## RESEARCH REPORT



# ESSENTIAL PUBLIC SERVICES, ESSENTIAL WORKERS' HEALTH: UNION-BASED INITIATIVES TO PROTECT THE MENTAL HEALTH OF YOUNG PUBLIC TRANSPORT WORKERS 

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## ITF

# THE INTERNATIONAL TRANSPORT WORKERS' FEDERATION (ITF) IS A DEMOCRATIC, AFFILIATE-LED GLOBAL FEDERATION OF 670 TRADE UNIONS IN 147 COUNTRIES, REPRESENTING OVER 18 MILLION WORKING MEN AND WOMEN IN ALL TRANSPORT SECTORS. THE ITF PASSIONATELY CAMPAIGNS FOR TRANSPORT WORKERS' RIGHTS, EQUALITY AND JUSTICE. 

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The research team dedicates this report to the tireless efforts of transport worker unions and members in the seven participating countries, and to the courageous transport workers and their unions in the Ukraine, who, with assistance from both the ITF and its affiliates in other countries, have helped to evacuate millions of refugees from Ukraine, and delivered humanitarian supplies on the return journeys: https://www.itfglobal.org/en/ news/transport-workers-movement-ground-helping-ukraine

## CONTENTS

EXECUTIVE SUMMARY ..... 4
(INCLUDING RECOMMENDATIONS)
INTRODUCTION ..... 19
SUMMARY OF LITERATURE REVIEW ..... 21
SUMMARY OF INTERVIEWS ..... 29AND FOCUS GROUPS
SUMMARY OF CASE STUDIES ..... 33
APPENDIX: ..... 48
COUNTRIES, UNIONS, RESEARCHERS, METHODS

## EXECUTIVE SUMMARY

## A. INTRODUCTION

The research confirmed that although most transport workers have been severely impacted by the pandemic, with cuts to jobs, working time, pay and benefits, women have suffered a disproportionate loss of livelihoods and have been forced into even more precarious and unequal working arrangements and conditions. Women's unequal position in the transport workforce means that they have been overrepresented in occupations, sectors and working arrangements that have been hardest hit. Women have also faced negative impacts because of the gendered hierarchy of many transport workplaces, together with sexist attitudes and harmful gender norms, which means that women have been pushed to the top of the list when cuts to pay, working time or jobs have taken place. In the informal transport economy, where women are overrepresented in the most precarious forms of work, the impacts have been heightened. The impacts have the potential to lead to the systemic exclusion of women from decent jobs in the transport sector.

The International Transport Workers Federation (ITF) commissioned a research study in 2021 to examine the working conditions and mental health of urban public transport workers, especially young workers (defined by the ITF as 35 years old or younger), in seven countries - Canada, Colombia, Indonesia, the Philippines, Spain, Uganda and the United States.

The aim of this study was to identify the main mental health problems experienced by young public transport workers, in both the formal and informal economy, and potential actions that unions can take to reduce those problems. The research also looked at the mental health services provided by employers and measures trade unions have taken to protect young workers' mental health. The study also looked at informal support activities young workers have organised themselves. The study was designed to bring together existing scientific research with the insights and experiences of unions and their members in different parts of the world, and to provide recommendations for actions unions can take.

This study mostly focused on general mental health and well-being rather than diagnosed mental health conditions. That is, we reviewed studies and asked our study participants questions about symptoms of depression, anxiety, burnout, psychological trauma (including post-traumatic stress disorder, PTSD), substance use, fatigue and sleeping problems.

The Executive Summary contains a summary of our study results and recommendations for unions. This is followed by more detail on our research review, focus groups and interviews, and case studies. Complete results of the study, including 184 quotations from public transport workers and details of our research methods, can be accessed in the Appendix of this report.

This study was conducted during the COVID-19 pandemic and thus describes the impact of the pandemic on working conditions and workers' mental health. However, we also review research and union action on working conditions and the mental health of public transport workers before COVID-19. The pandemic aggravated existing systemic hazardous and stressful working conditions which affect mental health. Our results and recommendations will hopefully be useful not only for dealing with the impacts of the pandemic, but also for union action addressing systemic hazards in public transport work.

## B. STUDY RESULTS

## 1. WORKING CONDITIONS AND MENTAL HEALTH BEFORE THE COVID-19 PANDEMIC

Over 80 research studies have looked at the mental health impacts of public transport work, primarily bus driving, with many studies finding high levels of anxiety, depression or burnout, with symptoms linked to working conditions, and psychological trauma from threats, assaults or, among train drivers, witnessing suicides ${ }^{1-9}$. Most of these studies did not include diagnoses of mental ill health, rather they used surveys or interviews to measure symptoms of mental ill health.

Additional studies have found increased risk of other stress-related illnesses among transport workers ${ }^{7}$, including heart disease and stroke ${ }^{10-11}$, high blood pressure ${ }^{12-13}$, musculoskeletal disorders ${ }^{14-15}$ and fatigue or sleeping problems ${ }^{16-17}$. Physical and mental ill health due to stressful urban bus and train driving are also highlighted as public transport safety risks ${ }^{7-19}$.

Over 60 years of research worldwide on public transport workers, primarily bus drivers, 1-8, , ${ }^{16,17,{ }^{17}, 22}$ found a variety of work-related causes of ("risk factors" for) mental ill health, including:

- The nature of professional driving (constant vigilance, witnessing suicides)
- Underfunding of public transport (understaffing, long hours, split shifts, inadequate rest breaks, time pressure, tight schedule, low pay, job insecurity, lack of bathroom access, payment incentive systems, outsourcing, privatization)
- A hostile work climate (harassment, lack of respect, recognition or support from management, stigma over discussion of mental health issues)
- Bus design (lack of protection from assaults)
- Urban transport system design (traffic congestion and infrastructure shortcomings)

Many of these risk factors, along with poor ergonomics, vibration, noise, and poor ventilation, have also affected the physical health of public transport workers

## 2. WORKING CONDITIONS AND MENTAL HEALTH DURING THE COVID-19 PANDEMIC

As of August 2022, 11 research studies had examined the impact of the COVID-19 pandemic on the working conditions and health of public transport workers ${ }^{23-33}$, some of which suggest large impacts on mental health. A larger number of newspaper and internet articles, and our focus groups and interviews, also suggest major impacts of the pandemic on the mental and physical health of transport workers, and their working conditions. These impacts included:

- Social isolation because of quarantine or social distancing
- Anxiety or fear of catching the virus at work, a risk highlighted by coworkers that died of COVID-19, including fear of bringing the virus home to loved ones
- Lack of COVID-19 safety equipment and protocols, especially early in the pandemic
- Intimidation or assaults by passengers, including those caused by disputes over mask requirements
- Layoffs, contract termination, reduced paid work hours, wage reductions, denial of sick leave, and short-term or part-time hiring, due to budget cuts, leading to financial strain
- Increases in workload/work hours, work intensification, unrealistic goals, excessive monitoring, fewer work breaks, pressure for production
- Service reductions (fewer buses), forced shift schedule changes, changes of work location or routes, due to worker sick leave or budget cuts, leading to more crowding, passenger frustration, more stress for bus operators
- Bullying, intimidation, social exclusion, and lack of respect or compassion from management

Some workers in our focus groups and interviews pointed out that sources of work stress, such as passenger verbal abuse, assaults, risk of traffic accidents or management's lack of concern, certainly existed before the COVID-19 pandemic. However, many emphasised the worsening of working conditions due to COVID-19. Failure to adequately deal with the hazards of underfunding, hostile work climate, bus design and lack of protection for informal workers before COVID-19, may have led to greater mental and physical health impacts of the pandemic and lockdowns, especially for informal workers, than otherwise might have occurred. Therefore, changes are needed to the systemic hazards, including informal work and stressful working conditions, to improve the health of workers both during "normal" times as well as during crises, such as pandemics.

## 3. DIFFERENCES BETWEEN COUNTRIES' SOCIAL AND POLITICAL CONTEXTS

Employment conditions and government responses to the pandemic (both of which can impact the mental health of young transport workers) varied across the seven participating countries. "Informal" workers in public transport appeared to face greater risks to their mental health.

For example, in the Philippines, a National Confederation of Transport Union (NCTU) official, Angelica Mata, reported:

> "During the pandemic, mental health and stress of jeepney drivers and operators... became a cause for concern. They couldn't drive. They had no livelihood... It was really stressful (case study \#3).

The length of the lockdowns in the Philippines may have also increased problems, especially for informal workers ${ }^{34,35}$.

Our focus groups in Uganda described the nation-wide lockdown to contain COVID-19, and restrictions on the transport economy which affected the mental health of young transport workers. Since many young workers are daily income earners, the abrupt manner in which the lockdown was announced had a large impact. They lost jobs and incomes, social support systems from peers and stress outlet systems. A young taxi driver from Uganda told us:

## "We spent months without working and it took a toll on us."

Increasingly "precarious" (insecure) work can also impact worker mental health. A young Colombian worker told us how government decrees allowed
"companies to advance workers' vacations, suspend employment contracts, authorise layoffs, and implement hourly work, which is something we are still suffering from, despite the fact that the health emergency has lowered."

Local attitudes towards, and awareness of, mental health also varied. In the Philippines, Angelica Mata reported:

> "... when we are confronted with problems, we get stressed. But [the drivers] did not realise it was already a "mental health" issue." A taxi driver from Uganda told us "Before the pandemic and lock down, I cannot say that mental health is something I was aware of. To me, whenever my mood was low, I thought it was because of the challenges I was going through and, over all, that was life and I would eventually be okay."

[^0]the control of protests. Urban public transport workers were in the crossfire between police and protesters. Some workers were physically assaulted. Additionally, participants reported a lack of concern for their personal safety from transportation companies, which forced them to stay at their workplaces during the riots on several occasions. A young ticket seller from Colombia told us: "In the protests, there was violence against the bus stations. In fact, there are still vandalised stations some were not reopened, because people got in and completely destroyed them. When the police used tear gas, evacuating us was not a priority for the company. There were comrades who had to stay at the stations and put up with tear gas, or stones being thrown at them. We were very scared and worried that something would happen to us."

## 4. YOUNG WORKERS

Only two of the research studies we found (both from Taiwan) looked specifically at young workers. They found higher levels of fatigue or burnout among younger drivers, due either to their "lack of driving experience" ${ }^{21}$ or the lower job rewards (such as lower pay, support, respect, job security and promotion opportunities). ${ }^{36}$ The very few existing studies of young transport workers was one of the reasons for conducting the current study.

While some of our focus group and interview participants reported similar impacts on younger and older workers, others suggested greater impacts on younger transport workers. For example, a young woman bus driver from the USA told us:
> "I haven't been in the job that long. You have the older operators that have been in the job for 10-plus years. So, they have more experience, they know how to deal probably with difficult passengers better than we do that are just starting off."

A young bus driver from the USA told us:
> "When I was fresh out of training, I was nervous because I didn't want to do anything wrong because I didn't want to get in trouble and get fired."

Other young workers described the impact of COVID-19. A young woman ticket seller and union official from Colombia told us:
> "Young people feel affected by the emotional burden generated by the probability of infecting our parents."

A young Canadian woman bus driver told us,
"I guess some of the older drivers probably chose to retire early when the pandemic started... If you're young, you're probably closer to the start of your career ... and you're going to try to push through it right?"
"All unionised workers have an indefinite-term contract and it's like it's no use for the companies to have us. So, they have begun to put disciplinary processes on us for insignificant problems. In the face of the slightest problem, they summon us for discharge."

Another young woman ticket seller and union official from Colombia told us:


#### Abstract

"A few years ago, transport companies began to hire fixed-term workers. These people have been the most vulnerable during the pandemic and most of them are young. And they not only suffered from the suspension or termination of their contracts during 2019 and 2020. Since before the pandemic, they suffer a lot because every three months their contract ends, and they do not know if they are going to renew their contract or not."


Other workers described increases in workload/work hours. work intensification, unrealistic goals, excessive monitoring, fewer work breaks, pressure for production - in part to cover the shifts of workers who were out sick - without additional compensation, which added to workers' mental health burden. A young bus driver from Spain told us:

> "We did not stop working but worked even more to cover the shifts that many of our colleagues with COVID left free. I'm not saying we were given less, but we weren't given more either. At least we could be treated better."

On the other hand, young transport workers have also taken the initiative to create youth organisations, with the assistance of their unions, including an annual Amalgamated Transport and General Workers' Union (ATGWU) youth camp in Uganda, and the Transport Workers' Union (TWU) Future Leaders Organizing Committee in the USA. A young taxi conductor in Uganda told us:
> "Through the union, I have come to know, defend and demand... my rights as a worker in a workplace." Similarly, the union can be a source of social support for young workers. A young taxi driver from Uganda told us "I have met [other] young drivers in the union who are my support system and I am able to navigate many issues."

[^1]- Insecure jobs excluding them from pensions, healthcare and social protection
- Jobs with long working hours and low pay
- Exploitative work cultures and violence that affects their mental health
- Tracking, surveillance and data collection as a direct result of technological change that threatens their rights
- Gender-based violence and discrimination (see Appendix, Section VII for full statement).

Thus, younger public transport workers face significant challenges due to their greater job insecurity and limited work experience. Added to that are the mental health impacts of the pandemic -- stressful working conditions, along with efforts by employers to weaken employment protections, reduce wages, lay off workers, or extend work hours. These conditions also provide the opportunity for and have spurred increased union action to address worker mental health issues.

## 5. DIFFERENCES BY OCCUPATION

Past research has focused mostly on bus drivers, with some studies of train drivers. And, bus and train operators in our focus groups and interviews reported stressful working conditions and mental health impacts both before and during the pandemic. However, in our study, workers in other occupations reported similar experiences: For example, customer-facing workers often had to continue to work in person during the pandemic.

A young ticket seller and union official from Colombia told us:
"Why doesn't the company stop? If everyone else is teleworking, why not us? If there are some external ticket sales points, where users can load the cards without us, why are we still at the ticket offices?"

Another young ticket seller from Colombia said:


#### Abstract

"The stress of the pandemic has generated more aggressiveness. In the case of the [company], some routes stopped working. This complicates user movements. It is difficult, because people pay the same ticket, but have access to fewer routes ... So, people's treatment of the box office staff is harsh, because for them the responsible persons are those ... with whom they are relating, [and] they vent."


Another concern of customer-facing workers in new technology. A young ticker seller from Colombia told us:
"Technology should, in fact, be an opportunity to re-educate people, to develop their skills, to improve their jobs. Advances in technology are inevitable, but replacement of the worker is not inevitable. The ticket selling machine needs maintenance and someone to collect the money. But the workforce is shrinking. And the few that enter no longer have good conditions. They are outsourced and have fixed-term contracts, or they pay them a pittance. So, it seems that we are at the service of technology and not the other way around."
"When they want to fire us, all they have to do is check the cameras and automatically many of us fall, because with the new margins [for errors] we have all had imbalances ... the fear is constant, fear of being fired, of being called to a performance audit, because that is what the company has generated in the worker ... In other words, you can't do anything because you're watched by those cameras that are inside the stations and they automatically call you for releases and possibly you'll be fired."

Maintenance workers have also faced increased stress during the pandemic. A young signal maintainer from the USA reported that:
"People are being forced now to work longer hours."
While all groups of workers continue to experience mental health issues, our focus groups from Uganda indicated that workers in "informal" jobs, without employment protections, have been affected the most. As a young taxi driver told us:

> "Today, because of the pressure and stress from reduced number of passengers and thus reduced number of trips, many drivers are handing over taxis back to bosses because they are not making enough money to sustain the business, including the daily payments to the taxi owner, and wages to the taxi conductor."

Another young Ugandan taxi driver told us:


#### Abstract

"Fuel prices even before the pandemic have always been fluctuating, mostly on the increase, yet the transport fares remain more less the same, which affects our daily income and expenditure. Anything that affects our meagre incomes affects us so much. We start to overthink and fail to sleep, yet we have to work early hours."


## 6. DIFFERENCES BY GENDER

Three research studies found greater mental health effects in women compared with transport workers who were men. A Canadian study found that women urban public transit employees who were exposed to a traumatic workplace event had more severe depression and for six-months longer than men. ${ }^{37}$ A Swedish study found that women bus drivers reported traffic congestion as worse, and considered irritated and aggressive passengers as contributing to mental strain more than men. ${ }^{38}$ Women transit operators in a US focus group reported more work and family conflict (child care and contact with children) when they worked longer, particularly on irregular shifts. ${ }^{8}$

A number of workers in our interviews and focus groups similarly pointed out greater impacts on women transport workers. For example, a young woman bus driver from Canada told us:
"I know other women on the job who say that they have [received abuse]. They get called names or they get told like this is a man's job and whatever."

A young worker and union official from Colombia said:

## "More than 70\% of the workers at [our company] are women and most women in the company are single mothers with many financial obligations."

While all groups of workers continue to experience mental health issues, our focus groups from Uganda indicated that workers in the informal sector, women, especially single mothers and young people have been affected the most.

## 7. DIFFERENCES BY RACE, ETHNICITY, TRIBE, IMMIGRATION STATUS, OR BY WORKERS WITH DISABILITIES, OR YOUNG PEOPLE WHO ARE BOTH WORKING AND STUDYING

A few participants from our focus groups/interviews discussed some of these issues. A Canadian union mental health advocate (MHA) reported that reduced opportunities to socialise, and greater social isolation during the pandemic was more difficult for Asian, East Indian and LGBT+ workers. The MHA reported that they were approached by more people from these groups.

Racially motivated attacks against Asian and Black transport workers also increased during the pandemic. A young woman bus driver from Canada told us:
"There's definitely been instances of racially motivated verbal assaults on drivers."

A young woman worker from Uganda told us:
"My mental health issues have always been from the constant subtle discrimination and passive aggression[from] my peers and workmates because of my tribe."

[^2]
## 8. TRANSPORT WORKER UNION ACTION

## A. COVID-19 response

Transport worker unions responded to the COVID-19 pandemic with a wide variety of programmes and policies that can indirectly protect mental health

- Collective bargaining with employers over job security, schedules and health and safety, including union and labour-management committees. In high-income countries, health insurance negotiated as an employee benefit between unions and employers often covers at least some mental health services.
- Negotiating with the government, advocacy for adequate transit funding, obtaining personal protective equipment (PPE) and cleaning supplies, obtaining workers' compensation for workers with COVID-19, "hazard pay", encouraging and arranging for testing and vaccinations.
- Member services. Increased emphasis on mental health services and support groups, which can directly protect workers' mental health. Unions also conducted worker education, provided legal support or fundraising for workers with suspended contracts or those losing income because of passenger capacity restrictions and some participated in research studies on COVID-19 and worker health.

Examples include:

## 1) Collective bargaining and union and labour-management committees

- By Amalgamated Transit Union (ATU) Local 1576 (USA) with the transit agency 39,40 to extend the time to receive the vaccine, retroactive pay for weekly testing, additional COVID leave and, if terminated due to failure to be vaccinated, the chance to be recalled (case study \#2).
- In Uganda, given the impact of COVID-19 on young workers, the ATGWU is reviewing their collective bargaining agreements with each shop - to negotiate for better working conditions, including extensive health insurance that covers counselling and mental health care services.


## 2) Negotiations, advocacy with government

- Coalitions between unions, for example, the San Francisco Bay Area, CA, Hazard Pay Coalition ${ }^{41}$ consisted of ATU Locals 265 and 192, and TWU Local 250A (case study \#1)
- Coalitions between unions and passenger and community groups, to prioritise worker, union, passenger and community concerns. For example, the San Francisco Bay Area, CA, People's Transit Alliance (https://peoplestransit.org/). ${ }^{42}$ and Voices for Public Transportation (https:// www.voicesforpublictransportation.org/). ${ }^{43}$
- National and local lobbying in the Philippines, by the National Confederation of Transport Worker Unions (NCTU-ITF) and the Move As One Coalition (including unions, community and human rights groups and public transport advocates), for a "just transition", 44 to improve job security and employment protections for "informal" jeepney operators and drivers. They also
responded to the employment crisis caused by COVID-19 lockdowns by providing immediate economic relief to workers (case study \#3). NCTU national secretary Jaime Aguilar told us:
> "We contribute to alleviating anxiety of jeepney drivers and operators by assisting them in their issues ... Thus, we are able to mitigate stress because they know assistance is available."

Similar "Just Transition" programmes have been conducted by transport workers' unions in other countries. ${ }^{45}$

## 3) Member services

- Informal support groups, to help co-workers with COVID-19, or to help reorganise shifts, with the assistance of Comisiones Obreras (CCOO) in Spain (case study \#9), or to provide support to help COVID-19 survivors deal with anxiety and depression, with the assistance of Sindicato Nacional de Trabajadores de Rama, Servicios de la Industria del Transporte y Logística de Colombia (SNTT) (case study \#5)
- Education, by Unifor in Canada through COVID-19: We're in this together. Mental Health Resource Guide (https://www.unifor.org/sites/default/files/legacy/documents/document/covid mental_health_guide_aug2021_en.pdf) ${ }^{46}$


## B. Response before the COVID-19 pandemic.

These efforts are similar to the actions taken by transport worker unions over many years to improve the health and safety of transport workers facing traditional job hazards - actions which included collective bargaining, health and safety committees, advocating for better job design and for laws and regulations, union assistance programmes, peer counselling, injury and illness surveillance programmes and research. Unions have sometimes worked with researchers to design, carry out and evaluate programmes and policies ("interventions") designed to improve transport workers' mental and physical health. ${ }^{47-48}$ Programmes created before COVID-19, such as Union Assistance Programmes, health and safety programmes, and youth organizations within unions, helped the unions to effectively respond to the COVID-19 pandemic. For example:

Union Assistance Programmes (UAPs), confidential counselling programmes for union members, in the USA (case studies \#7 and \#8) and other mental health referral programmes, such as Unifor's Mental Health Advocates in Canada (case study \#4), established before the pandemic, were especially valuable given the increases seen in drug use (in Spain) ${ }^{49} .{ }^{25}$ and deaths from drug use (in the USA) ${ }^{50}$ occurring during the pandemic. The TWU Local 100 (USA) UAP Clinical Director reported that since the COVID-19 pandemic began,
"our mental health-related "special intakes" (such as stress, depression and anger management) have greatly increased".

UAPs are also valuable since union members often prefer a resource where they can be assured of confidentiality, an assurance they don't always perceive in an employer's Employee Assistance Programme (EAP). ${ }^{51}$ For example, a Canadian bus driver told us:

# "If you ever mention drugs or alcohol, not even a problem with drugs or alcohol, to anyone through the EAP system, you will be sent to a drug or to an addictions doctor... that is a whole other level of stress for members, [that] any [drug] use equals addiction." 

A bus driver from the USA told us:

## "This is built up over a lot of years that there is no trust within our company or agency with the workers."

According to the ATGWU in Uganda, workers tend not to trust counselling or therapy services paid for by their employers to keep their mental health issues confidential (case study \#6).

The Canadian union Unifor published a book of resources on mental health in 2019 aimed at guiding local unions and union representatives on ways of developing contract language on mental health in collective bargaining. ${ }^{52}$ Starting in December 2019, Unifor Locals 111 and 2200 included the idea of a "mental health advocate" in bargaining, whereby the company committed to paid time off ( 10 hours/month) for one union representative per transit depot to fulfil this role. The advocate would receive 40 hours of training on mental health, and provide guidance for members in need of counselling or care on the services available through the EFAP (Employee and Family Assistance Programme) and community resources. In 2020, Unifor published a new mental health resource guide to address the challenges from COVID-19.46

One specific type of mental health training is Critical Incident Stress Management (CISM) training, usually provided to emergency responders to help them deal with traumatic events. It has not typically been provided to bus or train operators, despite the fact they also experience traumatic events, such as assaults, suicides and passenger or pedestrian injuries. ATU Local 265 (USA) has worked closely with a local mental health centre to provide such training and to create a peer support team for union members (case study \#7).

Transport worker unions have also developed youth organisations within the union, such as the ATGWU annual youth camp in Uganda (case study \#10), and the TWU Future Leaders Organizing Committee in the USA (case study \#11). These can be safe spaces to discuss many issues, including those related to mental health.

Since 2001, the Spanish labour federation Comisiones Obreras (CCOO), and its affiliated research institute ISTAS (Instituto Sindical de Trabajo, Ambiente y Salud ${ }^{53}$ ), have been carrying out research, education and trade union action on preventing psychosocial risks (sources of stress at work) and improving work organisation, to reduce mental health problems and other work-stress-related illnesses. ${ }^{54}$ ISTAS-CCOO carried out two surveys among affiliated workers during the pandemic with data on working conditions and mental health (case study \#12). 25,49,55

## C. RECOMMENDATIONS FOR UNIONS

## 1. Action needed to protect the mental health of transport workers

Transport worker unions need to continue their efforts to help their members deal with the impact of the COVID-19 pandemic, as well as long-standing hazards of public transport work. This can be accomplished through: 1) Collective bargaining; 2) Advocacy and negotiating with the government; and 3) Member services. We hope that the information provided in this report can provide useful examples of programmes and policies that ITF members worldwide can use. We recommend that unions actively consider the range of actions (by unions, by employers, by government) that have impacts on mental health (both positive and negative) so that these can be explicitly considered in future collective bargaining, advocacy efforts, or member services.

Based on our study findings, we recommend that transport worker unions:

### 1.1 Expand the scope of collective bargaining

- Negotiate contracts that provide for less stressful working conditions and protection of workers from health and safety hazards, or bargain over vaccine policies (case study \#2) or bargain for "hazard pay" as a form of recognition for essential worker efforts (case study \#1)
- Negotiate for coverage of mental health services through health insurance (case study \#6). We recognise that different countries have different healthcare systems, ranging from entirely private provision to well-resourced public services. In countries without public services, unions need to negotiate health insurance (including mental health services) with employers and advocate for national systems.


### 1.2 Continue coalition building, advocacy and negotiations with government agencies

- Build coalitions/alliances with:
- Other unions, for example, the San Francisco Bay Area Hazard Pay Coalition ${ }^{41}$ (case study \#1)
- Passenger and community groups, to prioritize worker, union, passenger and community concerns, in the USA (case study \#1) or in the Philippines (case study \#3)
- Mental health organisations (case studies \#4, \#7 and \#8). Such alliances can potentially be especially helpful for unions with limited resources
- Influence the economies and politics of their countries, through coalition-building, advocacy, and political action, to:
- Provide adequate funding for public transport.
- Provide for government policies, protections, support and funding for mental health programmes and services. This may also involve appeals to international organisations.
- Bring workers into, and keep them in, the formal economy (with greater job security, benefits and government regulations). For example, a major national and local lobbying effort by the NCTU in the Philippines was a campaign for a "just transition"44 designed to improve job security and working employment protections among "informal" jeepney operators and drivers through creating worker cooperatives (case study \#3). Similar programmes have been conducted in other countries. ${ }^{45}$
- The ITF recommends formalised transport systems that are efficient, affordable, environmentally sustainable and with decent working conditions - which can be achieved through negotiations with democratically accountable unions and allied associations. ${ }^{56}$ This involves employment based on contracts and regular wages, alternative models of vehicle ownership (for example, cooperatives), and public ownership and operation of public transport services.


### 1.3 Increase member services on mental health

- Provide support and treatment for workers struggling with mental health issues, including peer counselling programmes, union assistance programmes, and work to end stigma about discussing mental health issues. Examples include:
- "Surviving Men and Women: Brave Men and Women", a support group focusing on the emotional experiences of workers infected with COVID-19 through SNTT in Colombia (case study \#5)
- Mental health advocates (MHAs) in Canada, who are union members assisting workers to find - Union Assistance Programmes in the USA (case studies \#7 and \#8)
- Training for union members on mental health issues, including producing educational materials, such as in Canada (case study \#4), or training on dealing with traumatic events, such as in the USA (case study \#7)
- Encourage informal worker support networks, such as was done through CCOO in Spain (case study \#9).
- Ensure that union services are available to and meet the needs of workers from various occupations: bus and train drivers, but also maintenance workers and customer-facing workers such as ticket-sellers). They should also offer support to workers from different racial and ethnic backgrounds, immigrants, informal sector workers, women, workers with disabilities, LGBT+ workers, or workers managing work and school.
- Create alliances with research institutes or universities, or create a union research institute, such as the work of ISTAS and the CCOO in Spain (case study \#12). This enables research on the needs and interests of transport workers. Many research needs have been identified in this report, including the mental health impacts of various transport occupations; the increased vulnerability faced by different racial and ethnic groups, immigrants, informal sector workers, women, LGBT+ workers or other groups of workers; the effectiveness of various programmes, policies, contracts, laws or regulations designed to protect the mental health of transport workers.


## 2. Recommendations for young transport workers

In addition to the above recommendations, we recommend that transport worker unions focus on the needs of young members as follows:

- Provide opportunities for younger workers to be trained in union leadership skills, to be able to enter leadership positions in their unions, and to ensure that young workers have a voice in their union and in their workplace. To accomplish this:
- Provide education to young workers on collective bargaining, on health and safety, on politics, and on the important roles played by unions in their workplaces and in society
- Negotiate high-quality apprenticeships, workplace training programmes, and mentoring opportunities to support young people at work and during career progression
- Create or expand youth organisations within unions, such as the ATGWU annual youth camp in Uganda (case study \#10), or the TWU Future Leaders Organizing Committee in the USA (case study \#11)
- Involve young workers in union activities, such as health and safety committees
- Ensure that collective bargaining agreements provide equal protection to younger workers
- Ensure that the workplace has an appropriate and inclusive mental health policy
- Work to include younger workers in more formal employment arrangements


## INTRODUCTION

Urban bus driving has long been considered highly stressful with increased risk of illness.7, ${ }^{77,58}$ Some research has examined the stresses of urban train driving. ${ }^{59}$ However, there has been little research on other public transport occupations. The COVID-19 pandemic has added to the stresses and physical health risks faced by urban public transport workers. ${ }^{23,},{ }^{26}$ Few studies have looked at whether the impact of stressful and hazardous working conditions on the mental health of public transport workers differs by age, gender, race, ethnicity or other factors. Little research has been conducted on workplace policies and programmes designed to reduce the risk of mental health problems in transport workers.

Therefore, the International Transport Workers Federation (ITF) commissioned a study in 2021 to examine these issues in seven countries - Canada, Colombia, Indonesia, the Philippines, Spain, Uganda and the United States. In this section, we describe study methods and limitations, followed by sections with summaries of the literature review, focus groups and interviews, and case studies. The full versions of these sections are contained in the Appendix.

According to the World Health Organization, mental health can be defined as a "state of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community". ${ }^{60}$ Therefore, our approach to workers' mental health goes beyond a medical diagnosis of "psychiatric disorders", and includes workers' feelings of emotional, work and social well-being, health-related quality of life and stress-related disease - including symptoms of depression, anxiety, burnout, psychological trauma (including post-traumatic stress disorder, PTSD), substance use, fatigue and sleeping problems.

## 1. Study methods

We conducted a detailed review of three decades of past research studies on the working conditions and mental health of public transport workers, and included new research and media reports on the impact of the COVID-19 pandemic. Our review also included scientific studies and media reports of efforts by transport unions to improve the working conditions and protect the health of public transport workers.

We also conducted focus groups and interviews of 70 public transport workers and union officials, 41 ( $59 \%$ ) of whom were young workers (defined in this report as workers 35 years old or younger). Informed by these interviews, media reports and research studies, we prepared 12 case studies describing a range of strategies, programmes and policies unions have implemented, or are working to implement, in the six participating countries to improve the working conditions and protect the health of urban public transport workers.

## 2. Study limitations

Our study results should be interpreted with caution because of the relatively small number of people participating in our focus groups and interviews, as well as the sometimes-different types of participants across countries. Our results need to be confirmed by larger studies within each country, potentially using additional research methods. In addition, our focus group and interview participants are not necessarily representative of transport union officials or members in each country since they were not randomly selected. Finally, as we were not able to use standard surveys or access databases to measure current working conditions and mental health, we mainly relied on focus groups, interviews, web sites and media reports to conduct the study.

However, our study results were consistent with research studies conducted before the COVID-19 pandemic on the sources of stress at work ("work stressors") faced by urban public transport workers and their mental health impacts. ${ }^{1-9,16,17,20-22}$ Our results were also consistent with studies conducted during the pandemic, which showed increased risks among transport workers of exposure to the virus that causes COVID-19, unsafe working conditions, and high rates of mental health symptoms. ${ }^{23-33}$ Finally, our study results were consistent, for the most part, across countries.

## SUMMARY OF LITERATURE REVIEW

Many research studies have been conducted on the health, including the mental health, of urban public transport workers since the 1950s. As of August 2022, ten research studies have examined the impact of the COVID-19 pandemic on the working conditions and health of public transport workers. ${ }^{23}$-31 In addition, newspaper and internet-based articles, union web sites, and "key informant" interviews with union leaders, suggest major impacts of the pandemic on the mental and physical health of transport workers.

Therefore, we conducted a comprehensive search of scientific databases for research studies on this topic published between 1990 and 2021, finding 195 eligible articles. In addition, we found 10 articles and six government reports that reviewed existing studies, policies and programmes. We also conducted Google searches and examined union web sites and located more than 80 internetbased articles and resources on the impact of the COVID-19 pandemic on transport workers and the response of transport unions. Finally, we conducted interviews with union leaders in each country to better understand the impact of COVID-19 and transport union response. Our complete review methodology is in the Appendix.

## A. IMPACT OF COVID-19 ON TRANSPORT WORKER WORKING CONDITIONS AND MENTAL HEALTH

## 1. Research studies

Research studies examined the impact of the COVID-19 pandemic on the working conditions and health of public transport workers, in Norway, ${ }^{30}$ Sweden, ${ }^{27}$ Spain, ${ }^{25}$ the United Kingdom ${ }^{24,}{ }^{28}$, 29 and the United States. ${ }^{23,}, 26,32,{ }^{23}$ The studies found SARS-CoV-2 (the virus that causes COVID-19) being spread on public transportation, ${ }^{30}$ and that transport workers had a higher risk of exposure to SARS-
 transport workers who died of COVID-19. ${ }^{26}$

Workers reported inadequate protection against SARS-CoV- $\mathbf{2}^{25}$ and mental health symptoms. ${ }^{23,}{ }^{28}$ In New York City, many workers reported concerns about contracting COVID-19 at work, due to factors such as lack of PPE or passenger aggression related to mandatory mask use. New symptoms were more common in younger workers (<50 years), and Black and Hispanic workers. ${ }^{23}$

## 2. Newspaper and internet-based articles, union web sites and union leader interviews

In some low- and medium-income countries (Colombia, Indonesia, the Philippines, Uganda), quarantines, restrictions on passenger capacity, and economic shocks contributed to wage cuts, job loss, and even more "precarious" (insecure) employment, and, as a result, mental health and family impacts. ${ }^{61}$ (See sections on focus groups and interviews, on case studies and the Appendix for further details.)

In US media reports, transport workers described concerns early in the pandemic over delays in obtaining PPE and cleaning supplies, or social distancing protocols, ${ }^{62,}{ }^{63}$ and fear of infection. ${ }^{64}$ Workers described their "grief and anger", ${ }^{65}$ staffing shortages and service reductions due to retirements or quarantining infected workers, ${ }^{62}$ a hiring freeze due to lost revenue, ${ }^{66}$ and threats or assaults from passengers while trying to enforce mask-wearing rules. ${ }^{67,}{ }^{68}$ A tragic event occurred on 26 May 2021, in San Jose, CA, when a transport worker brought a gun to work and killed nine of his co-workers and then himself. ${ }^{51}$ This tragedy underscored existing local union concerns about a hostile work climate, the employer's resistance to pandemic safety measures, ${ }^{69}$ and the union's desire to make workplace mental health a priority, end stigma about discussing mental health, ${ }^{51}$ and have mental health services unions can be assured are confidential. ${ }^{51}$ (See case study 7 for further details.)

## 3. Summary of COVID-19 impact

The COVID-19 pandemic led to infections and deaths among public transport workers worldwide. In the seven participating countries, workers reported anxiety, fear of infection, stress, burnout, feeling disrespected, and social isolation; delayed, inadequate or insufficient supplies of PPE, distancing, or disinfectants; passenger aggression related to mask requirements. Reduced transit service due to quarantines, lockdowns, budget shortfalls and worker absences due to illness led to, in some cases, wage reductions and layoffs. Economic and mental health impacts appeared to be greater among "informal" workers. Longer government-imposed lockdowns may have also created more difficult economic conditions and worse mental health impacts, ${ }^{34}$ suggesting a need for greater worker and union voices in decision-making on government responses.

## B. COVID-19 TRANSPORT WORKER UNION RESPONSE

Transport worker unions in all seven participating countries have responded to the COVID-19 pandemic through a variety of actions, including some specifically designed to improve worker mental health. For example:

- Providing mental health information, referrals and services (Canada, ${ }^{70}$ USA ${ }^{69}$ )
- Obtaining government funding for mental health services (USA) ${ }^{69}$
- Counselling for members on job loss and mistreatment from employers (Uganda) ${ }^{71}$
- Bargaining over mental health advocates' time (Canada, case study 4)
- Protection from passenger assaults (USA) 51,72.74

Protection from violence resulting from excessive force by law enforcement in response to social movement protests (Colombia) ${ }^{75}$

Often, transport worker unions worked to improve transit funding, COVID-related worker health and safety, pay, work schedules, and job security, which can indirectly protect worker mental health:

- Worker health and safety, including:
- PPE and cleaning supplies, ${ }^{71,76-78}$
- Maintaining distancing on buses, rear-door boarding, more buses on the road, ${ }^{51}$ service adjustments ${ }^{76}$
- Health and safety protocols ${ }^{71}$
- Regular free COVID-19 testing, ${ }^{77}$ vaccine priority ${ }^{79}$ and/or encouraging vaccinations ${ }^{80}$
- Paid sick leave ${ }^{71}$
- Hazard pay ${ }^{41,51}$ (case study 1)
- Workers' compensation for COVID-1951
- A death benefit if the transport worker died from COVID-1981
- Adequate transit funding, ${ }^{76}$ including alliances with passenger and community groups ${ }^{42,82}$

In addition, the unions have bargained with employers over:

- Working day arrangements, for example, from five working days and one rest day to two working days and one rest day (Indonesia) ${ }^{78}$
- Improving working conditions and COVID-19 biosafety protocols (Colombia) ${ }^{61,83}$
- Protection against layoffs (Uganda) ${ }^{71}$
- Maintenance of welfare funds (Uganda) ${ }^{71}$

Or, bargained with the government over:

- Passenger capacity, increasing the number of vehicles on the road, financial assistance ("Service Contracting") to drivers and priority for vaccinations as essential workers (Philippines, case study 3) ${ }^{82}$
- Resumption of public passenger transport with acceptable conditions (Uganda) ${ }^{71}$

Additional activities have included:

- A labour-management COVID-19 task force, which administered COVID-19 testing and employee vaccinations (Indonesia) ${ }^{78}$
- Legal support or fundraising for workers with suspended contracts or those losing income because of passenger capacity restrictions (Colombia) ${ }^{61,83}$
- Providing food for members in need (Uganda, ${ }^{71}$ Colombia)
- Worker education ${ }^{71,84-87}$
- Participation in research studies (USA) ${ }^{23,26}$
- Communicating with members (Canada) 88,89
- Remembering and honouring co-workers who passed away due to COVID-19 (USA, see Appendix, case study \#13)


## C. RESEARCH BEFORE COVID-19 (1953-2019)

Research on the causes of ("risk factors" for) injury and illness among public transport workers in over 32 studies in over 13 countries was summarised in seven review articles published between 1988 and 2006, $1-7$ and one in 2017. ${ }^{8}$ The earliest published study mentioned in the review articles was from 1953. We also examined 195 research studies on this topic published between 1990 and 2021.

Earlier research focused more on physical health impacts of transport work, finding increased risk of stress-related illnesses, such as cardiovascular disease (heart disease and stroke), 11,90 hypertension (high blood pressure), ${ }^{12,13}$ musculoskeletal disorders (such as low back pain), ${ }^{14,91}$ gastrointestinal (digestive) problems, ${ }^{14}$ fatigue or sleeping problems ${ }^{92}$ and higher levels of stress hormones. ${ }^{7}$

Some studies looked at mental health impacts, finding high levels of psychological distress, such as anxiety, depression, ${ }^{93,94}$ and burnout, ${ }^{95,96}$ psychological trauma from threats, assaults or witnessing suicides, $, 9,59,97,98$ and unhealthy behaviours such as excessive alcohol use ${ }^{93}$ or cigarette smoking. ${ }^{99}$

Some studies found increased rates of sickness absenteeism ${ }^{7}$ and disability, ${ }^{3}$ the major causes of which were musculoskeletal disorders, cardiovascular disease and psychological disorders.

Research also suggests that the physical and mental ill health of urban bus and train drivers are public safety risks ${ }^{7}$ Work stress and stress-related diseases can lead to impairments for safe driving, such as divided attention, slowed response times, ${ }^{100}$ errors and safety violations, ${ }^{18,19}$ all of them increasing the risk of vehicle accidents. ${ }^{16,19}$

The research identified various working conditions that increase the risk for physical and mental ill health among public transport operators, including:

1) Stressful working conditions, ${ }^{12,}{ }^{101}$ such as high job demands, ${ }^{102,103}$ time pressure from strict schedules, ${ }^{57,104}$ traffic congestion, ${ }^{105}$ work barriers (such as vehicles parked in bus stops or unruly passengers), poor job control, ${ }^{16,36,106}$ low job rewards, such as low recognition, promotion opportunities or pay, ${ }^{14,36}$ lack of job security, ${ }^{107}$ long hours, ${ }^{20}$ split shifts, ${ }^{17,21,108}$ rotating shifts, inadequate break times, threat of assaults, ${ }^{109}$ social isolation, lack of support from management, ${ }^{22}$ conflict between work and family demands, and witnessing suicides. 9,59,97 Some researchers have described drivers' work as "threat-avoidant vigilance", that is, stressful work that involves being continuously vigilant (having a high level of attention) to avoid disaster, such as the loss of human life. ${ }^{110}$
2) Physical work hazards, such as assaults, ${ }^{111,12}$ poor ergonomics, ${ }^{15}$ lack of bathroom access, ${ }^{113}$ vibration, ${ }^{3}$ noise, and poor ventilation. ${ }^{7}$

Recent studies have also looked at new systems of work organisation, such as driver payment incentive systems, ${ }^{144,15}$ outsourcing, ${ }^{116,17}$ privatising public services, ${ }^{118}$ work intensification, ${ }^{8,},{ }^{82},{ }^{119}$ and "increasingly tight running schedules due to market competition", ${ }^{120}$, ${ }^{\mathrm{p} .3}$ which can increase stressful working conditions.

Most studies of train drivers have focused on post-traumatic stress disorder (PTSD) due to witnessing railway suicides. Scientific evidence indicates that "person-under-train accidents" can lead to PTSD, ${ }^{9}$ depression and panic disorders, ${ }^{97}$ absenteeism from work, ${ }^{121}$ fatigue, and sleep problems ${ }^{122}$ among train drivers.

Three studies found greater mental health effects in women (compared with men) transport workers. A Canadian study found that women urban public transit employees who were exposed to a traumatic workplace event had more severe depression six months longer than men. ${ }^{37}$ In a Swedish study, while there were no differences between men and women bus drivers on levels of stress hormones, women drivers reported traffic congestion as worse, and considered irritated and aggressive passengers as contributing to mental strain more than did drivers who were men. ${ }^{38}$ A US focus group study found that women transit operators reported more work and family conflict (child care and contact with children) when they worked longer, particularly on irregular shifts. ${ }^{8}$

Two studies found larger mental health effects in younger (compared with older) transport workers. A study from Taiwan found that younger train drivers had less ability to be aware of and control fatigue because of their "lack of driving experience". ${ }^{21}$ Another study from Taiwan found higher levels of burnout among younger workers, which may be due to their high levels of efforts combined with low rewards (such as pay, support, respect, job security and promotion opportunities). ${ }^{36}$ The very few existing studies of young transport workers was one of the reasons for conducting the interview and focus group study.

It is difficult to draw conclusions from research about possible differences due to race, ethnicity, tribe, immigration status, disability status, or for young people balancing work and school, because very few such studies have been conducted.

The effectiveness of 13 illness and injury prevention programmes (interventions) for bus drivers in Germany, the Netherlands, Sweden and Denmark was summarised in 2000.47, ${ }^{123}$ This review, and a similar 1999-2004 HealthyBus action research programme in Copenhagen, Denmark, ${ }^{48}$ found that these programmes improved workers' physical and mental health, well-being and job satisfaction, and reduced sick leave and the body's stress reactions in drivers.

The programmes varied, but they often combined changes in the organisation of work, ergonomics, schedules and management style with individual health promotion (wellness) or stress management. The HealthyBus research team involved the bus drivers in all stages of the project: "to ensure that all voices, not just the loudest and most powerful, would be taken into account." ${ }^{124}, \mathrm{p}$. 77, 80

Examples of workplace changes included:

- Reduced work hours for senior (and partially disabled) drivers
- More flexible and fairer vacation planning
- Improvements to scheduling, holidays, and taking time off
- Improved communication
- Priority traffic signals and separate lanes for bus traffic
- Electronic bus schedule information in buses and at bus stops
- Improved training of new hires, and providing courses for drivers on topics such as handling conflicts, threats and violence
- A more participatory management style
- More driver participation in scheduling shift systems
- Self-regulating (autonomous) work teams in which drivers were free to organise as they wished, within budget limits, leading to decreased sickness absence ${ }^{47}$
- Improvements to and replacement of buses, improvements to radio systems, and repair of road obstacles

In Copenhagen, at the end of the HealthyBus project, drivers reported:

- Fewer problems meeting tight rush hour timetables
- That they were more often able to take the full length of their breaks
- They spent less time thinking about violence and threats
- Their managers treat them better
- Fewer occasions when they felt "always or often stressed" or fatigued. ${ }^{124}$

Employer response. Transit agencies, sometimes in cooperation with transport worker unions, have carried out health promotion programmes, and limited efforts to improve recovery (rest break) time, worker training, bathroom access, and ergonomics programmes. Some agencies have implemented programmes to reduce assaults against drivers. ${ }^{125-127}$

Union response. Transport worker unions have acted to improve the health and safety of transport workers - through collective bargaining, health and safety committees, advocating for better job design and for laws and regulations, union assistance programmes, injury and illness surveillance programmes and a medical clinic. ${ }^{58,128}$

In the US, efforts have included campaigns for bathroom access for drivers, ${ }^{113,}{ }^{129-131}$ preventing assaults, ${ }^{132}$ providing for adequate recovery time, and better staffing. ${ }^{58,128}$

In France, trade unions and employers' associations negotiated national agreements, across industries, on work stress (2008) and on preventing bullying and violence (2010). Companies or establishments with 50 or more employees have to create a committee for health, safety and working conditions. Through such committees, French transport unions have worked to bargain over work hours, routes, work stress policies and dealing with the psychological effects of assaults. ${ }^{119}$

In Northern Europe, unions have also sometimes worked with researchers to design, carry out and evaluate programmes and policies whose goal was to improve transport workers' mental and physical health. ${ }^{47,48}$

## D. FURTHER RESEARCH NEEDED

Further research is needed to confirm and better understand the results of our study. Much of the past research focused on urban bus drivers, and some on train drivers, but very little research has looked at other transit occupations. Since $53 \%$ of our sample ( 46 people) were in occupations other than bus or train driver, our study results begin to fill this research gap. Further research is needed on occupations such as conductors, cleaners, station agents, maintenance workers, ticket sellers, traffic controllers and support personnel.

Similarly, further research is needed to address the current gap in knowledge on potential differences in working conditions or mental health within specific groups, such as among LGBTQ workers, workers with disabilities, or between younger and older workers, men and women, immigrants and native-born workers, and different racial or ethnic groups.

Further research is also needed on the working conditions and health impacts on public transport workers of:

- The COVID-19 pandemic
- Outsourcing, payment incentive systems, work intensification and privatization
- Informal work

Further research is needed on issues specific to the COVID-19 pandemic, for example:

- The mental health benefits to workers of negotiated agreements which protect against possible job loss due to vaccine mandates
- The impact of union education programmes on increasing vaccination rates or combatting vaccine misinformation
- How best to protect workers, especially those at increased risk of serious COVID-19 (or with family members at increased risk), from infection as the result of union members who refuse vaccination.

Further research is especially needed to evaluate the impact of different types of programmes and policies designed to protect the mental health of public transport workers from traditional work stressors and from the effects of crises, such as the COVID-19 pandemic. Since COVID-19 may remain with us (albeit at lower levels of infection, research is needed to monitor operational changes in the transport industry and the effect of these changes on workers' health and working conditions. Such changes would include programmes and policies on improving work organisation, health and safety, ergonomics, schedules, the physical work environment, education and training, management style, communication, bathroom access and rest breaks, and on reducing assaults and threats of violence. Such changes can be achieved by collective bargaining, health and safety committees, participatory action research, advocacy campaigns, coalition-building and laws and regulations.

Finally, research is sorely needed on the potential benefits of sustainable funding for public transit on the working conditions and mental health of transport workers, as well as on passengers, the community and environment. Recent reports, co-authored by the ITF, highlight the connections between public transport and a green and equitable recovery from the COVID-19 pandemic, healthy and more secure working conditions and healthy communities, addressing climate change, and reducing social inequalities, congestion, long commutes and poor air quality. $45,133,134$ The ATU (USA) President along with the mayor of Austin, Texas wrote: "Investing in clean and efficient public transit
systems [such as electric buses] is a critical pathway to lowering transport and overall emissions and is absolutely essential for maintaining the well-being of cities." The infrastructure funding bill signed by US President Biden on 15 November 2021 includes provisions to upgrade infrastructure, fight climate change, ensure workers' safety (preventing assaults) and training transport workers to operate, repair and maintain cleaner vehicles. 135 The union-led Just Transition programme in the Philippines (case study \#3) ${ }^{44}$ and similar programmes in other countries ${ }^{45}$ need to be evaluated for their impact on workers' health, community health, the environment and climate change.

## SUMMARY OF INTERVIEWS AND FOCUS GROUPS

Following approval from the Institutional (research ethics) Review Boards in each of the seven countries, we conducted focus groups and interviews with 70 public transport workers and union officials, primarily by video conferencing. Forty-one (59\%) were 35-years or younger, and 22 ( $31 \%$ ) were women. We prepared a written transcript of what the participants said, and coded their concerns, observations, and recommendations into themes. A summary is presented here. Quotes from workers who are 35 -years or younger are referred to as "young workers". The ITF requested that we use the terms "man/men" and "woman/women" instead of "male" and "female" in this report. The full report of interviews and focus groups, with 184 quotations from participants, is in the Appendix. Workers in at least three of the six countries reported:

1. Increased symptoms of mental ill health as a result of the COVID-19 pandemic, especially stress and fear of contagion. Workers also reported symptoms of anxiety, depression, irritable moods, sadness, anger, sleep disruption and fatigue. Social isolation contributed to these symptoms. Economic impacts of the pandemic, such as layoffs or wage reductions, affected workers' families. It was difficult for many to talk about mental health issues in the workplace because of the stigma attached to them. COVID-related lockdowns were especially difficult for informal workers, who lack job security and basic employment protections, for example, jeepney drivers and operators in the Philippines:
"During the pandemic, mental health and stress of jeepney drivers and operators became a cause for concern. They couldn't drive. They had no livelihood ... It was really stressful. These were stories that our members told us. Although ... they did not have an awareness of mental health issues. They were always saddled with problems."

- Angelica "Angie" Mata, union official, woman, Philippines

2. Mental health symptoms were caused by or made worse by hazardous and stressful working conditions during the pandemic. These included:

2a. Risk of catching the virus at work, a risk highlighted by co-workers that died of COVID-19
2b. Risk of catching the virus at work and bringing it home to loved ones
2c. Lack of COVID-19 safety equipment and protocols (such as masks, distancing, barriers/ shields, sanitiser), especially early during the pandemic
2d. Intimidation or assaults by passengers:
"One of my co-workers ... relayed a story to me about somebody who was coughing quite vigorously on this bus with no mask on and ... customers were ... visibly alarmed ... At some point, he did stop the bus, got out of his seat and asked the guy very politely: ‘Can you put on a mask?'... The customer really didn't take it well. So, the bus driver went back to [his] seat, [and] resumed driving. And I think that customer got up and tried to swing a punch ... [The driver] called security, so it turned out alright ... My friend is black ... He told me quite a few stories of people trying to take swings at him."

## - Bus driver, woman, young worker, Canada

2e. Layoffs, contract termination. reduced paid work hours, wage reductions, denial of sick leave benefits, mandatory vacations, technology to substitute for human labour, short-term or part-time hiring, leading to financial strain (inability to meet financial obligations, financial dependency) - all of which can worsen the mental health of workers:
> "[Colombian government decrees] allow companies to advance workers' vacations, suspend employment contracts, authorise layoffs, and implement hourly work, which is something we are still suffering from, despite the fact that the health emergency has [reduced]."

- Port worker, union official, man, young worker, Colombia
"All unionised workers have an indefinite-term contract and it's like it's no use for the companies to have us. So, they have begun to put disciplinary processes on us for insignificant problems. In the face of the slightest problem, they summon us for discharge."
- Ticket seller, woman, young worker, Colombia

2f. Increases in workload/work hours. work intensification, unrealistic goals, excessive monitoring, fewer work breaks, pressure for production - in part to cover the shifts of workers who were out sick - without additional compensation, added to workers' mental health burden:
"We did not stop working but [rather] worked even more to cover the shifts that... colleagues with COVID left free. I'm not saying we were given less, but we weren't given more either. At least we could be treated better."

## - Bus driver, man, young worker, Spain

Despite the additional demands placed on workers, over an extended period of time, some reported feeling dignity as "essential workers" keeping the transportation system running.

2 g . Service reductions (fewer buses), forced shift schedule changes, changes of work location, leading to more crowding, passenger frustration, more stress for bus operators.

2h. Bullying, intimidation, social exclusion, and lack of respect or compassion from management.
3. Some workers pointed out that sources of stress at work (such as passenger verbal abuse or assaults, risk of traffic accidents or management's lack of concern) existed well before the COVID-19 pandemic. Many emphasised the worsening of conditions due to COVID-19.
> "Just keep going ...the feeling [is] that there's no compassion or ... caring for the mental health of the operator. If you interviewed a lot of operators that have been doing the job for a long time, I would say that [is] the way they would describe it, that the agency doesn't care. They just want you out there, continuing."

- John Pospishek, bus operator, union official, man, United States

4. Possible differences between groups:

4a. Some workers felt that the impact of these working conditions on mental health was greater on women workers. Others felt that there was a similar impact for men and women.

4b. Some participants felt that the impact of these working conditions was greater for younger than older workers. Others felt that there was a similar impact for older and younger workers:
"I'm younger. So, I haven't been in the job that long. You have the older operators that have been in the job for 10-plus years. So, they have more experience, they know how to deal probably with difficult passengers better than we do [who] are just starting off."

- Wilma Pinales, bus operator, woman, young worker, United States

4c. Some workers reported greater impacts of the pandemic on Asian, East Indian and Black workers in Canada, although not among foreign born workers in Spain.
5. Workers described various mental health services available through their employer:

5a. Health insurance coverage for mental health (negotiated by the employer and union) tends to be available in high income countries. However, workers were not always satisfied with the process.

5b. Workers did not always trust employer-sponsored Employee Assistance Programmes (EAPs):
> "If you ever mention drugs or alcohol, not even a problem with drugs or alcohol, to anyone through the EAP system, you will be sent to a drug or to an addictions doctor... that is a whole other level of stress for members, [that] any [drug] use equals addiction."
> - Bus driver, union representative, woman, Canada

5c. Medical clinics and telemedicine (Indonesia)
5d. Employer-based mental health services
5e. Some reported little or no mental health support from their employer
6. Workers described services and programmes specifically related to mental health available through their union:

6a. Union-sponsored Union Assistance Programmes (UAPs), peer counselling or mental health training programmes

6b. Union member education on mental health, stress management
Other workers described other services and programmes, including collective bargaining, and other forms of support, which could indirectly promote members' mental health:

6c. Negotiations over work schedules, working from home, wages, contracts:
6d. Encouragement of COVID-19 vaccinations
6e. Advocating for personal protective equipment or engineering controls for members.
6f. Legal, financial and other support
"We have no programmes, such as counselling, that specifically cater to mental health issues. But we contribute to alleviating anxiety of jeepney drivers and operators by assisting them in their issues. We, in NCTU, anticipate, for example, what will be the difficulties that jeepney cooperatives will face. NCTU is able to help them in resolving these issues. Thus, we are able to mitigate stress because they know assistance is available."

- Jaime Aguilar, union official, man, Philippines

7. Young transport workers have taken the initiative to organise:

7a. Informal support groups, including through social media
7b. Programmes and activities through their union
"Through the union, I have come to know, defend and demand ... my rights as a worker in a workplace."

- Taxi conductor, woman, young worker, Uganda

Other issues were mentioned by workers in only one or two countries, for example, fear of political violence (Colombia), the stigma of being infected by COVID-19 (Colombia), management bullying directed at unionised workers (Colombia), employer services for workers, including education (Indonesia), a union programme on gender equity (Uganda), no pandemic impact on worker drug or alcohol use (Spain), the impact on transport workers of crime and addiction in the community (Canada), environmental conditions (Canada) and resistance by some union members to vaccine requirements (Canada, USA).

## SUMMARY OF CASE STUDIES

Based on interviews, media reports, union web sites and research studies, we developed 12 case studies of union action to protect the mental health of transport workers in the seven participating countries. Summaries are presented here. Full case studies are in the Appendix.

## A. NEGOTIATIONS WITH EMPLOYERS

## 1. Campaigns for hazard pay during the COVID-19 pandemic (USA)

Many transport workers felt that the sacrifices and risks that come with the job, especially during the pandemic, were largely unacknowledged, which can take a psychological toll..$^{68}$ In response, a number of transport worker unions in the US demanded hazard pay as a concrete form of recognition of the hazards they have faced and have suffered from.

The San Francisco Bay Area, CA, Hazard Pay Coalition (ATU Locals 265 and 192, TWU Local 250A) began in the summer of 2021.41,68 Rallies were held on 23 October and 4 December 2021 and 16 February 2022. See John Courtney, ATU Local 265 president, and other members of the Coalition, in San Jose, CA, 23 October 23 2021: https://www.youtube.com/watch?v=Dws4etsXWkY\&t=64s

ATU Local 265 members won a \$3,500 appreciation bonus in January 2022.41 Efforts continue by the other two local unions to obtain hazard pay and by all three to bargain new contracts in 2022. The three unions have also joined rider and community groups, to prioritise worker, union, passenger and community concerns, through the People's Transit Alliance ${ }^{42}$ and Voices for Public Transportation. ${ }^{43}$


Figure 1. Rally to demand hazard pay for frontline transit workers, Oakland, CA City Hall, 4 December 2021, attended by the three unions in the Hazard Pay Coalition - ATU Locals 265 and 192, and TWU Local 250A.

TWU Local 100 (New York City) president Tony Utano emphasised that transport workers deserve hazard pay ${ }^{136}$ and "need to be recognised for what we do". ${ }^{137}$


Figure 2. TWU Local 100 members marched with other essential workers and were cheered for their pandemic service by thousands of New Yorkers during the Hometown Heroes Parade, 7 July 2021.

## 2. Bargaining over vaccine policies (USA)

The ATU encourages vaccination, while opposing the firing of workers who are not vaccinated, ${ }^{40}, 138-140$ warning that "pulling unvaccinated employees from service will exacerbate widespread driver fatigue problems and hours of service violations which are disturbingly common in our industry." ${ }^{138}$ The ATU has also fought vaccine misinformation, ${ }^{39},{ }^{40}, 139$ placed pressure on transit agencies to make vaccination easier financially, and to create fair policies on vaccine-related timelines and employment separation. ${ }^{141}$

ATU Local 1576, Everett, WA, negotiated an agreement with Community Transit (CT) on 5 November 2021 ${ }^{39,40}$ that included an extension of time to receive the vaccine, retroactive pay for weekly testing, and additional COVID leave. If unvaccinated members lost their job, they would receive 100\% of their "paid time off" and sick leave balances, and have the chance to be recalled, with seniority, until 2024.37 CT employees lost their jobs due to the policy, with resulting staffing shortages leading to overtime and driver fatigue. The union also negotiated a $\$ 3,000$ retention bonus in 2022 for those members who stayed at work.

Similarly, the TWU is "opposed to any mandate that requires someone to lose their job if they don't want the vaccine," ${ }^{112}$ and is concerned about even more service delays and possibly unsafe conditions. ${ }^{142,143}$ TWU Local 100 in New York City (NYC) also opposed a mandate. ${ }^{142}$ Given staff shortages caused by the Omicron variant, the New York governor did not mandate the vaccine for NYC transit workers. ${ }^{143}$ Local 100 did advocate for and achieve a "vaccine or weekly test" option, ${ }^{143,144}$ more testing sites ${ }^{144},{ }^{145}$ and paid time to be vaccinated. ${ }^{146}$ By 27 December 2021, about $80 \%$ of NYC transit workers were vaccinated. ${ }^{143}$

## B. NEGOTIATIONS WITH THE GOVERNMENT

## 3. Improving the job security and mental health of workers in the jeepney sector through a "just transition" (the Philippines)

Informal workers in the "jeepney" sector, without job security or employment protections, experienced a "silent pandemic" of mental health symptoms amidst COVID-19, mainly due to widespread loss of income and livelihood due to lockdowns. A contributing factor was the uncertainty created by the government's Public utility vehicle modernisation program (PUVMP). ${ }^{44}$ Jeepneys, redesigned World War Two-era US Army jeeps, are the most common form of public transportation in the Philippines. A key component of PUVMP is the forming of fleets of jeepneys, composed of at least 15 modern jeepneys, organised as corporations or cooperatives, instead of individual operators.


Figure 3. Board of Directors of Lahug Apas Transport Cooperative, during their blessing of their modernised Public Utility Jeepneys.


Figure 4. Jaime Aguilar, national secretary, National Confederation of Transport Worker Unions (NCTU-ITF), the Philippines.


Figure 5. Angelica "Angie" Mata, secretary-general of the Cebu chapter of NCTU-ITF, driving a modernised Public Utility Jeepney during the blessing of an affiliate, Lahug Apas Transport Cooperative. See her video: 'A worker-led just transition in public transport in the Philippines': https://www.youtube.com/watch?v=FJHD6Cg664Q

The National Confederation of Transport Worker Unions (NCTU-ITF) and the Move As One Coalition (which included unions, community and human rights organisations and public transport advocates) responded to the crisis with initiatives to provide immediate economic relief (including food) to workers. Their main national and local lobbying effort was a campaign for a "just transition",44 designed to improve job security and employment protections among "informal" jeepney operators and drivers. This included:

- A longer period for implementation of PUVMP
- A higher government subsidy for modern jeepneys
- Fleet consolidation of jeepneys in the form of cooperatives instead of corporations
- Permission for some traditional jeepneys to operate as the economy was opened
- Service contracting (government subsidies) for jeepney associations to provide jobs to operators and drivers, increase public transport, and be the "new normal" in public transportation. ${ }^{44}$

NCTU-ITF has organised 18 cooperatives in nine key cities and provinces, with 4,392 members. Just transition for workers in the PUVMP has been accepted by many NCTU-ITF members as a result of awareness raising and the results of the struggle, and it is hoped this will reduce the "silent pandemic" of mental health symptoms by providing more formal employment and greater job security.

## C. MENTAL HEALTH SUPPORT AND SERVICES

## 4. Unifor worker referral assistance programme and Mental Health Advocates (Canada)

Unifor, Canada's largest private sector union, has mental health advocates (MHAs) - union members who have been trained to become referral agents in their workplace or local union. They act as liaisons to community resources which can help members access the services they need while protecting their confidentiality.

Unifor Local 111 represents 5000 transportation workers in Vancouver, BC, with five bus depots and one MHA assisting workers in each depot. One MHA reported he now works 10 hours per month, paid by the company, with the union providing extra paid hours when needed. In the next contract, the union will propose increasing the number of hours paid by the company. The MHA focuses on reducing disciplinary measures, which are unhelpful for workers with anxiety or depression. The MHA publicises the programme to the union's membership through bulletin boards (Figure 6 ) and by being "approachable". The MHA has referred 5-10 members monthly during 2020-2021. While the programme is strictly private and confidential, stigma is still an obstacle. Bus drivers are concerned when need help for dealing with addiction, since they are monitored by alcohol and drug testing to keep their job.

Unifor produced Mental Health Matters: A Resource Book for Union Representatives and Local Unions in 2019 aimed at guiding local unions and union representatives on ways to develop and include contract language on this issue in collective bargaining, ${ }^{52}$ and COVID-19: We're in this together. Mental Health Resource Guide in 2021.46 Both are available on the Unifor web site. ${ }^{70}$


Figure 6. Unifor mental health bulletin board at bus depot in central Vancouver, BC, Canada.

## 5. Surviving Men and Women: Brave Men and Women, SNTT (Colombia)

In the absence of formal programmes to address anxiety and depression among COVID-19 survivors, Vivian Acosta and Elena Salinas, workers in a transport company and members of the SNTT union National Board of Directors, took the initiative to offer a friendly space so that workers who had recovered from COVID-19 could share their experiences and concerns related to mental health. This programme is based on the benefits of expressive talking and writing about past emotional events, ${ }^{147-149}$ and has four stages:

1. Select and read aloud a sentence taken from a list of 40 phrases called "pills".
2. Briefly recount their recovery from COVID-19 and relate their experience to the selected "pill".
3. Share in writing on a public billboard their interpretation of the shared experience, according to the selected "pill".
4. Have something to eat.


Figure 7. Phrases related to the COVID-19 infection experience - "pills" (left) and Elena Salinas of the SNTT union National Board of Directors next to an expressive writing board (right) during a Men and Women Survivors Programme session.

Workers reported that the programme allowed them to see negative COVID-19 experiences as a form of learning. Despite being unpleasant, they prepare people to face demanding future situations. Workers also reported the importance of family and co-worker social support, and religiosity. Although such worker-led mental health promotion initiatives are valuable and should be supported by transport companies and unions, they do not displace employer responsibility for providing safe and healthy workplaces.

Initially, this programme focused on the employees of one company which operates the Bus Rapid Transit (BRT) System Transmilenio ticket offices. However, due to high rates of participation and a good reception by workers, the programme was extended to all BRT system ticket sellers. The programme impressed the SNTT Board of Directors and the management of one company, so much they have begun to provide financial and logistical support to extend the initiative.

## 6. Health insurance and mental health services, Amalgamated Transport and General Workers Union (Uganda)

All employees in shops (companies) in formal employment that are unionised are entitled to free medical care for all general medicine-related health issues. The medical care extends to their spouses and four legally recognised children. However, each shop has a monthly limit for every employee household (for most, UgX 500,000, about USD 142) beyond which the employee meets the additional medical costs. Young workers in the informal transport sector, including taxis and boda-bodas (bicycles and motorcycles offering passenger and parcel service at a fee), do not have health care packages.

Though accessible on request or recommendation, mental health care is not explicitly included in the medical care packages and doctors typically do not investigate or diagnose mental health issues. In addition, there is no trusted mechanism at the workplace for young workers to "open up" and discuss their mental health issues. They tend not to trust counselling or therapy services paid for by their employers to keep their issues confidential.

In light of COVID-19 and its impact on young workers, the union is reviewing collective bargaining agreements with each shop - to negotiate for better working conditions, including extensive health insurance that covers counselling and mental health care services.


Figure 8. Unifor mental health bulletin board at bus depot in central Vancouver, BC, Canada.

## 7. ATU Local 265 mental health programmes (USA)

Following a tragic shooting of transport workers by a fellow worker in California on 26 May 2021, ATU International President John Costa said: "This tragedy once again underscores the need to make mental health a priority in the workplace... We have to end the stigma around asking for help." Local 265 President John Courtney pointed out that, instead of an EAP, local members would prefer a resource where unions can vouch for its confidentiality. ${ }^{51}$

Local 265 has worked closely with the Bill Wilson Center's (BWC) ${ }^{150}$ Critical Incident Stress Management (CISM) team, which has provided peer support training in the past for Santa Clara Valley Transportation Authority (VTA)/ATU Local 265 and for AC Transit - Oakland, CA/ATU Local 192. The BWC will be working with Local 265 to create a peer support team for union members. While CISM training is usually provided to emergency responders to help them deal with traumatic events, in the past it has typically not been provided to bus or train operators, despite the fact they also experience traumatic events, such as assaults, suicides and passenger or pedestrian injuries.

California legislators provided $\$ 20$ million in funding (beginning February 2022) to promote mental health at the VTA and to help change its work culture. ${ }^{69} \mathrm{~A}$ joint union/management committee is determining how to spend the new state funding. Included will likely be counselling for members and their families, mental health days (time off work), a four-day worker training on providing peer support to co-workers, reducing stigma for discussing mental health, and a threat assessment process.


Figure 9. ATU Local 265 Executive Board Officers

## 8. TWU Local 100 Union Assistance Programme, New York City (USA)

TWU Local 100 negotiated a new contract in 1988 which included a Union Assistance Programme (UAP) to provide confidential intervention services for members and their eligible dependents for substance abuse and mental health/family issues, including stress, depression, anxiety, eating disorders, or gambling. Local 100 members could volunteer for confidential drug and alcohol treatment before being caught by the employer's random alcohol and drug testing programme. The cost of the treatment is provided by the employer above and beyond the health benefit plan.

The programme also provides supportive counselling and referral assistance to those with personal and family problems. UAP staff are clinically prepared to perform a full intake, assessment, evaluation and make a referral based on each member's needs. The staff will monitor the progress of each client, along with the clinical teams/licensed therapists, to help the members reach their goal of successfully completing the programme and re-entering the workforce. It is focused on a positive outlook and plan for their work life and home life. The UAP outreach team gives interactive presentations weekly to new hires as well as at various locations in the transit system including, depots, quarters and on the road at subway terminals and information booths.

Terence Thornton, UAP Clinical Director, reported that, since the COVID-19 pandemic began: "Our mental health-related special intakes (such as stress, depression and anger management) have greatly increased". The UAP web site also includes links to other sources of information and assistance. ${ }^{151}$

## D. INFORMAL WORKER SUPPORT GROUPS AND UNIONS

## 9. "If they don't do it, we will" (Spain)

In response to the COVID-19 pandemic in Spain, transport workers created informal support groups based on social networks (such as WhatsApp and Telegram), in which concerns or emergencies were collectively discussed. Some of our focus group participants described receiving social support; providing support to a co-worker ill with COVID-19; or reorganising shifts due to personal or mental health issues experienced by drivers.

These self-organised actions were strengthened by union involvement. They provided some resources and strategies about changing working conditions. Even though the unions do not have specific services for mental health care on a large scale, their role tends to be well valued and contributes to making workers' needs visible. One of the participants affirmed that: "Comisiones Obreras (CCOO), unlike many other bodies in Spain, have taken a bit of action regarding mental health, since companies do not ... If they don't do it, we will."

The $\mathrm{CCOO}^{85}$ and the Unión General de Trabajadores (UGT) ${ }^{84}$ also developed educational materials and COVID-19 response protocols for their affiliates. In some cases, these protocols were directed at transport workers, given their emphasis on highly mobile workers, a group considered to be at high risk, given their high exposure.


Figure 10. CCOO learning-by-doing occupational health and safety activities, February 2022, Reus, Spain

## E. YOUTH ORGANISATIONS WITHIN TRANSPORT WORKER UNIONS

## 10. Union youth camp, Amalgamated Transport and General Workers Union (ATGWU, Uganda)

The ATGWU young workers' committee proposed an annual youth camp in 2018 in response to growing demands by young workers for spaces for engagement and interaction on issues of interest to them. The annual youth camp has become a safe space to discuss many issues, including those related to mental health. Save for the last two years, due to COVID-19, the camp is scheduled to take place 13-17 November each year.

Issues raised recently by young workers were mainly due to the impact of COVID19 and included:

- Increased turnover of young workers
- Increased job inequalities and job insecurity
- Increased unemployment, and depression, anxiety and less interest in daily activities

The union hopes to design programmes that specifically address mental health issues. Young workers' leaders at the shop and association levels are trained and are charged with the responsibility to pass on the information to colleagues in a peer-to-peer learning approach.


Figure 11. ATGWU youth camp

## 11. Transport Workers Union (TWU) Future Leaders Organizing Committee (FLOC) (USA)

FLOC is "devoted to empowering and educating new and young workers of the Transport Workers Union" by providing the next generation of union workers "the tools, resources, and relationships that will prepare them to take action and further worker's rights". The first FLOC conference was held in December 2018, during which workers attended workshops, participated in leadership building activities and networked with other young workers throughout the TWU. FLOC has three committee meetings each year plus an annual conference, a three-day event, and includes workshops, guest speakers, open forums and leadership building activities. ${ }^{152}$ See a short video about FLOC: http://floc.twu.org/who-we-are/

In Miami, FL, 6-8 August 2019, FLOC members learned about how the salary gap between CEOs and workers, between races, and between genders has been widened. The trend only continues to rise. Runaway inequality explains the process by which workers fall victim to systematic wealth extraction by their corporations, banks, private equity firms, and hedge funds, and puts downward pressure on jobs, wages, benefits, and working conditions while boosting the incomes of the financial elites. FLOC members stated that: "It's a call upon us to build a collective movement to tackle the sources of increasing income and lowering wealth inequality." ${ }^{153}$


Figure 12. FLOC Members at the 2019 Miami conference sharing a photo with American Federation of State, County and Municipal Employees (AFSCME) Local 199 President Se' Adoreia "Cee Cee" Brown

While FLOC began in the union's air transport division, the 2021 TWU Convention unanimously passed a resolution to expand FLOC to all divisions. While transport worker mental health has not been a specific issue addressed in past meetings, it is being considered for future meetings.

## F. UNION SUPPORTED RESEARCH

## 12. ISTAS, a labour union research institute (Spain)

Since 2001, the Spanish labour federation Comisiones Obreras (CCOO), and its affiliated research institute ISTAS (Instituto Sindical de Trabajo, Ambiente y Salud ${ }^{53}$ ), have been carrying out research, education and trade union action on preventing psychosocial risks, and improving work organisation, to reduce mental health problems and other work-stress-related illnesses. ${ }^{54}$ The union also demands that companies improve their health surveillance, so that work-related diseases can be identified and compensated, and defends workers who are denied compensation. ISTAS-CCOO carried out two surveys among affiliated workers during the pandemic with data on work exposures and mental health. ${ }^{25,49,55}$ The 2020 survey showed that $44.3 \%$ reported job strain, $41.6 \%$ reported severe trouble sleeping during the last month, $55.1 \%$ were at risk of poor mental health, $15.4 \%$ reported new or increased tranquiliser use and 12\% reported new or increased opioid painkiller use - all these are more than double compared to pre-pandemic levels. ${ }^{49}$ Similar increases were seen in 2021 survey results. ${ }^{25}$ Younger workers tended to have higher work psychosocial risks and worse health. They were more likely to have lost their jobs, faced a temporary layoff or experienced poor job security during the pandemic. ${ }^{49}$ However, data were not available specifically for transport workers. A February 2022 study of cargo drivers, conducted separately from ISTAS, did find work intensification during the pandemic, and a substantial worsening of both working conditions and mental health. ${ }^{154}$

Please see the Appendix for complete details of participating unions and researchers, the complete literature review and case studies, the full report of interviews and focus groups, and all references.

## APPENDIX

## COUNTRIES, UNIONS, RESEARCHERS, METHODS



## CONTENTS

1. ITF AFFILIATES PARTICIPATING IN THE TRANSPORT ..... 52 WORKER MENTAL HEALTH STUDY
2. RESEARCHERS OBTAINING APPROVAL FOR FOCUS ..... 57 GROUPS AND INTERVIEWS FOR THIS STUDY THROUGH THEIR UNIVERSITIES' INSTITUTIONAL REVIEW BOARDS (IRBS)
3. ACKNOWLEDGEMENTS ..... 58
4. COVID-19 TRANSPORT UNION RESPONSE ARTICLES ..... 59
AND RESOURCES
5. A DAY IN THE LIFE OF A BUS DRIVER ..... 63
6. BUS DRIVER INJURY AND ILLNESS PREVENTION ..... 63 PROGRAMME SUMMARIES (HEALTHY WORK CAMPAIGN)
7. STATEMENT FROM ITF YOUNG TRANSPORT ..... 64 WORKERS' SUMMER SCHOOL, FLORENCE, ITALY, AUGUST 20-24, 2019
8. LITERATURE REVIEW METHODS ..... 66
9. FIGURE A. PRISMA 2020 FLOW DIAGRAM FOR NEW ..... 69
SYSTEMATIC REVIEWS WHICH INCLUDED SEARCHES OF DATABASES, REGISTERS AND OTHER SOURCES
10. RESEARCH ON THE MENTAL HEALTH AND ..... 70 WELLBEING OF YOUNG WORKERS IN PUBLIC TRANSPORT: A SCOPING LITERATURE REVIEW
11. METHODS OF COLLECTION AND ANALYSIS OF DATA ..... 104 FROM FOCUS GROUPS AND INTERVIEWS
12. TABLE A. ..... 107
PARTICIPANTS IN ITF STUDY OF MENTAL HEALTH OF YOUNG PUBLIC TRANSPORT WORKERS, N=70
13. TABLE B. ..... 108
PRIMARY OCCUPATIONS OF PARTICIPANTS IN ITF STUDY OF MENTAL HEALTH OF YOUNG PUBLIC TRANSPORT WORKERS, $\mathrm{N}=70$
14. COMPLETE RESULTS OF FOCUS GROUPS AND ..... 109 INTERVIEWS
15. COMPLETE CASE STUDIES ..... 159
Case Study 1:
CAMPAIGNS FOR HAZARD PAY DURING THE COVID-19 ..... 159
PANDEMIC (USA) A-116
Case study 2:
BARGAINING OVER VACCINE POLICIES (USA) ..... 162
Case study 3:
EFFORTS TO IMPROVE THE JOB SECURITY AND MENTAL HEALTH ..... 165
OF WORKERS IN THE JEEPNEY SECTOR IN THE PHILIPPINES
Case study 4:
UNIFOR WORKER REFERRAL ASSISTANCE PROGRAMME AND ..... 173
MENTAL HEALTH ADVOCATES (MHAS) WORKING WITH BUS DRIVERS IN VANCOUVER, CANADA
Case study 5:
SURVIVING MEN AND WOMEN: BRAVE MEN AND WOMEN ..... 176 (COLOMBIA)
Case study 6:
HEALTH INSURANCE AND MENTAL HEALTH SERVICES, ATGWU ..... 180 (UGANDA)
Case study 7:
ATU LOCAL 265 MENTAL ..... 181
HEALTH PROGRAMMES (USA)
Case study 8:
TWU LOCAL 100 UNION ASSISTANCE PROGRAMME (USA) ..... 184
Case study 9:
TRANSPORT WORKER AND UNION ACTION: ..... 186
IF THEY DON'T DO IT, WE WILL (SPAIN)
Case study 10:
UNION YOUTH CAMP, ATGWU (UGANDA) ..... 188
Case study 11:
TWU FUTURE LEADERS ORGANIZING COMMITTEE (FLOC) (USA) ..... 190
Case study 12:
ISTAS, A LABOUR UNION RESEARCH INSTITUTE (SPAIN) ..... 193
Case study 13:
MEMORIAL PAINTING FOR TRANSPORT WORKERS LOST ..... 194
TO COVID-19, TWU LOCAL 100 (USA)
REFERENCES (FOR THE MAIN BODY ..... 196
OF THE REPORT AND THE APPENDIX)

# 1. ITF AFFILIATES PARTICIPATING IN THE TRANSPORT WORKER MENTAL HEALTH STUDY 

## Canada

ATU Canada, https://www.atucanada.ca/
Scott Gordon, Executive Board Member, ATU Local 113, sgordon@atu113.net
Assistant Business Agent - Maintenance
As of the $3^{\text {rd }}$ quarter of 2021, the ATU had 31,639 active members and 6,313 retired members in Canada.
Mental health resources in Toronto: https://wemovetoronto.ca/managing-mental-health-and-wellbeing/

Unifor, https://www.unifor.org/
Sari Sairanen, Director, Health, Safety and Environment
Unifor is Canada's largest private sector union, with more than 315,000 members
Unifor, COVID-19: Mental Health Resources:
https://www.unifor.org/campaigns/all-campaigns/covid-19-mental-health-resources
https://www.unifor.org/sites/default/files/legacy/documents/document/covid mental health
guide_aug2021_en.pdf
Unifor, young workers: https://www.unifor.org/search?search=young+workers
Unifor, COVID: https://www.unifor.org/search?search=COVID
Canadian Union of Public Employees (CUPE), https://cupe.ca/
David J. Chezzi, CUPE National Representative, dchezzi@cupe.ca
Paralegal, Law Society of Ontario, Worker's Compensation Services
Canadian trade union representing workers in the public sector; also has affiliates from the nonprofit and para-public sector. Its membership was 700,000 in October 2017.

## Colombia

Sindicato Nacional de Trabajadores de Rama, Servicios de la Industria del Transporte y Logistica de Colombia (SNTT), https://snttdecolombia.org/

There are 320,000 transport and logistics workers in Colombia, about 4.6\% $(14,720)$ of them are urban public transport employees (including urban public transport drivers and staff of stations, roads and complementary services for land transport). ${ }^{155}$ The SNTT reports that it has 5,631 members ( $9.6 \%$ women).

## Indonesia

## Railway unions:

Serikat Pekerja Kereta Api (SP KA), Indonesian railway union, 5,000 members
Serikat Pekerja Kereta Api Jabodetabek (SP KAJ), member data not available
Both unions represent employees of PT Kereta Api Indonesia, which has about 22,000 employees.

## Bus rapid transport unions:

Serikat Pekerja Trans Jakarta (SP TJ, Indonesian bus rapid transit union, 2,500 members) Serikat Pekerja Dirgantara dan Transportasi (SPDT, Aerospace and Transport Union, 15,000 members) Both unions represent employees at PT, TransJakarta, which has about 6,000 employees. SPDT also represents employees at other companies.

## Digital and online driver union:

Serikat Pekerja Dirgantara (SPDT) Federasi Serikat Pekerja Metal Indonesia (FSPMI), 15,000 members. Employed by companies such as Gojek, Grab, Maxim, Andalan. Web site: https://fspmi. or.id/, https://www.facebook.com/SpdtFspmiPtTransportasiJakarta/
Jenfer Jansen Zakarias, SP TJ Youth Workers Committee leader
Sultoni, SP KA Millennial Empowerment leader
Ilham Badillah, SP DT Youth leader
Enung Yani Rukman, Project Field Coordinator, Urban Transport Jakarta Project, ITF

## Philippines

National Confederation of Transport Worker Unions (NCTU), https://web.facebook.com/Nctu-Sentro-ltf-381589319285641/, https://web.facebook.com/Nctu-Sentro-ltf-106202374451883/

Jaime Aguilar, national secretary, NCTU, reported on 9 October 2021 that NCTU members are drivers, operators, dispatchers and conductors. When the NCTU converted the association to a transport cooperative, their membership declined, from 30,000 to about 5,500. About 98\% of the members are men, but $20-40 \%$ of the leadership are women. About $10 \%$ of NCTU members are less than 35 years old. While previously all members were informal workers, now, those drivers and staff of cooperatives operating modernised jeepneys are formal workers. Because of NCTU's education and capacity building program, many cooperative leaders believe in empowering the cooperative for the betterment of the whole membership (see case study \#3).

## Spain

Confederación Sindical de Comisiones Obreras (CCOO), https://www.ccoo.es/
Unión General de Trabajadoras y Trabajadores (UGT), https://www.ugt.es/
The UGT has three main sections, including transport workers in the FeSMC (services, mobility and consumption) federation. ${ }^{156}$ In 2017, approximately 61,856 transport workers were members of the UGT, $81 \%$ of them men. ${ }^{157}$ The CCOO includes transport workers in the "FSC" (services to citizens) sector. ${ }^{158}$ As of May 2021, according to the CCOO, within the FSC sector, there were 29,597 members grouped in Road and Logistics and 13,219 in Railway (FSC had 235.858 members).

## Uganda

Amalgamated Transport and General Workers Union (ATGWU), https://www.africaefuture.org/atgwu/pagweb/81.html
General Secretary, Abima Stephen
Programmes Officer, John Mark Mwanika, Chair ITF Urban Transport
Education Secretary, Hamid Ssebunya
Roads Organising Secretary, David Musoke
Young Workers Committee leader, Executive Board Member, Shanitah Birungi
David Musoke reports that the ATGWU is the first Uganda registered union having been formed in 1937 during the colonial days. It is an ITF affiliate and has been key to ITF activities in East African Countries. For example, it was the mentor union for English speaking unions on organising informal transport workers on the African continent. ATGWU has been involved in occupational safety and health, in HIV projects including USAFIRI, and is involved in the counselling of workers related to mental health issues.

ATGWU organises workers from four major sections -- aviation, road transport, private security and property maintenance, and oil and gas. Also, some workers not directly engaged in transport but working within or close to a transport hub are members (such as cleaners at an airport or vendors at a taxi park). ATGWU organises both formal and informal transport workers. The road transport section is mostly informal, and includes five subsections: 1) Boda-Boda (bicycles engaged in the transport service);; 2) Tuku-Tuku (tricycles engaged in the transport service); 3) Taxis (mini vans with seating capacity of 14 before COVID-19 and 8 during COVID-19); 4) Trucks; and 5) Buses.

As of May 2021, ATGWU had organised 105,600 members of which 90,400 are informal and 15,200 are formal ( 13,000 in private security, 2,000 in aviation and 200 in oil and gas). Of 90,400 informal workers, 54,700 are Boda-Boda, 300 are Tuku-Tuku, 34,000 are taxis, 800 are truckers and 200 are bus drivers. In aviation, $40 \%$ are women, in private security $20 \%$ are women. However, in road transport, only $2 \%$ are women.

## United States (USA)

Amalgamated Transit Union (ATU), https://www.atu.org/ John Costa, President
Brian Sherlock, Safety Specialist, bsherlock@atu.org
John Lyons, Director of Joint Industry Councils and Collective Bargaining, ilyons@atu.org Russell Bateman, Training and Education Administrator, rbateman@atu.orgs

As of the $3^{\text {rd }}$ quarter of 2021, the ATU had 115,520 active members and 38,970 retired members in the US. About $77 \%$ of the members were men and about $5 \%$ were 30 years old or younger.

ATU COVID-19 response:
Members that have died: https://www.atu.org/remember-our-fallen
Vaccine information: https://www.atu.org/covid-19/covid-19-vaccine-information Union activities related to COVID-19: https://www.atu.org/covid-19/stay-informed, https://www.atu.org/covid-19/work-safe, https://www.atu.org/covid-19/take-action ATU mental health and behavioural health benefits, in cooperation with FHE health: https://www.atu.org/members/members-benefits

Amalgamated Transit Union, Local 1576, https://atu1576.org/, https://www.facebook.com/ATU1576
Danielle Julien, Vice President, djulienvp@atu1576.org
2810 Lombard Av. Suite 203
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Amalgamated Transit Union, Local 265, http://atulocal265.org/
1590 La Pradera Drive
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Amalgamated Transit Union, Local 627, https://atu627.org/
1385 Tennessee Avenue
Cincinnati, OH 45229-1013
Troy Miller, President, troympres627@gmail.com
Amalgamated Transit Union, Local 788
1611 South Broadway
St. Louis, MO 63104
Reggie Howard, President, rmhoward788@gmail.com
Transport Workers Union (TWU), https://www.twu.org/
John Samuelsen, President
Curtis Tate, International Administrative Vice President, ctate@twu.org
Heather Laverty, Legislative and Political Representative, hlaverty@twu.org
Transport Workers Union, Local 100, http://www.twulocal100.org/
195 Montague St
Brooklyn, NY 11201
Tony Utano, President
Earl Phillips, Secretary-Treasurer, ephillips@twulocal100.org
Pete Donohue, Communications Director, pdonohue@twulocal100.org
(about 41,000 members)
Transport Workers Union, Local 100, Union Assistance Program (UAP), http://www.twulocal100.org/ union-assistance-program
Terence Thornton, Clinical Director, uaplocal100@gmail.com
Transport Workers Union, Local 250A, https://twusf.org/
Roger Marenco, President, rmarenco@twusf.org
1508 Fillmore St. \#211
San Francisco, CA 94115
(about 2,200 members)

Transport Workers Union, Local 568, https://www.twulocal568.org/
Eric Espaillat, eespaillat@twulocal568.org
5395 NW 36th St
Miami Springs, FL 33166
(about 2600 members, $40 \%$ < 35 years old, $25 \%$ women)
TWU Future Leaders Organizing Committee (FLOC)
https://www.twulocal568.org/?zone=/unionactive/view_page.cfm\&page=FLOC20MIAMI
http://floc.twu.org/
http://floc.twu.org/who-we-are/
http://floc.twu.org/floc-zooms-into-2021/
http://floc.twu.org/floc-updates/history-is-written-during-the-last-floc-membership-meeting/

## 2. RESEARCHERS OBTAINING APPROVAL FOR FOCUS GROUPS AND INTERVIEWS FOR THIS STUDY THROUGH THEIR UNIVERSITIES' INSTITUTIONAL REVIEW BOARDS (IRBS)

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## 4. COVID-19 TRANSPORT UNION RESPONSE ARTICLES AND RESOURCES

## Canada

Porter, K. "Consider transit workers in vaccine rollout, commission says." Retrieved August 13, 2021, from https://www.cbc.ca/news/canada/ottawa/oc-transpo-vaccine-essential-work-1.5996525.

ATU Canada. "Covid-19 Archive (March-May 19)." Retrieved August 13, 2021, from https://www. atucanada.ca/members-resources/covid-19.

ATU Canada. "COVID-19." Retrieved August 13, 2021, from https://www.atucanada.ca/covid-19.
Labour Market Information (LMI) Directorate. "COVID-19 in Western Canada: Industry Impact: Transportation and Warehousing." Retrieved August 13, 2021, from https://www.jobbank.gc.ca/ content_pieces-eng.do?cid=16783.

Canadian Union of Public Employees National Sector Council Conference. Sector Profile: Transportation. Ottawa, Ontario: Canadian Union of Public Employees, 2020. Retrieved August 23, 2021, from https://cupe.ca/sector-profile-transportation

## Ottawa, Canada

OC Transpo has a webpage for users, where COVID-19 cases are reported, along with the date, worker role/position and routes affected due to worker isolation/sick leave. The last case reported was on August 18-19, 2021. Website visited on October 17, 2021.
https://www.octranspo.com/en/our-services/safe-travels/confirmed-covid-19-cases/
ATU Local 279 members are drivers, maintenance and other workers of OC Transpo. They have fought for employment equity, against service cuts, and demanding vaccination for all their members, putting young workers in the foreground. Website visited on October 17, 2021. https://www.younified.ca/landing

OC Transpo drivers staged a peaceful protest in Ottawa in April this year - calling for immediate COVID-19 vaccination for the union's members. https://ottawacitizen.com/news/local-news/a-lot-of-anxiety-oc-transpo-union-pushing-for-immediate-vaccination-of-its-members

On its webpage, CUPE 5500 (OC Transpo Supervisors) highlights some mental health services. Website visited on October 17, 2021.
https://5500.cupe.ca/health-and-wellness/

## Toronto, ON, Canada

"There are currently 16 TTC employees in self-isolation and 1069 employees have returned to work. As of October 6, 2021, a total of 1126 TTC employees, out of a staff of 16,000 , have tested positive for COVID-19". They give the job title of each of the affected workers. Website visited on October 17, 2021.
http://www.ttc.ca/COVID-19/Case_update.jsp
ATU Local 113 represents 12,000 public transit workers in Toronto and the York Region. Website visited on October 17, 2021.
https://wemovetoronto.ca/

There were protests on October 13, 2021 against worker vaccination mandates.
Website visited on October 17, 2021.
https://www.thestar.com/news/gta/2021/10/13/on-a-new-front-in-the-ttc-vaccine-battle-union-calls-transit-agencys-mandate-illegal.html

## Vancouver, BC, Canada

Translink shows no news about workers, health or COVID-19.
"Unifor Local 111 represents over 4000 Metro Vancouver Transit Operators. We operate a fleet of over 1400 vehicles across the Lower Mainland, including Electric Trolley buses, CNG powered buses, Diesel Hybrid buses, Diesel buses and Community Shuttles." Resources and news are available on their webpage, on: mental health:
https://www.unifor.org/search?search=mental+health
Unifor 2200 represents approximately 1000 Skilled Trades and Support Workers employed by Coast Mountain Bus Company (translink) in Metro Vancouver, BC. Unifor 2200 shares a joint certification with Unifor 111, which represents the operators of CMBC.
The Local Union comprises Commercial Transport Mechanics, Bodypersons, Electronic Technicians, Partspersons, Automotive Mechanics, Painters, Tirepersons, Overhead Linepersons, Machinists, Welders, Masters, Controllers and Mates, Engineers, Plumbers, Electricians, Carpenters, Sheet Metal Workers, Servicepersons, Interior Cleaners, and Support Workers. https://unifor2200.ca Website visited on December 30, 2021

Current collective agreement covers both Unifor Locals 111 and 2200. Effective date: 1 April 2019. Expiry date: 31March 2022.

## Colombia

SNTT. " i El SNTT de Colombia, en estado de máxima alerta ante la pandemia de COVID -19 que azota a la humanidad!". Retrieved 13 August 2021, from https://snttdecolombia.org/noticias/el-sntt-de-colombia-en-estado-de-maxima-alerta-ante-la-pandemia-de-covid-19-que-azota-a-la-humanidad/

SNTT. "EI SNTT de Colombia firma su tercera convención colectiva de trabajo en pandemia." Retrieved August 13, 2021, from https://snttdecolombia.org/noticias/el-sntt-de-colombia-firma-su-tercera-convencion-colectiva-de-trabajo-en-pandemia/
"Reparar los daños en TransMilenio costaría $\$ 20.000$ millones." Retrieved 13 August 2021 from https://www.portafolio.co/economia/transmilenio-reparacion-de-los-danos-en-buses-y-estaciones-costaria-20-000-millones-552028

ITF (2014). "Los/as conductores/as de autobuses luchan por reincorporarse a sus puestos de trabajo." Retrieved 13 August 2021, from https://www.itfglobal.org/es/news/losas-conductoresas-de-autobuses-luchan-por-reincorporarse-sus-puestos-de-trabajo.

## Philippines

Angelica "Angie" Mata, secretary-general of the Cebu chapter of the National Confederation of Transport Workers Unions (NCTU) discussing
"A worker-led just transition in public transport in the Philippines": https://www.youtube.com/watch?v=FJHD6Cg664Q

In 2016 the government of the Philippines promoted the modernisation of public transport to reduce carbon emissions in its cities. But it came at a cost: the NCTU in Cebu City, Philippines, was determined to save the jeepneys, Philippines' traditional form of public transportation. Thanks to the NCTU, since 2018, thousands of jeepney workers have organised through a just transition into transport cooperatives that are now part of the jeepney modernisation project, aimed at curbing climate change, formalising informal jobs, democratising transport and providing a model to transform public transport.

## Spain

Llorens-Serrano, C., et al. "Condiciones de trabajo y salud tras un año de pandemia." Retrieved 13 August 2021, from https://istas.net/noticias/condiciones-de-trabajo-y-salud-tras-un-ano-de-pandemia-resultados-de-la-encuesta-cots-en

## USA

Transport Workers Union (TWU) Local 100, New York City
Bus operators at the Michael J. Quill Depot in midtown Manhattan produced this video to say that MTA/TWU Transit Workers are Front Line Workers -- and We Matter! (April 24, 2020)
https://www.youtube.com/watch?v=3uw7zByvX9Y (2:50)

TWU Local 100 Transport Workers Bulletin (Fall 2020):
"Report on the Union's Efforts to Battle COVID-19" (pages 6-7)
"Now the World Knows About NYC Transit Workers" (pages 26-27)
"We Mourn Our Brothers and Sisters Lost to the Coronavirus" (pages 28-32)
http://www.twulocal100.org/sites/twulocal100.org/files/twu local100bulletinfall2020.pdf

TWU Local 100 Transport Workers Bulletin (Winter 2020):
"Massive Rally Helps Catapult Union to Contract Victory" (pages 6-11)
http://www.twulocal100.org/sites/twulocal100.org/files/twu 100 bulletin winter2020.pdf

TWU Local 100 Transport Workers Bulletin (Summer 2021)
"TWU Demands Hazard Pay At Hometown Heroes Parade" (pages 9-11)
"Union Chalks Up Wins in Fight for More Cops to Patrol Subways" (pages 22-23)
"Bus Members Campaign for More Cops, Too" (pages 24-25)
http://www.twulocal100.org/sites/twulocal100.org/files/twu_100_bulletin_summer2021.pdf

Local 1056 Bus Operator Talks COVID and Bus Safety (1 March 2022)
https://www.laborpress.org/local-1056-bus-operator-talks-covid-and-bus-safety/?utm
source=rss\&utm medium=rss\&utm campaign=local-1056-bus-operator-talks-covid-and-bus-safety
How the Dumb Response to Covid Put NYC Bus Operators in Danger - An MTA Veteran Speaks Out (March 9, 2022)
https://www.laborpress.org/how-the-bungled-response-to-covid-put-nyc-bus-operators-in-danger-an-mta-veteran-speaks-out/

John Samuelsen, TWU International President, discusses the shooting in a Brooklyn subway station on 12 April 2022, safety in the subway system, and the quick actions of TWU Local 100 members who helped passengers escape to safety.
On the Brian Lehrer show, WNYC: https://www.wnyc.org/story/checking-transit-union/ On National Public Radio (NPR): https://www.npr.org/2022/04/12/1092414655/mta-official-and-lifelong-brooklyn-resident-on-attack-at-subway-station

SF TWU 250a Transit Workers, Covid, Health \& Safety with TWU 250a President Roger Marenco, (May 27, 2020)
https://www.youtube.com/watch?v=tOiqLIcK3fk
Transit Workers Deserve Hazard Pay - Rally Recap of ATU 265 Demanding Hazard Pay From VTA, San Jose, CA (October 23, 2021)
https://www.youtube.com/watch?v=Dws4etsXWkY\&t=64s (1:18)
People's Transit Alliance
A coalition of transport worker unions, labour activists and passenger advocacy groups designed to work "with transit workers and riders to build solidarity and amplify their demands for a frequent, safe, affordable service."
https://peoplestransit.org/campaigns/

## 5. A DAY IN THE LIFE OF A BUS DRIVER

A Day in the Life of a Bus Driver, by the Center for Social Epidemiology, https://unhealthywork.org/la-bus-driver-study/a-day-in-the-life-of-a-bus-driver/

## 6. BUS DRIVER INJURY AND ILLNESS PREVENTION PROGRAMME SUMMARIES (HEALTHY WORK CAMPAIGN)

https://healthywork.org/wp-content/uploads/2020/09/Programs-and-policies-to-reduce-work-stress-among-bus-drivers.pdf
https://healthywork.org/wp-content/uploads/2020/09/Preventing-threats-and-violence-against-busdrivers.pdf
$\underline{\text { https://healthywork.org/wp-content/uploads/2020/09/Bathroom-Access-for-Bus-Drivers-in-US-and- }}$ Canada.pdf
https://healthywork.org/wp-content/uploads/2020/01/HWC-Website-Page-Content-Resources-Healthy-Work-Strategies-Intervention-to-reduce-job-stress-bus-drivers-Sweden-v1-011720.pdf
https://healthywork.org/wp-content/uploads/2020/01/HWC-Website-Page-Content-Resources-Healthy-Work-Strategies-Action-research-intervention-urban-bus-drivers-Denmark-v1-011720.pdf

## 7. STATEMENT FROM ITF YOUNG TRANSPORT WORKERS' SUMMER SCHOOL, FLORENCE, ITALY, AUGUST 20-24, 2019

We are 25 young public transport workers from 17 trade unions in 14 different countries. We have spent five days together at the ITF young workers summer school in Florence, Italy. We are the present and the future of the trade union movement and the world. Our membership and activism are crucial to building power in our public transport.

We recognise that our brothers and sisters from India, Kenya, Nigeria and Uganda were denied visas to travel to Italy. We regret their absence and the loss of their experiences that has compromised our learning. We condemn the structures that deny young people from particular countries the right to travel, experience, learn and build global solidarity.

We are proud of what we do. Together, we move millions of people across our cities and countries every day. We give people the opportunity to access employment, meet their friends and family and enjoy public life. Public transport is critical to addressing the climate crisis. We move the world and drive the economy.

But as young workers in public transport, we are confronted with...

- Insecure jobs that exclude us from pensions, healthcare and social protection
- Jobs that have long working hours and low pay
- Exploitative work cultures and violence that affect our mental health
- Tracking, surveillance and data collection as a direct result of technological change that threatens all the rights our trade union movement has won
- Gender-based violence and discrimination


## We are committed to...

- Building youth structures within our unions that create collective space for young workers to influence policy and campaigns within our unions and in our workplaces
- Organising to bring more young workers into our trade unions and making them more accessible to our generation through trade union education
- Creating sustainable youth platforms and activist networks that connect young workers fighting for their rights in our public transport
- Taking action to win decent work in our public transport through policy and campaigning that puts people before profit
- Securing women's access to traditionally 'male' jobs and ending gender-based violence, including supporting the newly adopted ILO Convention on Violence and harassment in the world of work
- Being part of the solution to the climate emergency by bargaining for expanded public transport, increasing the use of renewable energy and training to reduce our carbon footprint
- Building alliances across borders and movements to stand together for economic, social, gender and climate justice
- Highlighting the critical role of informal workers in public transport through the collection of data on the informal workforce


## Together we support the People's Public Transport Policy and demand...

## Decent work in public transport that guarantees us a right to a job with:

- Wages that give us access to a good quality of life and recognise the contribution we make to cities and society
- Facilities that assure a healthy and safe working environment
- A transition from informal to formal jobs
- Access to pensions, healthcare and social security
- The right to trade unions


## More worker control of technology:

- Worker representation in decision making on the development and implementation of new technology in our public transport
- Transparency and trade union access to the data collection in the workplace
- Restrictions on the use of data in disciplinary proceedings
- Re-skilling and training that allows us to transition to new, decent jobs
- Fatigue management policies that acknowledge the importance of the social aspects of working life and restrict the minute management of our work

We will start our collective action on the World Day for Decent Work on 7 October 2019 to highlight our commitment to winning decent work for young workers in our public transport. We call on our brothers and sisters in other ITF-affiliated unions to join us in our demands and mark the day with us.

We will take space<br>We will organise<br>We will campaign<br>We will break barriers<br>We will stand up for the fight<br>We will win<br>Solidarity forever!

## 8. LITERATURE REVIEW METHODS

## 1. Study design

This review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. ${ }^{159}$ The inclusion and exclusion criteria were discussed and approved by all the authors. The article search process was conducted by the study Principal Investigators (PIs), Dr. Cendales, Dr. Useche, Dr. Cedillo and Dr. Landsbergis. Study eligibility was independently assessed by the four Pls and Ms. Yan, Mr. Stephenson, Ms. Jara, Ms. Hunt, Dr. Kyaw and Mr. Jimenez. The information extraction was carried out by the four Pls and Ms Yan, Mr. Stephenson, Ms Jara, Ms Hunt, Dr Kyaw, Mr Jimenez, Ms Nathani and Ms Nguyen.

## 2. Inclusion/exclusion criteria

The criteria for the inclusion of research studies in the literature review were:

1. Original articles published in English.
2. Studies on the mental health or working conditions of urban public transport workers.
3. Studies which assess mental health outcomes related to the working conditions of urban public transport workers.
4. Studies which assess safety outcomes related to working conditions or mental health problems of urban public transport workers.
5. Studies which assess stress-related physical outcomes associated with the working conditions of urban public transport workers.

The exclusion criteria were:

1. Articles published in non-English languages
2. Case studies, conceptual articles, conference proceedings and literature reviews
3. Articles on inter-city rail or bus workers
4. Studies on drug testing of workers, which do not assess mental health or working conditions
5. Studies on cardiovascular reactivity not related to mental health problems or working conditions

## 3. Search strategy

The Medline (PubMed), Scopus and Web for Science databases were used to identify articles published between 1990 and 2021. Keywords such as "transport workers", "bus drivers", "train drivers", "mental health", "stress", "post-traumatic stress", "anxiety", "depression", "burnout", "alcohol" and "substance use" were combined in the following search algorithm:
"transport workers"[Title/Abstract] OR "transport employees"[Title/Abstract] OR "transport drivers"[Title/Abstract] OR "transport conductors"[Title/Abstract] OR "transport maintainers"[Title/ Abstract] OR "Transit workers"[Title/Abstract] OR "transit employees"[Title/Abstract] OR "transit drivers"[Title/Abstract] OR "transit conductors"[Title/Abstract] OR "transit maintainers"[Title/ Abstract] OR "bus drivers"[Title/Abstract] OR "bus conductors"[Title/Abstract] OR "bus workers"[Title/Abstract] OR "bus employees"[Title/Abstract] OR "bus maintainers"[Title/Abstract] OR "train drivers"[Title/Abstract] OR "train conductors"[Title/Abstract] OR "train workers"[Title/ Abstract] OR "train employees"[Title/Abstract] OR "train maintainers"[Title/Abstract]) AND ( "mental health"[Title/Abstract] OR "post traumatic"[Title/Abstract] OR "stress" [Title/Abstract] OR anxiety[Title/Abstract] OR depression[Title/Abstract] OR burnout[Title/Abstract] OR "alcohol"[Title/ Abstract] OR "substance use"[Title/Abstract]

Search results (bibliographic and abstract information) were stored and exported to Rayyan ${ }^{\circledR}$ online software, where duplicates were automatically eliminated and full text manuscripts were uploaded in PDF format. The abstracts of the manuscripts were screened by at least two of the project researchers in order to assess the articles' eligibility. The references of the retrieved articles were inspected for additional eligible manuscripts. Disagreements about the inclusion of manuscripts were resolved using the evaluation of a third reviewer.

## 4. Information extraction

Information extracted from the articles selected for the review included Population (country, city, occupation, age, gender), Intervention (if applicable), Comparisons (if applicable. In nonexperimental studies, comparisons were recorded between occupational groups or by age, sex, race or immigration), Outcome (PICO), Instruments, research design, predictors and limitations.

## 5. Results

Figure A provides a flow chart with the results of the article search and selection processes conducted for this literature review. After elimination of duplicates and abstract screening, the full texts of 395 articles were reviewed for eligibility. By applying the aforementioned inclusion/ exclusion criteria, the eligible list was reduced to 195 manuscripts. Ten review articles, seven government reports that assessed existing studies, policies and programmes, and five additional articles published in 2022 were identified by searching the authors' files and examined. Key informant interviews were also conducted in each country to gain an understanding of the context of COVID-19 impact and transport worker union response. The results of the information extraction process are summarised in Figure A.

## 6. Measures of mental health in research studies

Most of the studies included self-reported measures of mental (ill-)health, based on surveys. While two studies used qualitative interviews to ask about workers' mental (ill-)health and working conditions. ${ }^{22,160}$ Other studies relied on cognitive or psycho/physiological tests, ${ }^{161-163}$ physiological measures ${ }^{162,164}$ or individual psychological diagnoses. ${ }^{107}$

A variety of work and employment conditions were studied, looking at their possible impacts on workers' mental (ill-)health and work. Some of these aspects were framed through measurements (variables) from existing models (Demand-Control-Social Support; Effort-Rewards Imbalance and Job Demands-Resources) that have been extensively applied in many working populations. Work demands, decision-making, work rewards, work pace, social support and over-commitment are examples of the aspects of work framed by these models, included in $1 / 3$ of the studies, using standardised questions. In other studies, specific questions and observations of these same aspects were included. Work-life/family balance/conflict was another aspect included in seven studies. All of these characteristics of the work apply generally to all occupations, although they manifest in specific terms in each one.

Other (psychosocial) job characteristics addressed in the studies are more specific to the work of public transport drivers (especially bus drivers). Among these are: scheduling, ${ }^{22}$ number and frequency of stops, ${ }^{163,165}$ routes, ${ }^{166}$ split shifts, ${ }^{21,57,108}$ rest intervals, ${ }^{167,168}$ interactions with clients, $96,163,169-171$ traffic, ${ }^{162-164,166,172}$ peak hours, ${ }^{120}$ loneliness, ${ }^{173}$ emotional load, ${ }^{174}$ perceived safety, ${ }^{175}$ violence ${ }^{8,109}$ and "workload" as measured through various approaches. ${ }^{170,176-178}$

## 7. Internet-based newspaper and magazine articles

To assess recent developments on the impact of COVID-19 on transport working conditions and worker mental health, and the responses of transport worker unions, Google searches and examination of union web sites were conducted on these topics. From these searches, >80 internetbased articles and resources were identified and summarised in discussions of COVID-19 impact and union response. Such searches were used since there were very few refereed journal articles found on the impact of COVID-19 on transport workers and on the transport worker union response to COVID-19.
9. Figure 1. PRISMA 2020 flow diagram for new systematic reviews which included searches of database

IDENTIFICATION OF STUDIES VIA DATABASES AND REGISTERS
IDENTIFICATION OF STUDIES VIA OTHER METHODS


[^3]
# 10. RESEARCH ON THE MENTAL HEALTH AND WELLBEING OF YOUNG WORKERS IN PUBLIC TRANSPORT: A SCOPING LITERATURE REVIEW 

By Leonor Cedillo, Boris Cendales, Sergio Useche, Shirly Yan, Daryl Stephenson and Paul Landsbergis.

With contributions by Zainab Nathani, Chris Jimenez, Nataly Jara, Sandra Hunt, Kay Kyaw and Vivian Nguyen


## CONTENTS

## 1. INTRODUCTION

## 2. COVID-19 IMPACT

## 3. COVID-19 UNION RESPONSE

## 4. PRE-COVID RESEARCH

A. Overview
B. Research on mental health outcomes
a. Burnout, psychological distress
b. Post-Traumatic Stress Disorder (PTSD) and traumatic experiences
c. Alcohol use and smoking
d. Fatigue and sleeping problems
C. Research on outcomes which are not mental health outcomes, but likely result from orcause stressful working conditions
a. Cardiovascular disease (CVD) (heart disease and stroke)
b. Hypertension
c. Musculoskeletal disorders (MSDs)
d. Accidents and risky behaviours
e. Assaults
f. Lack of bathroom access
D. Differences in research results by gender, age and race/ethnicity
E. Other stressors: outsourcing, incentive systems, work intensification, informal economy
F. Programmes, Policies, Interventions to improve transport worker working conditions and physical and mental health that have involved unions
G. Other programmes, policies to reduce transport worker stress and improve transport worker mental and physical health

## 5. CONCLUSIONS AND RESEARCH RECOMMENDATIONS

## 6. REFERENCES

## 1. INTRODUCTION

Many research studies have been conducted on the health, including the mental health, of urban public transport workers since the 1950s. Much of this research has been on urban bus drivers, and some on train drivers. However, very few studies have looked at differences between younger and older workers, men and women, different racial or ethnic groups or immigrants or other transport occupations, such as conductors, cleaners, station agents, mechanics, ticket sellers, traffic controllers and support personnel. As of August 2022, 11 research studies had examined the impact of the COVID-19 pandemic on the working conditions and health of public transport workers. ${ }^{23-33}$ In addition, newspaper and internet articles suggest major impacts of the pandemic on the mental and physical health of transport workers, and their working conditions.

Transport worker unions have acted in a variety of ways to improve the health and safety of transport workers, dealing with both traditional job hazards and with COVID-19. These include collective bargaining, health and safety committees, advocating for better job design and for laws and regulations, member assistance programmes, and injury and illness surveillance programmes. They have sometimes worked with researchers to design, carry out and evaluate programmes and policies (interventions) designed to improve transport workers' mental and physical health. ${ }^{47}$

Therefore, we provide a "scoping" review of the research on the working conditions and mental health of transport workers, mainly focusing on pre-COVID research and interventions, but also including 10 research studies and many media reports about the impact of COVID-19, and union responses to COVID-19 from media and union reports.

## 2. COVID-19 IMPACT

## Canada

In June 2020, the Ottawa Public Health Agency reported 895 identified workers among 2,036 total confirmed COVID-19 cases. Health care workers accounted for $62 \%$ of the total, while "trades, transportation and equipment operators" were $3 \% .^{180}$ In Western Canada, employment in the transit and ground passenger sub-sector plunged in April 2020. Although ridership has since increased, employment growth was stagnant in the last quarter of 2020 (+0.5\%) and down 5.8\% in March 2021 (vs. 2020). ${ }^{181}$

## Colombia

According to the Sindicato Nacional de Trabajadores de Rama, Servicios de la Industria del Transporte y Logística de Colombia (SNTT), the main ITF affiliate, the COVID-19 pandemic generated massive layoffs and precarious employment in transport companies. Some public passenger transport operators cut their workers' wages by up to $50 \% .{ }^{61}$

## Norway

Before lockdown, residents of Norway who tested positive on SARS-CoV-2 were more likely to have used public transport 1-3 times (increased risk 1.28), 4-10 times (increased risk 1.49) and more than 10 times (increased risk 1.50) than those who had not tested positive, ${ }^{30}$ providing evidence of the plausibility of transmitting the virus in public transport.

## Spain

Research. The prevalence of SARS-CoV-2 infection based on PCR testing among bus drivers in Madrid, Spain was $4.2 \%$, greater than the overall $3.2 \%$ for essential workers, between March-July 2020. Over $50 \%$ of workers felt they were at high risk of infection and worried about infecting others, yet only $2 \%$ considered quitting their work. ${ }^{31}$

In a report by the labour federation, Comisiones Obreras (CCOO), public transport workers, together with waiters and retail workers, were the occupational groups who have had the least adequate protection measures against COVID-19, and have been highly exposed to crowds and situations increasing risks to their mental and physical health. ${ }^{25}$

## Sweden

Research. Among working-age adults, taxi/bus drivers had the highest relative risk of dying from COVID-19 mortality when adjusted only for basic demographics. However, after adjusting for education, income and country of birth, there were no occupational groups with significantly elevated COVID-19 death rates. ${ }^{27}$

## United Kingdom (UK)

Research. Death rates from COVID-19 among bus drivers in London were greater than death rates for London as a whole in the majority of weeks from early April to early May 2020. At higher risk of dying of COVID-19 were bus drivers aged 65 and over, those from racial and ethnic minority groups, and those with pre-existing high blood pressure. ${ }^{24}$

A cohort study of over 14 million people aged 40-64 years in England found COVID-19 death rates between January 24 and December 28, 2020, to be 2.33 times higher (age adjusted) and 1.53 times higher (age, ethnicity, education and geographical factors adjusted) in bus and coach drivers who were men than "non-essential" working men. Women bus and coach drivers had COVID-19 death rates 2.95 times higher (age adjusted), but only 1.05 times higher (confounder adjusted) than "nonessential" working women. ${ }^{29}$

A UK interview study found mental health effects of the pandemic among bus drivers. Said one: "I felt stressed. I felt uncomfortable. I felt vulnerable. I felt neglected. I felt everything because the company still don't think it's serious". Another bus driver reported: "I was quite paranoid. I used to dread leaving the house every day, going into work." Issues included: "Hand sanitiser came in, I think, probably three, four weeks after lockdown started", or "People not getting on with masks", or "They increased the length of the shift [without additional pay]", or "[My wife and I had] always done things together and to suddenly be sitting in a room on your own is quite dire". ${ }^{28}$

## United States (USA)

Research in the northwest region. A survey of transit workers (majority bus operators) in 2020 found links between knowledge of employer safety procedures and lower perceived COVID-19 risk and better mental health. Bus operators reported worse levels of employer safety procedures, and higher perceived COVID-19 risk, work stress, and depression symptoms, compared with nonoperators. ${ }^{32}$

Research in California. In California, between January 2020-May 2022, 340 confirmed COVID-19 outbreaks, 5,641 outbreak-related cases, and 537 COVID-19-related deaths occurred among California public transportation industries. Outbreak incidence was 5.2 times as high (129.1 outbreaks per 1,000 establishments) in the bus and urban transit industry as in all California industries combined (24.7). Death rates were 2.1 times as high ( 237.4 deaths per 100,000 workers) in transportation support services and 1.8 times as high (211.5) in the bus and urban transit industry as in all industries combined (114.4). ${ }^{33}$

Research in New York City. Between 1 March and 7 July, 2020, 118 Transport Workers Union (TWU) or Amalgamated Transit Union (ATU) members working within the New York City (NYC) metropolitan area died of COVID-19, comprising $0.3 \%$ of Metropolitan Transit Authority (MTA) union members. $46 \%$ were operators within the bus, subway, or train systems, while $57 \%$ had positions that involved close public contact. ${ }^{26}$

In an August 2020 survey of TWU Local 100 (NYC) members by researchers from New York University (NYU), $24 \%$ self-reported having been infected by COVID-19, although there was no difference in infection rates by transit division (bus vs. subway), race, ethnicity, gender, or age. ${ }^{23,182}$ Most ( $87 \%$ ) Local 100 members were concerned about developing sickness at work, and $72 \%$ feared for their safety at work due to factors such as lack of personal protective equipment (PPE) or passenger aggression related to mandatory mask use. Most (91\%) knew a colleague who had been infected with COVID-19, and $76 \%$ knew a colleague who had died. New mental health symptoms since the start of COVID-19 were also often reported - 60\% reported feeling "nervous, anxious, onedge, and cannot control worrying", $15 \%$ reported feeling "isolated, down, depressed, or hopeless" and $10 \%$ reported sleep problems. These new symptoms were more common in younger workers (<50 years), Black and Hispanic workers, those with difficulty obtaining PPE, or lack of enhanced cleaning and disinfection procedures or signs to maintain social distancing and those fearful for safety at work.

Popular media, web sites. NYC. Terence Layne, a NYC bus operator, described his and his colleagues' low morale, saying "I'm saturated with grief and anger". "People think of front-line workers ... as having helped the city get through it. But that's not what happened," Layne said. "We helped the city survive it." ${ }^{65}$ Transit workers criticised the MTA in 2020 for not informing colleagues about potential exposures to COVID-19, belatedly distributing disinfectant to clean work spaces, having inadequate records of workers who had been infected, failing to enact early social-distancing protocols, and keeping employees in near proximity to each other in crew rooms and signal towers. 62,63

By the end of March 2020, more than 1,300 MTA employees were quarantined or iso-lated, increasing to 6,000 in later weeks and months. ${ }^{62}$ Absenteeism increased fourfold with the start of the pandemic, ${ }^{62}$ and many workers retired rather than "put their life on the line". ${ }^{183}$ This led to staffing shortages and a reduction of service. ${ }^{62}$ At the height of the pandemic, the MTA also lost about 90\% of its riders, causing budget shortfalls and a hiring freeze. ${ }^{66}$ Even in June 2021, thousands of NYC subway trips were cancelled because of a shortage of train operators, conductors and workers. 183 By July 2021, subway riders increased to almost half of the pre-pandemic weekday 5.5 million, and efforts to hire and train new workers increased. ${ }^{183}$ However, the number of transport workers testing positive for COVID-19 from 9-16 December 2021 had increased to 169, up from 38 during 19-26 November, reflecting regional trends. "Omicron is whipping through," said JP Patafio, a union vice president for bus operators. "It's putting a tremendous strain on service, because you have so many absences." The transit agency had previously been recovering from staffing shortages caused by a hiring freeze and retirements. ${ }^{184}$ For the past two years (as of 13 June 2022), in New York City, at least one worker a week, on average, has reported being assaulted on the job, and dozens per week report experiencing verbal harassment. ${ }^{185,186}$ Increasing numbers of assaults in
many US cities leads to greater absenteeism and retirements, forcing remaining workers to work longer hours and threatening the public transport system. ${ }^{185}$

San Francisco, CA. Roger Marenco, President of TWU Local 250A said, in early April 2020, "Operators are in such a high level of fear factor that they don't want anybody getting near them ... We drive as if everybody, as if every trip, you know, we're carrying the disease, we're carrying the virus." ${ }^{64}$ He criticised efforts by the City and County of San Francisco to take concessions because of the economic conditions. ${ }^{187}$ In April 2021, he said "In the beginning, we were not being issued an adequate amount of PPE. That has since changed, and some of the challenge is just the psychological effect it has had on operators. They deal with hundreds, maybe thousands, of passengers on a daily basis. It's difficult knowing you could potentially contract COVID-19 and bring it home. Another thing, sometimes [companies] try to enforce mask compliance rules and they get a negative response, so that puts the operator in a difficult position just trying to keep the public safe." ${ }^{67}$

Oakland, CA transport workers described the anxiety and fear of catching or bringing home a dangerous virus, as well having to "navigate and implement" changes to safety protocols. In addition, a driver stated that: "When people are angry, when people are frustrated, when people don't understand what's going on. When they get on the bus with an attitude or when they're angry about everything that's going on-who do they take it out on? Not the other passengers, but you right there in the seat." Another driver was attacked for enforcing the mask requirement. "The mental health of everybody has deteriorated over the last year and a half of the pandemic," bus operator Brandi Donaldson said. "I myself have felt it. I've seen it in my family, I've seen it in my co-workers, and l've seen it in the general public." Being spat upon by a passenger was "a horrible experience," said bus operator Sultana Adams, but "it was that experience that motivated me to start getting involved in my union. Our company isn't protecting us. We have to do everything that we can to stand together, inform each other, and protect ourselves." ${ }^{68}$

San Jose, CA transport workers experienced a tragic event on 26 May 2021, when a member of ATU Local 265, and an employee of the Valley Transportation Authority (VTA), brought a gun to work and killed nine of his co-workers and then himself. ${ }^{51}$ Local 265 President John Courtney was frustrated that the VTA had refused to remove that department's management following the shooting, pending an investigation into the work culture. "... the same folks were gonna run the show when they brought light rail back ... The managers knew that there were problems. I don't mean problems about the killer-just general problems that could lead to a mentality in the workplace where the workers feel that no one cares about them, that they don't care about our safety." He was "flabbergasted" at management's seeming eagerness to rush traumatised people back to work. ${ }^{51}$ Over the previous year, union members felt disrespected over VTA's resistance to pandemic safety measures, especially as such decisions were being made by managers working from home. Courtney said, "Every time that door opens, we don't know if we're going to get assaulted, spat on, cursed at. These are little traumas, mini-traumas, that happen every single day." 69

ATU International President John Costa said, "This tragedy once again underscores the need to make mental health a priority in the workplace. Unfortunately the VTA has taken no action to address the grief, the mental health, and the safety of employees who have been under unfathomable, extreme stress after this tragic shooting ... VTA workers must have immediate access to the full spectrum of mental health services ... We have to end the stigma around asking for help." ${ }^{51}$ Local President Courtney pointed out that "Most of our employees don't want to go [to the Employee Assistance Program] because it's company-oriented," Instead, he would prefer a resource where the unions can vouch for confidentiality. "I also want to have a place where we can safely take a member who we may or may not think is having problems, to develop tools where we can approach these members - without insulting them, without disrespecting them - where we as shop stewards can walk up to them and say: 'Hey, I noticed your day's a little off today. Can you talk?'" 51

## Uganda

According to David Musoke, Roads Organising Secretary of the Amalgamated Transport and General Workers Union (ATGWU), as of 14 July 2021, the major impacts of the COVID-19 lock down on young transport workers has been:

- Closure of public passenger industry, except "Boda-Boda" (bicycles and motorcycles offering passenger and parcel service at a fee) were allowed to carry luggage
- Loss of income since they were not working
- Loss of jobs for some formal workers, as they were laid off.
- No movement was allowed
- Some of the parked taxis experienced an increased wear and tear by the time the lock down was eased and they were no longer roadworthy
- Lack of food in households
- Loss of independence as most of them depended on politicians and the wealthy for handouts
- Divorce and separation in relationships
- Families were separated as wives and children were taken to villages where food could be available and the husband could carry on alone in the urban environment
- Abandonment of family responsibilities as some disappeared from their families
- Distress for fear of contracting COVID-19
- Truck drivers were not allowed to stop anywhere and the road was very isolated. For truck drivers who contracted COVID -19, fear of isolation and the uncertainties of illness
- Anger at home, stress, anxiety, depression


## Indonesia

Almost all sectors of workers in Indonesia have been affected by the COVID-19 pandemic, according to Enung Yani Rukman, Project Field Coordinator, Urban Transport Jakarta Project, ITF. The impact of COVID-19 on the transportation and warehousing sector in Indonesia affected the growth of Gross Domestic Product in Q4 2019- Q1 2020 by -6.38\% and affected the number of workers by $4.36 \% .{ }^{188}$ During the pandemic, especially in Jakarta, social activities were not strictly limited, but in July 2021, Indonesia imposed an emergency restriction on activities due to the significant death toll. There was also a high death toll among transportation workers.

One major impact is termination of employment, as occurred in the railway Union (SP KA), according to the Chairperson of SP KA (online communication). In addition, workers were exposed to COVID-19. One of the bus transportation unions has members at the Transportation Jakarta company (Trans Jakarta). From September 2020 to the summer of 2021, the Aerospace and Transport Union (SP DT) recorded a large number of positive cases of COVID-19 among Trans Jakarta office administration workers and field workers. The other union at Trans Jakarta, the Bus Rapid Transport union (SP TJ), reports the death of some workers due to COVID-19 from June to July 2021. This situation has raised the awareness of management and unions and encouraged them to cooperate on occupational health and safety activities.

## Philippines

According to Jaime Aguilar, general secretary, National Confederation of Transport Worker Unions (NCTU), on 15 March 2020, the President put the entire country into lockdown to reduce the spread of the virus, until June 2020. Then, the Enhance Community Quarantine (ECQ) was relaxed and some businesses were allowed back into operation. The Department of Transportation and Road
(DOTR), as part of the Inter Agency Task Force for the Management of Infectious Disease (IATF), highlighted the importance of public transportation. They issued a policy on health protocols in public transport, which allowed only $50 \%$ passenger capacity in all public transport, including jeepneys (small buses). This posed a major problem for transport workers and passengers.

## 3. COVID-19 UNION RESPONSE

## Canada

Since the pandemic began, transport unions in Canada have been active in advocating for their members and negotiating with government and employers. ITF affiliates in Canada (Unifor, CUPE and ATU) are participating in this study and are interested in hearing what their members feel may be necessary.

ATU Canada has all communication with their social partners and government on their webpages. ${ }^{88,89}$ Besides COVID-19 protections that the unions have been able to put in place, the union started a hotline for their members to get assistance. In April 2021, ATU was still advocating for vaccination, as more workers tested positive. ${ }^{80}$

Unifor has urged vaccination for its transportation members. Data from the general population is more than 70\% vaccinated (as of September 2021).

Canadian Union of Public Employees (CUPE) has been campaigning for adequate PPE, service adjustment to protect the safety of workers and passengers, and financing from all levels of government to "preserve the integrity of public transit as [CUPE] continues to battle layoffs ... austerity-minded policies continue to privatise and contract out, placing downward pressure on wages, benefits and working conditions." ${ }^{76}$

## Colombia

The SNTT has focused on legal support for workers affected by suspension of working contracts, and collective bargaining to improve working conditions and COVID-19 biosafety protocols. 61 Bargaining successes were achieved with a multinational freight company (DHL), a bus company (Metrolinea-Bucaramanga) and Danish logistics and land transport multinational (APM-MAERKS), allowing more than 500 workers to achieve better working conditions or retain employment benefits despite the economic crisis. ${ }^{83}$

Between April and June 2021, a major social movement began, motivated partly by the economic crisis generated by the pandemic. A general strike, led by youth and labour unions, saw excessive force used by law enforcement. Transport workers experienced violent roadblocks and serious damage to public transport infrastructure. ${ }^{75}$ Following SNTT requests, police surveillance increased in mass passenger transportation systems in major Colombian cities. ${ }^{189}$ In Bogotá, the damage to the Bus Rapid Transit system (Transmilenio) was more than 5 million dollars. ${ }^{75}$ As of March 2022, social protests in Colombia have continued, implying a high risk for transport workers, not only because of the risk of being physically assaulted, but also because of witnessing violence, ${ }^{190}$ including police abuse of force ${ }^{191}$ - both associated with mental health problems, such as depression and suicide.

## Spain

In Spain, CCOO (Comisiones Obreras) and UGT (Unión General de Trabajadores) are the largest labour federations. About 1/7 of workers are affiliated to a trade union. ${ }^{192}$ The National Federation of Transport Associations of Spain (FENADISMER) includes various sectors of transport workers in Spain, including companies, individuals and low-to-middle sized collectives. ${ }^{193}$ In response to the COVID-19 pandemic, the CCOO and the UGT developed a set of educational materials and COVID-19 response protocols for their affiliates. In some cases, these protocols were implicitly - and almost exclusively - directed at transport workers, given their emphasis on "highly mobile" workers, a group considered to be at higher risk, given their exposure. ${ }^{84,85}$ The CCOO has published on work hazards (including those in the transport field), including in some occupational health magazines. ${ }^{86,87}$

## USA

Public transport unions in the US have focused on hazards such as exposure of drivers to ill riders and increases in assaults against transit workers. To ensure financial security for members' families, in April 2020, TWU Local 100 of NYC advocated for a $\$ 500,000$ death benefit for transit workers' families if the member died from COVID-19, which was included in the MTA budget. ${ }^{81}$ TWU Local 100 also publicised support from a leading mayoral candidate, who emphasised the importance of keeping transit workers safe from passengers who did not want to follow COVID-19 safety guidelines. The candidate stated: "They should not go to their buses, their trains, their stations and be assaulted. ${ }^{72}$

TWU Local 100 worked with New York University (NYU) researchers to conduct an on-line survey in August 2020 on the impact of the pandemic on transport workers ${ }^{23,182}$ and worked with the National Institute for Occupational Safety and Health (NIOSH) and ATU representatives on a study of COVID-19 deaths in NYC area transit workers. ${ }^{26}$ Local 100 advocated for regular testing of transit employees and vaccine priority for transit workers when the vaccine became available. ${ }^{79}$ Their advocacy led to the NY governor issuing an executive order that increased the number of police officers on public transportation in NYC to better protect transit workers and enforce fines for passengers not wearing masks. ${ }^{73,74}$ Local 100 President Tony Utano said: "This is good news for both transit workers and riders. Anyone who doesn't wear a mask, or some other face-covering, puts everyone at risk." ${ }^{74}$ On 1 October, 2021, NYU researchers, working with TWU Local 100, received a large five-year grant from the US National Institutes of Health to study efforts to protect NYC transit workers from COVID-19, and how infection prevention and control programmes impact the health and well-being of frontline workers.

Nationally, in 2022, the ATU argued that the CDC "made the misguided and irresponsible decision to shorten the duration of quarantines for asymptomatic people to five days ... at the very least, a negative test should be required before employers force employees back to work. It's also in the best interest of transit agencies and the riding public to prioritise safety by providing transit workers free and accessible testing, paid sick leave, and adequate PPE including masks ... Throughout this pandemic, many transit agencies have failed to provide safe working conditions and adequate wages, leading many transit workers to find better jobs in other industries. Our members want to know everything is being done to keep them safe at work. Strengthening, not weakening, protections is what's needed now more than ever."77 On 9 March 2022, 20 labour unions wrote a letter to the US Department of Transportation and the Federal Transit Authority, demanding federal action to protect transit workers on the job and implement baseline safety standards. These were included in the bipartisan infrastructure law that President Biden signed in November 2021. Such standards would include "tracking data on transit worker assaults; updating a national safety plan to
include workers' voices; denying all waiver applications from transit agencies to exempt themselves from safety obligations required by the new law; and establishing minimum level of assault protections". ${ }^{185,194}$

Local unions in the San Francisco Bay area (ATU Locals 192 and 265, and TWU Local 250A) came together to organise a Hazard Pay Coalition. Connie McFarland told the Board of AC Transit (Oakland, CA) that: "We really would like to have some form of appreciation that's more than lip service." "Hazard pay was absolutely the right demand," said bus operator Anne Marie Ruiz, a Local 265 safety steward. "There's a lot of anger out of our rank and file. We're moving the county while management's working from home and not giving us the things that we need to keep ourselves safe." Rallies were held on 23 October 2021 in San Jose, CA, on 4 December in Oakland, CA, and on 16 February 2022 in San Francisco, CA. Ruiz was moved by the solidarity reflected in the turnout from the three transit unions on 23 October and the support from passersby: "People are driving by and horns are honking and people had their fists out the window. It was overwhelming." ${ }^{41}$ According to Roger Marenco, president of TWU Local 250A, the San Francisco rally also included the demand for hiring more staff. The local unions also helped to organise a "People's Transit Alliance" bringing together transport workers with passenger and community groups. Several local union contracts expire in 2022 and the organising conducted so far within unions and between unions and the community may help the unions achieve their demands. ${ }^{42}$

ATU Local 265, San Jose, CA, advocated to improve pandemic safety and scheduling, including maintaining social distancing on buses, rear-door boarding, having more buses on the road, obtaining workers' compensation for workers made sick by COVID-19, staying home without loss of benefits if sick or waiting for test results, hazard pay and installing safety barriers to protect drivers from assaults. ${ }^{51} \mathrm{~A}$ joint union/management committee is determining how best to spend $\$ 20$ million in new state funding to promote worker mental health, and to change the agency's work culture. ${ }^{69}$

## Uganda

David Musoke reported on 5 August 2021 that the union provides counselling for their members on issues such as job loss and mistreatment from employers, and, during the pandemic, the union:

- Negotiated for formal workers not to be laid off and if they were laid off, they should go with all their termination benefits
- Solicited for funds from ITF to provide food to 100 HIV positive transport workers
- Solicited for funds and provided 2000 reusable masks and 2000 litres of sanitiser for taxi driversMade transport workers aware of standard operating procedures (SOPs)
- Provided soap and 3000 jerry cans and sanitiser to 3000 truck drivers
- Negotiated resumption of public passenger transport with the government with acceptable conditions
- Negotiated a salary increase for private security workers
- Key issues during negotiations
(i) $50 \%$ reductions in passenger vehicle capacity -7 passengers in a taxi
(ii) Introduction of route charts for taxis
(iii) Strict adherence to standard operating procedures (SOPs) within taxi parks
(iv) Maintenance of a welfare fund for the taxi industry


## Indonesia

According to Enung Yani Rukman, ITF Urban Transport Jakarta Project, as of 24 August 2021, urban transportation unions, especially Bus Rapid Transport unions in Jakarta, understand the importance of dealing with COVID-19 for their members. The Trans Jakarta Union (SP TJ), Aerospace and Transport Union (SP DT) and other unions at the Jakarta Transportation company cooperated in the COVID-19 Task Force, which consisted of management and unions. This Task Force was formed based on a decree from the Board of Directors of Trans Jakarta company. There are four active unions in the COVID-19 Task Force at Trans Jakarta. Together with management, they:

1. Antigen swab test with a target of 200 people per day at work or self-test. In July 2021, when the peak of COVID-19 cases occurred in Jakarta, the Task Force Trans Jakarta company conducted an antigen test on a total of 4,182 workers ( $68 \%$ of all 6,114 employees). The test found 631 positive cases, 131 active positive cases and 496 recoveries.
2. Vaccinate workers of the Trans Jakarta company. According to a report by the Trans Jakarta Workers Union, ${ }^{195}$ the Sinovac vaccine was administered in three stages; the first batch in April-May with 1218 people completing two doses. The second stage is a vaccination target of 5000 workers, the first dose so far has been given to 1544 workers. The third batch will be conducted in AugustSeptember 2021.
3. Conducted negotiations with company management to re-establish working day arrangements, provide personal protective equipment (masks), and provide vitamins for workers during emergency social activity restriction (in Bahasa abbreviated PPKM). This resulted in a new schedule for office workers, changed from five working days and one rest day to two working days and one rest day. Only $30 \%$ worked from the office, the rest worked from home. Meanwhile, service workers (drivers, ticket sellers, bus stop officers) followed scheduling arrangements for each line. As of 23 August 2021, Indonesia was still strictly implementing emergency social activity restrictions.

## Philippines

Jaime Aguilar, general secretary, National Confederation of Transport Worker Unions (NCTU) reported on 5 Augus 2021 that COVID-19 had delayed the deadline for franchise consolidation from 30 June 2020 to 31 March 2021 (see case study \#3).

On 3 November 2021, Mr. Aguilar reported that the Move as One Coalition (including the NCTU) was instrumental in a proposal to mitigate the impact of the $50 \%$ limit of allowable passengers in vehicles that had led to limited public transportation services, and workers and passengers being stranded waiting for rides. Through Coalition advocacy, the Land Transport Franchising Regulatory Board (LTFRB), a DOTR agency, increased the number of jeepneys and buses to serve the public and prevent the possible spread of the virus inside crowded passenger buses or jeepneys. In January 2022, public transport was allowed 70\% capacity under "Alert Level 3".

The Coalition also proposed a "Service Contracting" programme as part of the government response to the pandemic. The programme had an allocation of 5.5 billion pesos, with an additional 3 billion pesos from the General Appropriation Act (GAA). The LTFRB contracted out transport workers to be part of Service Contracting. They are paid 11 pesos/kilometre as assistance to mitigate their lost income caused by the $50 \%$ passenger limitation. This programme was helpful and deterred transport workers from violating the health protocol. As of August 2021, transport workers were declared "essential" and a priority group for vaccinations by the government, and wearing
face masks is the policy in transportation. The second round of Service Contracting funds started in September 2021, but by January 2022, funds were depleted. Service Contracting was conceived by the government as pandemic aid for drivers/operators and for commuters. In contrast, NCTU and Move As One are calling for Service Contracting to be the "normal mode" in public transport government contracts jeepney cooperatives to provide service and collects fares from commuters so that the system is self-sustaining.

## 4. PRE-COVID RESEARCH

## A. Overview

In 1983, ${ }^{57}$ Dr. Bertil Gardell of Sweden described bus driving as one of the most highly stressful in the world, and a "high risk group" for illness. ${ }^{58}$ Since then, research on risk factors for (causes of) injury and illness among transport workers in over 32 studies in over 13 countries was summarised in seven review articles published between 1988 and 2006, ${ }^{1-7}$ and one in 2017. ${ }^{8}$ The earlier research focused more on physical health impacts of transport work, such as increased risk of cardiovascular disease (heart disease and stroke), hypertension (high blood pressure), musculoskeletal disorders (such as low back pain), gastrointestinal problems, fatigue/sleeping problems and higher levels of stress hormones. However, some studies looked at mental health impacts, including high levels of stress, anxiety, depression, ${ }^{93,94}$ burnout, ${ }^{95,96}$ psychological trauma from threats, assaults or witnessing suicides, and unhealthy behaviours such as excessive alcohol use or cigarette smoking. Some studies found increased rates of "sickness absenteeism" and disability, the major causes of which were musculoskeletal disorders, cardiovascular disease and psychological disorders.

Research also suggests that the physical and mental ill health of urban bus and train drivers are public safety risks. ${ }^{7}$ Work stress and stress-related diseases can lead to divided attention, slowed response times, ${ }^{100}$ errors and safety violations, ${ }^{18,19}$ which increase the risk for vehicle accidents.

The review articles identified various working conditions that increase the risk for mental and physical ill health among public transport operators, including:

1. Stressful job characteristics, such as high job demands, time pressure from strict schedules, traffic congestion, work barriers (such as vehicles parked in bus stops or unruly passengers), poor job control, low job rewards such as low recognition, promotion opportunities or pay, long hours, job insecurity, split shifts, rotating shifts, inadequate break time, threat of assaults, social isolation, lack of support from management, conflict between work and family demands, and witnessing suicides. For example, in a 1983 study, Swedish urban bus drivers reported conflicts between their desire to provide a professional level of service and relentless time pressure to keep the schedule. ${ }^{57}$ Some researchers have described drivers' work as "threat-avoidant vigilance", that is, stressful work that involves continuously maintaining a high level of vigilance or attention in order to avoid disaster, such as loss of human life. ${ }^{110}$
2. Physical work hazards, such as poor ergonomics, vibration, noise, and air pollution

Recent studies have also looked at new systems of work organisation, such as driver payment incentive systems, outsourcing, privatisation, and "increasingly tight running schedules due to market competition" which can increase stressful working conditions. ${ }^{120, \text { p. } 3}$

Most studies of train drivers have focused on post-traumatic stress disorder (PTSD) related to witnessing railway suicides. Scientific evidence indicates that "person-under-train accidents" can
lead to PTSD, ${ }^{9}$ depression and panic disorders, ${ }^{97}$ absenteeism from work, ${ }^{121}$ fatigue, and sleep problems ${ }^{122}$ among train drivers.

Few studies have investigated other transport workers such as mechanics, ticket sellers, traffic controllers and support personnel, and few studies have examined differences between workers due to age, gender, race, employment or immigration status.

The effectiveness of 13 illness and injury prevention programmes (interventions) in bus drivers in Germany, the Netherlands, Sweden and Denmark was summarised in 2000. ${ }^{47}$ This review, and a similar 1999-2004 programme in Copenhagen, ${ }^{48}$ found evidence that these programmes improved health, well-being and job satisfaction, and reduced sickness absenteeism and physiological stress. The programmes varied, but they often combined changes in work organisation, ergonomics, schedules and management style with individual health promotion or stress management. Some examples of workplace changes were reduced work hours for senior (and partially disabled) drivers, more flexible and fair vacation planning, improved communication, priority signals and lanes for bus traffic, a more participatory management style, more driver participation in shift systems, and selfregulating (autonomous) work teams in which drivers were free to organise as they wished, within budget limits.

## B. Research on mental health outcomes

## a. Burnout, psychological distress

We identified 73 studies of burnout or psychological distress among transport workers. Research studies include mental (ill-)health typically in three ways: (1) as a result or outcome influenced by specific aspects of working conditions; (2) as a pathway or secondary influence that together with other factor(s) leads to outcomes at work or in health; and (3) as a primary cause or influence (predictor/risk factor) leading to results at work or in health. This can include results at the organisational level, such as: absenteeism; turnover; disability; intent to leave or commitment/job engagement and job satisfaction; and safety. ${ }^{166,171,196-200}$

Transport workers often exhibit more psychological distress than other occupations. A Chinese study found train drivers had worse general health, mental health, social functioning and vitality, followed by conductors, and maintenance and support workers. ${ }^{201}$ A Bulgarian study found that $70 \%$ of workers reported "affective" (emotional) stress symptoms, with bus drivers ranking second highest of all occupations studied. ${ }^{202}$ In an Indian study, bus drivers showed higher levels of perceived stress when compared with office staff. ${ }^{203}$ A UK study showed worse mental health and lower job satisfaction among bus drivers than other occupations. ${ }^{166}$ In the Netherlands, bus drivers had similar work-related negative effects to medical residents or child care workers. However, they reported more health complaints than medical residents. ${ }^{204}$

Comparisons between transport occupations in levels of psychological distress. Among US public school transport workers, mechanics had higher levels of emotional exhaustion than bus drivers, bus aides and clerical workers, but bus drivers and bus aides had a lower sense of personal accomplishment than clerical workers and mechanics. ${ }^{205} \mathrm{~A}$ Colombian study found that bus drivers reported more cynicism, emotional exhaustion and burnout than bus rapid transit (BRT) drivers. ${ }^{16}$ In Taiwan, self-employed drivers (primarily taxi, truck, trailer, private cars) had worse mental health than government employed bus drivers. ${ }^{206}$

Transport workers: more job stressors than other occupations? In Germany, 59.6\% of bus and subway drivers experienced "high efforts plus low rewards" compared to $34.2 \%$ of administrators
and $37.2 \%$ of repair/craftsmen in a traffic company. ${ }^{207}$ However, in the Netherlands, bus drivers had lower levels of workload than child care workers or medical residents, but greater work-to-home interference than child care workers. ${ }^{204}$

Comparisons between transport workers in levels of job stressors. In Colombia, high demands plus low control ("job strain") was higher among city bus drivers than interurban bus drivers, who had higher levels than taxi drivers. ${ }^{208}$ Another Colombian study found that bus drivers reported more work efforts, psychological demands and job strain than bus rapid transit (BRT) drivers. ${ }^{16}$ Among US public school transport workers, bus aides had lower job control than clerical workers. ${ }^{205}$

Risk factors for: burnout (and its components: emotional exhaustion, cynicism, and lack of personal accomplishment) was related to:

- Long working hours and split working time in bus drivers in Taiwan. ${ }^{21}$
- Lower supervisor support in bus drivers in Taiwan. ${ }^{21}$
- "Surface acting" in bus drivers in the U.S. ${ }^{95}$
- High demands plus low control ("job strain") in bus drivers in Colombia ${ }^{16}$ and Taiwan. ${ }^{36}$
- High efforts plus low rewards in bus drivers in Taiwan. ${ }^{36}$
- Job demands and low job resources in Zimbabwean bus drivers. ${ }^{209}$
- Violence faced by bus drivers and conductors in Mozambique ${ }^{109}$
- Interactions with customers by bus drivers in Shanghai, China. ${ }^{96}$

Depression was related to:

- Loneliness in the cabin, stress and fear of an incident, fatigue, dissatisfaction with the resting place, dissatisfaction with rights and the need for a second job in underground metro drivers in Teheran, Iran. ${ }^{173}$
- Precarious employment conditions in Brazilian professional drivers. ${ }^{107}$
- Worse break room infrastructure among rail workers in Boston (USA). ${ }^{210}$
- Poor work-life balance in Korean bus drivers. ${ }^{211}$

Work-family conflict was related to:

- Long working hours and split working time in bus drivers in Taiwan. ${ }^{21}$
- "Surface acting" in bus drivers in the U.S. ${ }^{95}$
- Problems with split shifts in a Swedish study. ${ }^{108}$
"Stress" was related to:
- Working split shifts, in a U.S. study. ${ }^{17}$
- Problems with split shifts in a Swedish study. ${ }^{108}$
- Management leadership styles, highly demanding work schedules, short breaks, increased work demands and irregular working hours, absence of community, lack of trust, lack of respect, poor communication and shift work in New York City transport workers. ${ }^{22}$
- Irregular driving schedules, long periods of sitting, heat and cold, and lack of esteem and recognition in Austrian bus drivers. ${ }^{212}$
- Peak driving times and extreme weather conditions in inexperienced Swedish bus drivers. ${ }^{120}$

Worse mental health (including "psychological distress") was related to:

- Home-related problems, practical job problems, and assaults in the UK ${ }^{166}$
- More than 10 years working as a bus driver in Turkey. ${ }^{213}$
- High demands plus low control ("job strain") and high efforts plus low rewards in bus drivers in Colombia. ${ }^{106,208}$
- Lower social support in bus drivers in Colombia. ${ }^{208}$
- Heavy workload in Norwegian bus drivers. ${ }^{176}$

Recommendations: Bus drivers in San Jose, CA (USA) suggested improving route scheduling, including split shifts, observation by management, upward communication with senior management, and improvement of bus yard and relief point facilities for their breaks. ${ }^{17}$

## b. Post-Traumatic Stress Disorder (PTSD) and traumatic experiences

Drivers: worse mental health than the general population. Compared to the general population, Korean men subway drivers were at higher risk for panic disorder ( $1.3 \%$ vs $0.1 \%$ ) and PTSD ( $1.5 \%$ vs $0.7 \%$ ) and at higher risk if they had experienced a "person under train" (PUT) incident. ${ }^{97}$ Another study found that 2.2\% of South Korean train drivers had full PTSD and 7.0\% had "subthreshold" PTSD, that is, PTSD without "functional impairment". ${ }^{214}$

Drivers: traumatic events common. 32.2\% of Korean subway drivers had experienced a PUT incident. ${ }^{97}$ In Montreal, Canada, $68.1 \%$ of city bus drivers had traumatic exposures, with $70.4 \%$ of those having them multiple times. ${ }^{215}$ German men train drivers in treatment for PTSD averaged 1.8 PUT incidents (range 1-8); $80.8 \%$ experienced a railway suicide, $21.9 \%$, a violent personal assault, $12.3 \%$ natural disasters and $6.8 \%$ a life-threatening illness. ${ }^{216}$

Mental health effects for those experiencing traumatic events. In London, of underground train drivers involved in killing or injuring members of the public during work, $16.3 \%$ developed PTSD and $39.5 \%$ had depression or phobic states (irrational fears) one month after the incident. ${ }^{217}$ In another London study, $17.11 \%$ of 76 underground train drivers had PTSD, while $31.58 \%$ had depression or phobic states one month after the incident. However, no drivers had PTSD six months later, but two had depression or phobic states. ${ }^{218}$ A third London study found that $23 \%$ of bus crews who had been physically assaulted developed PTSD. At an 18-month follow-up, high levels of mental health problems persisted. ${ }^{219}$

In a study of German train drivers who experienced a PUT, 30\% had moderate PTSD symptoms, 44\% moderate to severe PTSD, and $14 \%$ severe PTSD. ${ }^{216}$ Of Canadian bus drivers who were violently attacked at work, $58.7 \%$ had acute stress disorder and $17.4 \%$ had PTSD within the first month. At least moderate levels of PTSD were experienced by a majority over the next year. Six months following the incident, $9.3 \%$ of participants had a delayed onset of PTSD. ${ }^{59}$

A French study showed drivers exposed to traumatic events had more psychological distress and more "acute stress disorder" (ASD, a precursor to PTSD) than non-exposed drivers. ${ }^{220}$ Another French study of train drivers found that most of the psychological disorders were seen right after an incident and disappeared within a year. ${ }^{121}$ NYC transit workers in the dust cloud of the 9/11 World Trade Center disaster had significantly higher risk of persistent PTSD and depressive symptoms. ${ }^{221}$

Other effects if workers have experienced traumatic events. Traumatic events led to more sickness absence in German public transport, ${ }^{9}$ more health problems in Norwegian train drivers ${ }^{222}$ and more physical and psychological symptoms in Korean railroad drivers. ${ }^{223}$ Canadian urban
bus drivers with PTSD during their lifetime had more health complaints and more frequent health treatments compared with drivers experiencing trauma, but not PTSD, and those not experiencing trauma. ${ }^{224}$ Korean train drivers with PTSD were more likely to make errors. ${ }^{122,214}$

Factors promoting recovery. In a German study, for less severe events, peer support was better than supervisor support for reducing sickness absence. ${ }^{9}$ In French train drivers, psychological support after an incident helped recovery. ${ }^{121}$ In a Canadian study, PTSD symptoms were maintained by "criticism, complains, refusal to help, or hurtful and insensitive remarks". ${ }^{59}$

## c. Alcohol use and smoking

Drivers, compared to other workers. One Swedish study found no difference in smoking between drivers and other occupations. ${ }^{90}$ Another Swedish study found more smokers among bus and truck drivers, but no difference in alcohol use. ${ }^{99}$ Alcohol abuse (CAGE questionnaire) was seen in $75.4 \%$ of public transportation drivers in Lima, Peru vs. $21.8 \%$ in the general population. ${ }^{93}$ In Taiwan, selfemployed drivers had a higher frequency of substance use than the government employed bus drivers. ${ }^{206}$ In bus drivers in Belo Horizonte, Brazil, the prevalence of alcohol abuse and dependence was $13.5 \%$. ${ }^{225}$

Risk factors for alcohol use and smoking. In Bogota, Columbia city bus drivers, $21 \%$ were smokers, and those facing "job strain" (job stress) were more likely to be smokers. Smoking was also associated with traffic incidents. ${ }^{226}$ Among San Francisco transit operators, heavy and average alcohol consumption was related to years driving and job stress. ${ }^{101}$ Alcohol abuse was associated with work-related distress in bus drivers in Belo Horizonte, Brazil ${ }^{225}$ and with poor work-life balance in Korean bus drivers. ${ }^{211}$

## d. Fatigue and sleeping problems

Drivers: More fatigue and sleep problems than other workers. German bus and subway drivers had higher levels of fatigue and sleep disturbances (49.7\%) compared to repair workers (44.4\%) and administrative personnel ( $39.8 \%$ ) at the same traffic company. ${ }^{207}$ In Peru, more bus drivers (62\%) had excessive sleepiness than auto-rickshaw drivers (50\%). The bus drivers worked longer hours ( 14 vs. 10 hours/day) and were older ( 37 vs. 32 years). ${ }^{227}$

How common is the problem? A Swedish study found $19 \%$ of city bus drivers "had to fight to stay awake while driving" two to three times or more each week and nearly half experienced this at least twice a month. ${ }^{92}$ A study from Poland found that driver sleepiness is a problem for city bus drivers, regardless of traffic level or monotony of route. ${ }^{228}$

Risk factors: job stress. High efforts (such as work pressure, workload, responsibility, vigilance, shiftwork) along with low rewards (such as low support and respect, poor promotion prospects and reduced job security) contribute to fatigue and sleepiness in public transport workers in Colombia, ${ }^{16}$ Germany, ${ }^{207}$ Lithuania ${ }^{229}$ and Australia. ${ }^{178}$ Sleeping problems were related to precarious (insecure) employment conditions in Brazilian professional drivers ${ }^{107}$ and poor work-life balance in Korean bus drivers. ${ }^{211}$

Shiftwork. Split shifts are typically long (>10 hours) work shifts divided into at least two parts with an unpaid, or lower paid, break of four or five hours between the parts. ${ }^{108}$ Studies from Peru, ${ }^{227}$ Argentina, ${ }^{230}$ and Turkey ${ }^{231}$ showed greater sleepiness. reduced sleep time, long time to wake up, snoring and short resting time for drivers working on split shifts. Swedish urban bus drivers who reported problems working split shifts (36\%) also reported poorer health, higher stress, working
hours interfering with social life, lower sleep quality, more persistent fatigue and lower possibilities to influence working hours than those who did not view split shifts as a problem. ${ }^{108}$

Lithuanian ${ }^{232}$ and Swedish ${ }^{233}$ studies found that driving a bus in the afternoon during a split shift, when the work shift started early in the morning led to higher levels of sleepiness, and caused $25 \%$ more traffic incidents than drivers working in the afternoon shift (2pm to midnight with one hour break). In South Korea, alternating day shifts where drivers work for 17-20 hours one day (or sometimes on three consecutive days) followed by one day off had more severe sleepiness than those working two shifts daily, where the drivers work 8-10 hours per shift for five or six consecutive days followed by one or two days off. ${ }^{234}$

Bus drivers working split shifts in California (USA) reported physical fatigue (80.6\%), mental fatigue ( $79.6 \%$ ) or stress ( $57.7 \%$ ). They also reported that fatigue or stress affected their ability to operate the bus, and $68.6 \%$ felt unable to focus on the task at hand, as a result of work on a split shift. $73.7 \%$ were dissatisfied with split shifts and $84.5 \%$ preferred straight shifts. ${ }^{17}$

## C. Research on outcomes which are not mental health outcomes, but likely result from or cause stressful working conditions

## a. Cardiovascular disease (CVD) (heart disease and stroke)

Bus drivers: More CVD than other occupations. Prospective studies. In a pioneering study conducted from 1956-60, London bus drivers had nearly double the rate of new cases of heart disease over five years than bus conductors (8.5/100 vs. 4.7/100). ${ }^{235}$ In Gothenberg, Sweden, over about 12 years, $18.4 \%$ of bus and tram drivers developed heart disease compared to $6.4 \%$ of men in other occupations. ${ }^{90}$ Another Swedish study found a 50\% higher death rate from heart attacks in urban bus drivers compared with other employed men in Stockholm, Goteborg and Bohus counties, but no difference in Malmohus county nor in mainly rural areas. ${ }^{236}$ Bus drivers in Denmark, between 1981-1991, went from being 41\% more likely than other occupations to be hospitalised for heart disease to being $89 \%$ more likely. ${ }^{11}$ In Taiwan, $1.7 \%$ of bus drivers had heart disease compared to $0.9 \%$ of skilled workers. ${ }^{237}$

Case-control study. Stockholm County (Sweden) bus drivers with 1-10 years on the job had 1.56 times the risk of a heart attack, and those with >10 years had 2.41 times the risk compared with the general population. ${ }^{10}$

Cross-sectional studies. However, Japanese train drivers and conductors had a lower risk of stroke compared to railway clerical workers, customer service workers, supervisors, railway signallers, maintenance workers and engineers. ${ }^{238}$

Risk factors. Bus and truck drivers (men) from two Swedish counties had more shiftwork, more variable workhours, and higher job demands, and lower job control and social support than other men of similar age in those counties. ${ }^{102} \mathrm{~A}$ US study found bus drivers had high scores on two job dimensions (hazardous work, vigilance plus responsibility) associated with severe disability due to cardiovascular disease (CVD) under the age of 65. ${ }^{239}$ More than $40 \%$ of Taiwanese drivers work over 12 hours a day. ${ }^{240}$ Working more than 12 hours per day increased risk of CVD in Taiwan bus drivers. ${ }^{20}$ Working in high traffic areas increased the risk of CVD in bus drivers in Denmark. ${ }^{105}$ Another Danish study found a 39\% greater risk of stroke among bus drivers compared employed men, although no large difference among drivers between urban and rural areas. ${ }^{241}$

# C. Research on outcomes which are not mental health outcomes, but likely result from or cause stressful working conditions 

## b. Hypertension

Drivers: more hypertension than other occupations. In Taiwan, hypertension was more common in men bus drivers than skilled working men in all age groups, with the greatest difference in 30-34-year-olds ( $48.1 \%$ for bus drivers vs. 21.2\% for skilled workers). ${ }^{237}$ In Korea, hypertension was more common in men bus drivers ( $53.3 \%$ ) than employed men (17.6\%) and craft and machine operators who were men (19.7\%) of similar ages. ${ }^{13}$ Among Polish professional drivers, including public transport, buses, trucks and taxis, $73.8 \%$ were diagnosed with hypertension, compared with $32.5 \%$ of the general population. ${ }^{242}$

Blood pressure (BP) increases during a workday. On a work day, Pakistani men intracity bus drivers (short distance) had an 11\% higher systolic BP (SBP) and 16\% higher diastolic BP (DBP) compared to hotel or grocery shop workers without driving experience, of similar age and gender. They also had a $12 \%$ higher SBP and $20 \%$ higher DBP on a work (vs. non-work) day. ${ }^{243}$ Romanian men bus drivers with "normal" BP had a large increase in SBP (133.9 to 143.3 mm Hg ) and DBP ( 79.1 to 89.5 mm Hg ) from non-driving to driving periods. Similar increases were seen in drivers with high BP. ${ }^{244}$ Among Swedish bus drivers, the group whose cardiovascular indicators were more responsive to job stress, such as traffic or passenger interactions, had higher after-work SBP and DBP (123.7 vs. 115.8; 83.5 vs. 75.3). ${ }^{245}$

Risk factors. Half of Egyptian men bus drivers who reported high work stress had hypertension compared to only $12.8 \%$ who reported low work stress. ${ }^{246}$ In a study of San Francisco, CA, transit operators, work barriers (such as disruptive passengers and obstructed bus stops) and time pressure (workload, tightly run schedule, passenger load, traffic density), both measured by observers on the bus, predicted higher (by 63-65\%) risk of hypertension. ${ }^{104}$ A Colombian study found that high efforts-low rewards and high demands-low control ("job strain") were related to SBP and job strain was related to DBP ${ }^{106}$ In India, hypertension was more common in bus conductors who were not satisfied with their job (33.3\%) compared to those who were satisfied (11.6\%).. ${ }^{247}$ However, BP increases over a work day in Long Beach, CA, bus drivers did not differ between those who reported low vs. high job strain. ${ }^{248}$ Years of service increased risk of hypertension even after taking age into account in a study of San Francisco bus operators ( $28.8 \%$ in those with no previous bus driving experience to $38.9 \%$ in drivers with more than 20 years of service). ${ }^{12}$

## c. Musculoskeletal disorders (MSDs)

Drivers: more MSDs than other occupations. Work-related musculoskeletal disorders (WMSDs), including tendinitis, carpal tunnel syndrome and low back pain, can be caused both by the physical demands and the psychological demands of a job. ${ }^{249}$ In a U.S. study, $80.5 \%$ of bus drivers experienced back or neck pain, compared to $50.7 \%$ of non-driver transit workers, such as custodians and dispatchers. ${ }^{91}$ Another US study of bus drivers found $85 \%$ reporting pain in at least one body area (especially in the lower back, shoulders and knees), greater than the general population. ${ }^{250}$ More bus drivers experienced mild spine pain (53.9\%) compared to $29.9 \%$ of nondrivers. In a US/Swedish study, there was little difference in Sweden in lower back pain between bus and truck drivers ( $49 \%$ vs. $59 \%$ ). However, in the US, bus drivers had more lower back pain ( $81 \%$ compared to $50 \%$ ), and in both countries, low back pain was greater in bus drivers ( $60 \%$ ) compared to truck drivers (56\%) and non-drivers (42\%). ${ }^{251}$ In a German study, $40.8 \%$ of men and $59.3 \%$ of women bus and subway drivers were experiencing musculoskeletal symptoms compared to $26.1 \%$ of men and $19.3 \%$ of women administrative personnel and $24.7 \%$ of men and $31.7 \%$ of women repair service workers. ${ }^{14}$

Risk factors. San Francisco diesel bus, electric trolley bus, light rail train and cable car operators working 30-40 (vs. 20-30) hours per week and those with high psychological demands and "job problems" were more likely to have spinal injuries. ${ }^{103}$ Another San Francisco study found back pain related to "barriers" that got in the way of being on time, vision, proper driver body position or movement, and vehicle controls that were unreliable or difficult to use. ${ }^{15}$ In Brazil, "employment precariousness" (job instability, lack of empowerment, vulnerability, and job precariousness) related to musculoskeletal symptoms. ${ }^{107}$ A Norwegian study found emotional exhaustion to be related to WMSDs in bus drivers. ${ }^{252}$ In a German study, bus and subway drivers were more likely to experience high efforts plus low rewards ( $59.6 \%$ of men and $57.7 \%$ of women), compared to men and women repair service ( $37.2 \%$ and $48.4 \%$ ) and administrative workers ( $34.2 \%$ and $27.1 \%$ ). $62 \%$ of drivers with high efforts plus low rewards had musculoskeletal symptoms, vs. $38.3 \%$ of drivers who did not. ${ }^{14}$ Precarious (insecure) employment conditions were related to sleep disorders in Brazilian professional drivers. ${ }^{107}$

## d. Accidents and risky behaviours

Seventeen studies were found on accidents, 11 on city bus drivers, while the other six refer to "professional" or "public transport" drivers, or passenger transport train/rail operators. A study of 320 Turkish public transport drivers found that 49 (15.3\%) had at least one sleepiness-related motor vehicle accident or near-missed accident. ${ }^{231}$

Risk factors. Risk of crashes among public transport drivers was related to burnout in Taiwan, ${ }^{36}$ lower social support in Israel ${ }^{253}$ and Colombia, ${ }^{208}$ sleep-related problems, such as insomnia in Sweden, ${ }^{92}$ alcohol use, ${ }^{253-255}$ high demands plus low control (job strain) in Colombia ${ }^{16}$ and driving a bus in the afternoon during a split shift, when the work shift started early in the morning in Lithuania ${ }^{232}$ and Sweden. ${ }^{233}$

Fatigue is a major factor for risky driving and road accidents. The combination of sleep loss, lack of breaks and difficult working conditions increases the risk of accidents. Studies from Japan, 255 Turkey ${ }^{231}$ and Korea ${ }^{234}$ found that working while sick or shiftwork increased the risk of collisions and near-miss incidents by drivers. Studies from Australia, ${ }^{256}$ Taiwan, ${ }^{21}$ Korea ${ }^{257}$ and Germany ${ }^{207}$ found that severe fatigue is related to car crash experiences or risky driving behaviour, such as not wearing a seatbelt.

## e. Assaults

Transport workers vs. other occupations: more assaults. Many transport workers have experienced physical or verbal abuse while working, $70 \%$ or more over 12 months in studies in the US, Australia, UK ${ }^{111}$ and Mozambique, ${ }^{112}$ and similar levels of assaults to healthcare and law enforcement workers. ${ }^{98,109,258}$ In Mozambique, burnout levels in transport workers (severe, 3.6\%; mild, $30.1 \%$ ) were similar to healthcare and social service workers. ${ }^{109}$ However, bus drivers are more likely to be "afraid of being judged" by an employer and so less likely to complain compared with other occupations when there is no visible wound. ${ }^{111}$

More mental health risks. Bus drivers have more PTSD symptoms ${ }^{98}$ and burnout ${ }^{109}$ and face more verbal abuse ${ }^{98}$ and risk of violence ${ }^{111}$ than other occupations. Bus drivers also have a similar or greater chance of developing PTSD during their lifetimes compared to the general population. ${ }^{59}$

Risk factors. Verbal aggression is the most common form of assault with aggressors tending to be young men, usually in groups, and mostly occurring around rush hour or at night. ${ }^{111,112}$ One Australian study found that fares accounted for about $63 \%$ of assaults, ${ }^{111}$ followed by passenger
intoxication, which may be a factor in up to $1 / 3$ of assaults. ${ }^{109,111,112}$ Conflict among co-workers, with supervisors, and with owners is also a source of strain, on par with conflict with passengers. 109,111,258

Psychological impact of assaults. Burnout from repeated incidents of violence or increased verbal abuse can lead to poor job performance. ${ }^{258}$ Studies in the US, Canada, the UK, Norway, and Australia found that workers exposed to violence were more likely to develop burnout, acute stress disorder (ASD, a precursor to PTSD) and PTSD. ${ }^{98,109,111,258}$ A Canadian study found that $58.5 \%$ of participants had ASD and $17.4 \%$ had PTSD a month after an assault. ${ }^{59}$ Symptoms of ASD and PTSD tend to decrease with time, regardless of levels of support. However, several studies show that exposure to violence and a lack of social support can lead to burnout and prolong PTSD symptoms compared to people who do have support. ${ }^{59,112}$

Preventative measures. Feeling unsupported, or a lack of control, or a lack of clear procedural understanding are factors that can lead to ASD and then to PTSD among transport workers. ${ }^{59}$ A Canadian study found that workers were generally unaware of violence policies in their workplaces. ${ }^{98}$ Drivers have called for increased education on their role and on consequences of actions taken towards them. ${ }^{111}$ It has also been recommended that drivers be trained to deal with aggressive behaviour, to have more secure and better processes for reporting incidents, and to have better payment systems. ${ }^{112,258}$

## f. Lack of bathroom access

Bus drivers have jobs where bathroom access is restricted, and, in some cases, denied. ${ }^{259,260}$ This has led such workers to delay bathroom visits, and to cope by not drinking water or other fluids. This is stressful for anyone in this situation, and even more stressful for pregnant women, workers with certain medical conditions, and workers who need to take medication on a set schedule. Health problems caused by delayed bathroom use include urinary tract infections, and bladder, bowel and kidney problems. Other concerns include safety and cleanliness bathrooms used by bus and taxi drivers along their routes. ${ }^{259,260}$ Bus drivers who are distracted by a full bladder can create a safety hazard while driving. In fact, driving on a full bladder can impair a driver's concentration. An extreme urge to urinate can have similar effects on a worker's attention as having a blood alcohol concentration of $0.05 \%$, or roughly the same as driving without having slept in the past 24 hours. In a San Francisco study with members of ATU Local 192, workers reported improvising by using cups, bottles, or plastic bags, and $20 \%$ reported accidentally relieving themselves on the job. ${ }^{133} \mathrm{~A}$ recent survey of US transit officials and workers found that $46 \%$ reported bathroom access to be a "serious issue" and another 29\% reported bathroom access to be "one of the most important" issues. ${ }^{260}$

## D. Differences in research results by gender, age and race/ethnicity

Few studies have examined differences in the mental or physical health of transport workers by gender, age or race/ethnicity.

## Gender

Three studies which examined mental health outcomes found similar results for men and women:

Similar mental health was found in men and women bus drivers in a study in Norway. ${ }^{261}$

In a Canadian study, moderate PTSD was more common in men than women one month after a workplace violence event, although similar levels were experienced at later times. ${ }^{59}$

A Swedish study found an increase in workload (time pressure, been forced to hurry during work, strained myself to keep the driving schedules, not being able to give passenger service due to tight driving schedules) over 18 months was related to effort in carrying out work and fatigue spillover from work to leisure time and home. Men and women were exposed to similar stressors, thus tended to have similar symptoms. ${ }^{177}$

A German study found only minor differences in work stress between men and women transit company employees. ${ }^{207}$

However, three studies found worse mental health in women (vs. men) transport workers. In a Swedish study, while there were no differences between men and women bus drivers on levels of stress hormones, women drivers reported traffic congestion as worse, and considered irritated and aggressive passengers as contributing to mental strain more than did men drivers. ${ }^{38}$ Several Los Angeles women bus operators in a qualitative study reported more work and family conflict (child care and contact with children) when they worked longer, particularly on irregular shifts. ${ }^{8} \mathrm{~A}$ Canadian study found that women urban public transit employees who were exposed to a traumatic workplace event had more severe depression six-months later than men. ${ }^{37}$

Only one study, in China, found worse mental health in men (vs. women) bus drivers. ${ }^{96}$
Four studies of musculoskeletal disorders found small differences between men and women. Among Indian bus conductors, men most commonly reported leg pain ( $93.9 \%$ ), ${ }^{262}$ while women most commonly reported lower back pain ( $\sim 88 \%$ ). ${ }^{263}$ A San Francisco study found that women (vs. men) transit workers had a slightly higher risk of spinal injury, ${ }^{103}$ and a Seattle area study of bus drivers found a higher rate of pain among women (vs. men) drivers. ${ }^{250}$

## Age

Two studies which examined mental health outcomes found greater effects for younger workers. In Taiwan, younger (vs. older) bus drivers tended to experience higher burnout. ${ }^{36}$ Younger train drivers in Taiwan had higher levels of fatigue. ${ }^{21}$

Four studies examined musculoskeletal disorders and age, with mixed results. A San Francisco study found that transit operators working for five years or less had a higher rate of spinal injury than those working six or more years. ${ }^{103}$ However, this could be due to injured workers who had been driving for more years leaving the job due to pain. US and Swedish men bus and truck drivers reported more pain than non-drivers only between the ages of $35-45$, suggesting that older drivers with WMSDs may have already left work. However, in the group younger than 35, bus drivers did report more neck pain than truck drivers, which was not seen in older drivers. ${ }^{251}$ A Lithuanian study found back pain to be more common in older motor transport workers. ${ }^{229}$ However, a study in Israel found that drivers with lower back pain were on average younger than drivers without lower back pain (average of 45 vs 47 years). ${ }^{264}$

## Race/ethnicity

Only one study examined racial or ethnic differences in health among transport workers. Among NYC men bus drivers who died between 1980 and 1984, deaths due to heart disease were 23\% greater than the general US population for white drivers and $72 \%$ greater for non-white drivers. ${ }^{265}$

## E. Other stressors: Outsourcing, incentive systems, work intensification, informal economy

## Outsourcing

In Denmark, over 20 years ago, outsourcing occurred in a "strongly regulated labour market where the outsourced employees hold regular jobs with their contractor" with the majority being union members covered by collective agreements. ${ }^{17, p .99}$ In Denmark, collective agreements allow for works councils and the election of shop stewards, while legislation establishes joint labourmanagement safety and health committees and allows workers to elect safety representatives. Danish law was amended in 2001 to impose on outsourcers a somewhat heavier responsibility on health and safety and "forced the bus transport companies" to collaborate more with the contractor, employees and union. ${ }^{117, \text { p. 110-111 }}$

Outsourcing "caused a strong price competition which resulted in several mergers and bankruptcies among the bus contractors. Passengers experienced this development as a deterioration of quality. A reduction of the public support for bus transport increased prices, and the sector was, for a number of years, marked by a critical debate in the media". ${ }^{117, ~ p .99}$ Drivers "experienced reduction in their rest periods, split shifts with several duty periods during one workday, a reduction in their [skill] requirements, temporary instead of permanent employment, and a reduction in maintenance costs, causing operation problems for the drivers" leading to "high rates of sickness absenteeism and staff turnover". ${ }^{117, \text { p. } 109}$ During that time, a Danish study found that seven of 20 outsourced bus drivers left their job due to dissatisfaction with working conditions. ${ }^{116}$ The remaining 13 outsourced drivers, after one year, showed increases in systolic blood pressure (SBP), blood sugar and the stress hormone cortisol.

Danish bus drivers' representatives have "pointed out health and safety concerns such as tight bus schedules, difficulties with pass-ability in traffic, lack of break possibilities, risk of robberies. and problems with offensive passengers." Supported by their unions, drivers "put pressure on the transport companies" through "petitions to both the operations management, the transport companies' executive management, and the politically elected board ... wildcat strikes, cases brought before the Danish Work Environment Authority, and media contacts". 117, p. 107

## Driver incentives

In most large and medium-sized cities, public transport services are provided through risk-sharing contracts between companies and the local government. ${ }^{266}$ But, who bears the risk of operational cost overruns (for example, traffic accidents and passenger fare evasion) and decrease in transport demands? Employers have established demanding performance standards (focused on reducing costs) and incentives/penalties associated with these standards are often decisive factors in the pay of passenger transport workers, especially bus drivers. ${ }^{267}$ Bus drivers are primarily responsible for performance that directly determines the profits of public transport companies, such as receiving payments from passengers and maintaining the frequency and regularity of service. In theory, performance incentives are designed to reward transport workers for meeting organisational goals while maintaining good service quality.

However, in bus-based transportation systems, salary incentives based on number of passengers transported generate a "the war for the fare", competition between drivers, more risky driving behaviours and work traffic accidents. ${ }^{114}$ Such incentives, common in developing countries, have recently been replaced by fixed payment systems combined with salary bonuses for good performance in cities such as Santiago, Bogotá and Lima. These new incentive systems are based
on the number of buses per kilometre/mile relative to the scheduled number, the frequency and regularity of services, and passengers' service satisfaction. ${ }^{267}$

A study conducted in the metropolitan Santiago (Chile) area ${ }^{115}$ found that the majority of bus drivers agree with performance incentives established according to objective measures, such as the frequency and regularity of services. But they do not agree with incentives related to subjective measures not under their control, such as passenger satisfaction (based on surveys) - because Santiago bus drivers see interaction with passengers as a main source of work stress (fare evasion is high and passengers treat drivers disrespectfully). The Santiago researchers recommend that salary incentives be accompanied by the minimum working conditions necessary to meet performance goals to ensure safety and driver satisfaction. ${ }^{115}$

## Work intensification

The earlier two-person staff (one driver and one conductor) for operating a bus has been largely replaced with a single person (a driver) in major Western cities. ${ }^{7,8,166}$

The rest/recovery time of Los Angeles County transit operators at the end of each route has significantly decreased, from about 15-20 min in the 1980s to about 6-10 min in 2006, and traffic conditions have increased stress and risk of accidents. ${ }^{8}$ A study of New York City transit workers found tighter "more efficient" train and bus scheduling "associated with increased occupational hazards" and unhealthy behaviours (fast food diet, little physical activity, poor sleep). ${ }^{22, ~ p . ~} 360$ Workers interviewed noted "fewer opportunities to use the bathroom or eat a proper meal as a result of increased operational pressures". 22, p. 362

A case study of a large French public transport group showed that drivers' cabs are better designed ergonomically, and buses have air conditioning, better vehicle suspension and modern communication systems. There is a 35 -hour work week by law. However, there has been an increase in absenteeism among drivers due to illness and work-related accidents. ${ }^{119}$ Besides the usual risks faced by bus drivers, new forms of "work intensification" have emerged, including pressure to limit operating costs (fewer supervisors and relief drivers, concentrating services on high density (profitable) routes, increasing workloads), stricter punctuality requirements and use of geolocation (leading to shorter break times), checking tickets being more difficult when a bus is overloaded or late, and deteriorating relations with customers (including verbal and physical aggression). ${ }^{119}$

## Informal vs. formal economy and privatisation

In Dar es Salaam, Tanzania, from 1970-1983 the public sector provided passenger transport services. ${ }^{118, \text { p. } 1183}$ Privatisation began in 1983, and was completed by 1996. The result was an oversupply of buses, traffic congestion, "speeding; overloading of vehicles; chronic tensions between private operators and students over travel at subsidised rates; and a high occurrence of lethal accidents involving private buses". ${ }^{118, \text { p. } 1184}$ Along with an over-supply of unskilled labour, the result was an average workday for full-time drivers and conductors of 15 hours. "This is extremely taxing on workers' physical and mental well-being, considering the heat, the need to speed, avoiding collisions with other speeding buses and impounding by road police, to engage in turf wars with students, and to do all this in the presence of often argumentative passengers. Severe back pain, mental distress ... are the vicious (and common) manifestations among workers of extreme working conditions." ${ }^{118, \mathrm{p} .1190}$ Workers on a route that did not overlap much with other routes were able to somewhat self-regulate working conditions and establish a mutual aid association from 1998-2005 - an informal source of welfare protection (for burial costs, hospital expenses, releasing members from jail). ${ }^{118}$

# F. Programs, Policies, Interventions to improve transport worker working conditions and physical and mental health that have 

 involved labor unions
## 1. Bus driver health and safety programs - San Francisco, USA

A medical clinic for San Francisco transit operators at San Francisco General Hospital was negotiated by their union, TWU Local 250A and the municipal transportation company (MUNI). Beginning in 1978, Dr June Fisher and colleagues, using a collaborative approach, turned doing physical exams into participatory action research about the stressors facing bus drivers. Clinic staff interviewed operators and rode with them to observe actual work situations. They formed a working committee consisting of labour, management and researchers. They documented the increased rates of high blood pressure faced by transit operators. In the process, the union members learned much about health and safety and research on these issues. Local 250A President Ray Antonio said in 2005 that health and safety "is an issue at the collective bargaining table. It is a political and economic issue. It is an issue of standards and regulations to protect workers. It is an organising tool that is the foundation and an ongoing challenge for any union. It empowers the workers in dealing with the problems they face every day". ${ }^{58,128}$

The Ambassador Program was a pilot project developed in San Francisco in 1998 to improve bus driver working conditions and relationships between drivers and passengers, a collaboration between the TWU, operator MUNI, passenger representatives, physicians who worked with bus drivers, and researchers. ${ }^{58,128}$ The programme aims were to increase the numbers of buses and drivers on certain routes, have less rushed running time, improve recovery time for bus drivers, improve equipment, improve training for bus drivers, and the chance for passengers to receive education about the system. Because the project involved an inadequate budget and a limited number of vehicles, buses were taken away from another route to put on the "intervention" route, resulting in increased stress due to fewer buses on the other route. Unfortunately, the pilot project was not continued or expanded. ${ }^{128}$

## 2. Preventing threats and violence against bus drivers - USA

An important source of stress at work for bus drivers is the threat of being assaulted by passengers. ${ }^{6,59,132}$

US Laws. As of 2019, 30 states in the US had passed laws to deal with violence against transit operators. ${ }^{132}$ These laws include measures such as, "enhanced penalties," as in the District of Columbia code §22-3751 et seq, which states that people who commit crimes against transit workers may be punished by a fine of up to one and $1 / 2$ times the maximum fine otherwise authorised for the offence and may be imprisoned for a term of up to one and 1/2 times the maximum term of imprisonment otherwise authorised by the offence, or both. ${ }^{268}$ Other laws have increased penalties, for example, crimes that may have been considered misdemeanours previously, are now felonies. ${ }^{268}$ There are also laws at both the state and city level, which suspend people who have a history of criminal or otherwise disruptive behaviour against transit operators or other passengers. ${ }^{268}$ The Madison, Wisconsin Metro Transit System adopted a code of conduct. In the event the code of conduct is violated, a person can be suspended for a maximum of six-months and/or be removed from the use of services immediately. ${ }^{268}$

Structural changes to buses. The ATU also recommends structural changes to buses that would reduce the chances of injury to bus drivers by creating physical barriers. Since many physical assaults are related to disputes around fare payment, the ATU suggests that transit systems be
permitted to use federal funds to "...keep service levels up and fares down". ${ }^{132}$ Reauthorisation of the transportation bill in Congress, Moving Ahead for Progress in the 21st Century (MAP-21), could potentially provide funding for structural and legislative measures to protect bus operators. ${ }^{132}$

## 3. Bathroom access for transit operators - USA

US government regulations. The Occupational Safety and Health Administration (OSHA) sanitation standard for general industry, 29 CFR 1910.141(c)(I)(i), requires employers to provide their employees with toilet facilities, which was emphasised in OSHA's 1998 interpretation letter. ${ }^{269}$ In addition, the 2010 Washington State Division of Occupational Safety and Health (DOSH) Directive 5.98, Bathroom and Toilet Facility Access, ${ }^{270}$ is consistent with the 1998 OSHA interpretation. ${ }^{269}$ OSHA's guidance includes timely access without restrictions (such as having to use the bathroom only during scheduled breaks), and understanding that some workers need to use the bathroom more than others. This is more challenging for bus drivers, who must also locate bathrooms and deal with time constraints and traffic. Unfortunately, public employees are covered by Federal or state OSHA programs in only about half of U.S. states.

US union efforts. The ATU, representing workers in the US and Canada, has advocated for better access to restrooms while transit workers are working. In February 2019, the ATU published "Restroom Access: A Guide for Local Unions" to help with local union campaigns, to inform union members, and to educate the public about the importance of access to clean, safe, secure bathrooms for transit workers. ${ }^{129}$ On its website, the ATU provides news of local union efforts, scientific articles, surveys, flyers, posters, and educational media such as a short video about the struggles of transportation workers to find bathrooms while working. ${ }^{130}$

In 2018, bus drivers in the state of Connecticut (USA) demonstrated and renewed their pleas for transit authorities to provide adequate restroom services to the workers. The ATU released a survey in which workers reported the ways they have had to learn to cope without having proper access to bathroom services. ${ }^{271}$ In June 2019, a three-year contract between ATU Local 443 (Stamford, CT) and Connecticut Transit was signed, placing high importance on drivers' rights to access clean, safe bathrooms when needed. ${ }^{131}$ Drivers in Stamford had protested at rallies for more than a year, and formed "bathroom committees" who helped locate accessible bathrooms along bus routes.

## Recommendations for improving bathroom access for transit workers. ${ }^{113}$

The California Code of Regulation (CCR) outlines the requirement of transit employers to provide workers access to restrooms. However, the vague wording of the clause allows for different interpretations by managements. In a 2014 report on bathroom access for transit workers in California, the following recommendations were made that address the challenges that transit workers currently face:

- Extend route times. Scheduling changes are needed to reduce the rigid scheduling and time constraints that are a major barrier to adequate restroom access for transit workers.
- Add buses during peak hours and high traffic areas to decrease the stressors that drivers face, by allowing for a realistic passenger load and more time to manoeuvre traffic and thus reach their break sites at layover points.
- Improved supervisor-operator relations. Encouraging open dialogue and removing formal punishment or verbal retaliation when operators use the restroom.
- Increased restroom inspections. Increase inspection of the facilities to ensure sanitary conditions and the necessary supplies are continually stocked.


## 4. Bathroom access for transit operators - international

The International Transport Workers' Federation (ITF), together with Unite, a British and Irish trade union with more than 1.3 million members as of 2017, developed a charter that recognises access to bathrooms as a human right. ${ }^{272}$ Unite publicised research results on the struggles of transport workers over bathroom access on World Toilet Day, an official United Nations day since 2013, in November 2019. ${ }^{273}$ On 7 March 2022, the ITF launched a new web site, "Sanitation Rights Are Human Rights Activist Toolkit", which includes an investigation guide, inspection checklists, a survey, a sanitation charter and union campaigns. ${ }^{274}$

## 5. European programmes and policies

In some European programmes (as in Stockholm and Copenhagen), there was a focus on improving the drivers' work environment. In Stockholm, this included physical route changes, such as separate bus lanes, passenger peninsulas, and electronic bus schedule information in buses and at bus stops, which were innovations in the 1990s. These improvements are common now in Europe and North America. The Copenhagen project went further and included many programmes and policies involving improvements in scheduling, holiday time, taking time off, and communication; development of skills, such as training in management and communication, improved training of new hires, and providing courses on topics like handling conflicts, threats and violence; and improvements to and replacement of buses, and radio systems.

## a. Stockholm, Sweden - bus driver intervention studies

A small 2013 study of bus drivers in Stockholm suggests they experience less stress when using an "even-headway" strategy (maintaining even headways between consecutive buses by speed and dwell time adjustments) rather than a schedule-based control. An even-headway strategy allows greater flexibility to changing traffic conditions, and implies greater driver cooperation, in particular when running behind schedule. The strategy is implemented through a real-time display called BusPC, located in the driver cabin, which indicates the difference between the headway from the previous bus and the headway from the next bus. ${ }^{120}$

In the 1990s, Stockholm Transport, a municipal transit agency, decided to carry out an intervention to reduce traffic congestion, increase speed, and improve passenger service along one of the most congested urban bus routes in Stockholm. But a transit research team saw an opportunity to learn whether the project would also improve bus drivers' health by reducing stressful traffic congestion, and reducing time-consuming passenger inquiries through automated technology that would provide schedule information. The transit research team - from Stockholm University, Stockholm, Sweden and Cornell University, Ithaca, New York, and not affiliated with Stockholm Transport realised that the project would provide a chance to see if reduction in traffic congestion and work stressors that slowed the pace of bus drivers' work would reduce driver stress and improve driver health. The research team proposed this additional idea, a "complementary perspective" called the "Human Side of the Road", to Stockholm Transport, and the agency agreed to it. ${ }^{123,275}$

The researchers and transit union representatives met with drivers to discuss the design and purpose of the study. Questionnaires were mailed to participants' home addresses, along with instructions, an explanation of the purpose of the study, a confidentiality assurance, and a letter from the local union indicating its support.

Stockholm Transport designed a bus route that featured physical changes to improve the efficiency of bus operation and used technology to reduce traffic congestion (on the "intervention route"), and compared it with similarly congested bus routes in Stockholm that had not been
changed. The municipal transit agency thought that if they reduced traffic congestion and the drivers' need to answer some passenger questions and provide directions, operators would be able to focus on safe driving with less time pressure, and transit traffic would move faster. The following changes were carried out along the intervention route:

- Separate bus lanes for areas with high traffic congestion
- Improvements at difficult turns and areas with traffic bottlenecks
- A traffic signal system that gave buses higher priority
- Construction of passenger peninsulas that reduced drivers needing to pull over to a kerb, and reduced the number of illegally parked cars, which can slow transit traffic
- Design and installation of electronic information systems in buses and at major bus stops for passengers' benefit, reducing the need for passengers to ask questions. ${ }^{123,275}$

Evaluation of the programme. This was a small-scale study. Five drivers dropped out over the course of the study, leaving nine in the intervention group and 27 in the comparison group. Data were collected in March and April 1991 before the intervention, and in September and October of 1992 after the intervention. The intervention appeared to be effective in reducing perceived workload, job hassles, systolic blood pressure (SBP), heart rate and distress after work. However, no change was seen for diastolic blood pressure (DBP), fatigue or psychosomatic symptoms. The researchers reported that being an intervention (vs control group) driver was related to drops in SBP, heart rate and perceived stress. Also, changes in job hassles were related to changes in SBP, heart rate and perceived stress. However, given the small number of drivers involved in this study, it was difficult to draw strong conclusions about the impact of this particular programme. ${ }^{123,275}$

## b. Copenhagen, Denmark - HealthyBus project

The HealthyBus project in Copenhagen, Denmark was active from 1999 to 2004, and involved all six bus companies in the city, 20 job sites, and 3,500 city bus drivers in more than 200 changes in programmes and policies (interventions).

Inspired by the Stockholm bus driver project, ${ }^{123,275}$ and spurred by research showing that bus drivers have high rates of cardiovascular disease, ${ }^{11,276,277}$ researchers from Denmark and the UK helped to design a large-scale intervention project using a "participatory action research" approach for bus drivers in Copenhagen. ${ }^{124}$ The research team wanted the bus drivers to be involved in all stages of the project: "to ensure that all voices, not just the loudest and most powerful would be taken into account." The research team involved people from multiple professions (such as occupational medicine, epidemiology, engineering, and health promotion) in the planning and implementation of the project. ${ }^{124, p .77,80}$ Two bus drivers, two managers, and an employee from Copenhagen Traffic were appointed to paid half-time positions to formally create a link between workers, unions and employer groups and the researchers (all together known as the "project group"). From the beginning, there were interviews with "stakeholders", and the research team took feedback seriously, such as when a union spokesperson said that the project "must not end up as just another report." ${ }^{124, \text { p. } 79}$ Partnerships on a "local level included drivers, shop stewards/safety stewards and managers, and a central level with companies, unions/employers and Copenhagen Traffic." ${ }^{124, \text { p. } 80}$ Following such planning, the project group came to an agreement on what the first 116 planned interventions would be.

The first 116 interventions fell into four main categories:

1. Work organisation, such as improvements to scheduling, holidays, and taking time off, as well as suggestions for improved communication
2. Organisational support for healthy behaviours (which they called "lifestyle"), which included suggestions for availability of healthy food options at work, passes to fitness centres, and incentives to quit smoking
3. Competence (skills) and education, such as training in management and communication, improved training of new hires, and providing courses on topics like handling conflicts, and threats and violence
4. Physical work environment, such as improvements to and replacement of buses, improvements to radio systems, and repair of road obstacles.
"Action research" was a process that involved interviews, focus groups, and thoughtful discussion in meetings with everyone involved, sometimes resulting in changes such as adding interventions. For example, while the project began with 116 planned interventions, by the end, the number of interventions had reached 208. ${ }^{124}$

Evaluation. Comparing results of follow-up surveys of 2,729 bus drivers in 2003 and 2004 with baseline surveys of 2,677 drivers in 1999-2000, improvements were seen in working conditions, physical and psychological symptoms and health, and health behaviours. ${ }^{124}$ Drivers reported a reduction in: rush hour timetable being too tight; not being able to take full length of a break; thinking about violence and threats; and that managers do not treat drivers well. Drivers also reported a drop in "always or often stressed", back pain, headache and fatigue. ${ }^{124} 45 \%$ of drivers said the work environment had improved throughout the last two years of the project. ${ }^{124}$

## 6. Collective bargaining and laws in France

French trade unions and employers' associations negotiated two national agreements across industries, one on work stress (2008) and the other on bullying and violence (2010) (p3).
"Employers shall take all the measures necessary to ensure the safety and to protect the physical and mental health of workers."

- Article L. 4121-1, paragraph 1, French Labour Code

Companies or establishments with 50 or more employees have to establish a committee for health, safety, and working conditions (CHSCT in French). ${ }^{119, ~ p .4}$ When a new form of work organisation was introduced at "TramBus" that changed the length of the working day, the expert report commissioned by the CHSCT was used by the CHSCT and the union to discuss and change some routes. ${ }^{119, ~ p . ~} 11$ The CHSCT is one "model" of union action. "Several legal cases have been brought alleging obstruction of the CHSCT's work, notably because of a lack of consultation before the introduction of a number of changes to work organisation. Thus, for example, when management hired outside consultants to analyse the circumstances surrounding accidents and other incidents and established a psychological support system for employees who had experienced or were living with work-related stress, without having consulted the CHSCT, the CHSCT referred the case to the courts". ${ }^{19, \text { p. } 11}$

Contracts negotiated between unions and employers on the risk of physical aggression towards drivers "seldom take into account the psychological aspect of the risks. The policies adopted still largely reflect the standard tertiary prevention approach to workplace health, in which the focus is more on mitigating the effects through agreements that seek to reduce absence rates (even when including specific measures on health and safety), rather than on a modern policy of preventing risks, particularly psycho-social risks". These policies could lead to drivers not declaring illness or
being absent. "At TramBus, a 2002 agreement includes a clause committing the management to improve safety at work, particularly with regard to dealing with the psychological consequences of attacks." In 2010, "an action plan on psycho-social risks was adopted in consultation with workforce representatives and trade union delegates." At SouthBus, a 2011 agreement about the CHSCT provided for "establishment of a committee for monitoring safety issues, the right to notification, the right to leave one's post, and employee safety training and announcing the adoption of a policy for preventing psycho-social risk and stress at work". ${ }^{19, \text { p. } 11}$ These programmes and policies need to be evaluated for the impact on worker mental health.
"When an employee has reasonable grounds for thinking that a work situation constitutes a clear and present danger to his life or health or he observes that the protection system is defective, he must alert the employer immediately and may leave his post (article L. 4131-1, French Labour Code)... this right is regularly invoked by bus drivers in the event of physical attacks on themselves or their colleagues". ${ }^{19, p}, 10$

In a large French public transport group, with open-ended employment contracts and pay rises determined by seniority, bus drivers may change routes (by seniority) or change occupations within the company (if declared medically unfit to drive), a system that was discontinued in one company due to budget deficits. ${ }^{119}$

## G. Other programmes, policies to reduce transport worker stress and improve transport worker mental and physical health

## 1. Seeking, receiving treatment for PTSD and other effects of traumatic events

Negative interactions with management, and the time spent doing paperwork were barriers to seeking help in Toronto Transit Commission employees with PTSD. Motivation to help seeking came from family and peer support, financial and emotional issues. ${ }^{278}$ Systematic screening and individualised education increased treatment seeking rates ( $79 \%$ vs. $69 \%$ ). ${ }^{279}$

PTSD symptoms decreased with time in Toronto transit workers participating in a "Best Practices Intervention" and a "Treatment-as-Usual" programme. ${ }^{279}$ New York transit workers who took a course of Cognitive Behavioural Therapy for the treatment of PTSD from a traumatic event had nine of ten symptoms improve. ${ }^{280}$

## 2. Bus driver programs and policies in the USA and Canada

A 2014 US Transportation Research Board (TRB) report describes workplace health protection and promotion programs in US and Canadian transportation agencies that employ bus drivers. ${ }^{125}$ The programmes focus mainly on workplace health promotion and wellness, or ergonomics. One example of a health promotion programme is access to onsite fitness facilities, which may help some workers to fit exercise into a busy workday. However, for bus drivers working irregular shifts with tight schedules and little room for breaks or downtime, trying to fit in exercise can be challenging. The report indicated that bus drivers made less use of onsite fitness facilities compared with administrative and other staff. Although the worksites profiled in the report include innovative wellness programmes, many of them do not match well with scheduling demands. Some of the programmes tried, in small ways, to reduce sources of stress at work which could possibly improve the mental health of drivers, for example:

- Allowing for recovery time (rest break time at the end of a route)
- Training on reducing conflicts between bus operators and customers
- Scheduled comfort stops with restrooms (bathroom access)
- A restroom policy along with education about the policy
- Contracts with businesses along routes that offer use of restrooms
- An ergonomics programme

In the TRB report, there are several cases of wellness programme managers and union representatives observing that for a wellness programme to benefit bus operators, the programme should more directly address the unique challenges operators face. In one employee survey that asked how wellness activities could have the most impact, the most common answers were complaints about tight schedules that left no time for bathroom breaks or lunch.

Orange County, California, Transit Authority (OCTA). The TRB report describes an OCTA programme with various components specifically trying to reduce sources of work stress among bus operators. These include a policy in which recovery time is built into schedules. OCTA promoted micro breaks during bus operators' work shifts, worked to get vending machine suppliers to provide healthy food and beverage choices, and evaluated bus equipment with safety and injury prevention as a priority. Wellness programme staff generally placed importance on the need for vendors and other resource organisations to be mindful of operator schedules and work culture. The OCTA also had a programme involving experienced bus operators and trainers - called "ambassadors" - who would ride with bus operators and observe and correct ergonomic issues, and provide advice on responding to passengers. Unfortunately, by 2014, the "ambassador" programme was no longer in use.

Conclusions. US and Canadian transit agencies have focused mainly on workplace health promotion. Some have tried to reduce work stressors and improve driver mental and physical health by trying to improve scheduling and increasing drivers' break times, and incorporating ergonomic improvements to reduce injuries. But, most wellness programmes place responsibility for health on bus drivers and not on the work environment.

## 3. Preventing threats and violence against bus drivers - USA and Canada

The US Transit Advisory Committee for Safety (TRACS) published a report in 2015 on "preventing and mitigating transit worker assaults" in which they outlined strategies designed to address assaults and potential violence geared towards transit workers:

- Policies and procedures: Develop guidelines for transit agencies to prevent workplace assaults and encourage these authorities to create programmes to prevent all forms of violence.
- Risk management: Establishing a formal risk management process, which should include a mechanism for employees to routinely assist in identification of key hazards and safety issues.
- Safety promotion: Training, public education and other forms of support for transit employees
- Safety assurance: Enforcement of all guidelines contained within a programme that are designed to reduce violence ${ }^{126}$

Sécuribus Programme in Montréal. ${ }^{127}$ The innovative Sécuribus programme implemented by the Societe De Transport De Montréal (STM) included a variety of actions to promote the safety of drivers. The four main measures were:

1. Ongoing training: This training consisted of two 7 -hour phases, and was taught by four former bus drivers who became certified as "Sécuribus instructors" (along with videos featuring other
transit workers from the STM). Phase 1 focused on giving drivers strategies to diffuse tension and prevent potentially violent behaviour. Phase 2 focused on stress management tools.
2. Two campaigns promoting respect: one to promote customer awareness on respecting STM bus drivers, and the other highlighting behaviours that can potentially irritate bus drivers and those around them, potentially leading to tension in the bus.
3. Data indicators on assaults to track trends to better carry out prevention.
4. Installation of deterrents, such as surveillance cameras, emergency call buttons, safety inspectors, and support for employees that had reported assaults. This also included legal support to all drivers who wanted to take legal action against those who had been involved.

The Sécuribus program, carried out in 2007, has seen positive results:

- The number of assaults (that led to reports) decreased by $44.36 \%$ from 2007 (133 assaults to 95 in 2010, to 74 in 2012).
- Assault-related sick days decreased by 52.1\%, with 4,657 in 2007, but only 2,232 in 2012.
- Physical assaults decreased by 53.4\%, with 58 in 2007, to 30 in 2010, and 27 in 2012.
- Increases in customer satisfaction (through surveys) related to security on buses, from $89 \%$ in 2007 to 94\% in 2012
- The STM was able to lower its costs related to assaults by $43.7 \%$. From 2007 to 2012, the Sécuribus programme saved the STM over $\$ 1.9$ million.

Maryland Transit Administration (MTA) Service Safety Task Force (SSTF). ${ }^{127}$ In 2014, the MTA established the SSTF to decrease incidents of violence and assaults on operators. This included examining current policies and security features on buses to determine what could be improved. As a result:

- All buses were equipped with panic buttons, cameras, and a voice radio to effectively communicate if an assault took place.
- The SSTF recommended that shatterproof compartment shields be put in every bus, and the recommendation was accepted.
- The SSTF improved communication to increase public awareness of bus operator safety measures. This included signs indicating the penalty for assaulting a driver, and a letter issued to parents and students to indicate "rules of conduct" on buses.
- The SSTF also improved communication between bus drivers, operators, and police.
- The SSTF helped to improve MTA bus driver training which now includes topics such as "Deescalation, Conflict Resolution, and Maintaining a Peaceful Bus Environment". There are now safety and security pamphlets including a 17-page guide on improving the personal safety of a bus operator, that was geared towards reducing assaults.

Since the programme was implemented in 2011, aggravated assaults on bus drivers decreased by $40 \%$ by 2014, and a reduction was also seen in assault-related workers' compensation costs.

## 4. Preventing threats and violence against bus drivers - International

International recommendations to reduce assaults against transit workers. The International Association of Public Transport (UITP) and the International Transport Forum (ITF) released a joint statement in 2015 that outlines recommendations at an international level designed to improve urban public transport safety and combat violence. An important recommendation is to engage
stakeholders (public authorities, unions, passengers) and encourage their participation in protecting basic rights of transit workers. ${ }^{126}$

## 5. CONCLUSIONS AND RESEARCH RECOMMENDATIONS

## A. Summary of results

COVID-19 pandemic. As of August 2022, 11 research studies had examined the impact of the COVID-19 pandemic on the working conditions and health of public transport workers, ${ }^{23-33}$ some of which suggest large impacts on mental health. A larger number of newspaper and internet articles also suggest major impacts of the pandemic on the physical and mental health of transport workers, and their working conditions. These impacts include COVID-19 infections and deaths; anxiety, fear of infection, stress, burnout, feeling disrespected, and social isolation; limited availability of PPE, distancing, or disinfectants: passenger aggression related to mandatory mask use. Reduced transit service due to quarantines, budget shortfalls and worker absences due to illness led to, in some cases, wage reductions, and layoffs - with greater economic impacts in developing countries.

Pre-COVID research. Many research studies have been conducted on the health of urban public transport workers since the 1950s, finding increased risk of heart disease and stroke, high blood pressure, musculoskeletal disorders, and fatigue/sleeping problems. A number of studies have found mental health impacts, including high levels of anxiety, depression and burnout, and psychological trauma from threats, assaults or witnessing suicides. ${ }^{1-8}$ Stressful working conditions of transport workers contribute not only to their physical and mental ill health, but also to public safety risks.

Young transport workers meeting at an ITF summer school in 2019 in Italy emphasised that they face many of these same issues:

- Insecure jobs excluding them from pensions, healthcare and social protection
- Jobs that have long working hours and low pay
- Exploitative work cultures and violence that affects their mental health
- Tracking, surveillance and data collection as a direct result of technological change that threatens their rights
- Gender-based violence and discrimination (see Appendix, Section VII for full statement)

Union response. Transport worker unions have also responded to the COVID-19 pandemic through a variety of actions, including collective bargaining, advocacy for worker health and safety and for adequate transit funding, providing PPE and cleaning supplies, obtaining workers' compensation for workers with COVID-19, education, hotlines, encouraging and arranging for vaccinations, legal support or fundraising for workers with suspended contracts or those losing income because of passenger capacity restrictions, an increased emphasis on mental health services and participation in research studies.

These efforts are similar to the actions taken by unions over many years to improve the health and safety of transport workers facing traditional job hazards. These actions have included collective bargaining, health and safety committees, advocating for better job design and for laws and regulations, member assistance programs, and injury and illness surveillance programs. They have sometimes worked with researchers to design, carry out and evaluate programmes and policies (interventions) designed to improve transport workers' mental and physical health. ${ }^{47,48}$

Agency response. Transit agencies, sometimes in cooperation with transport worker unions, have implemented health promotion programmes, and limited efforts to improve recovery time, worker training, bathroom access, and ergonomics programmes. Some agencies have implemented programmes to reduce assaults against drivers.

## B. Gaps in research and research recommendations

Much of this research has been conducted on urban bus drivers, and some on train drivers, but very little has examined other transit occupations. Similarly, very little research has been conducted on possible differences between younger and older workers, men and women, and different racial, ethnic or tribal groups or immigrants. Therefore, further research is needed on:

- Other transport occupations, including conductors, cleaners, station agents, mechanics, ticket sellers, traffic controllers and support personnel
- Potential differences between younger and older workers, men and women, different racial, ethnic or tribal groups and immigrants vs. native-born workers
- LGBT+ workers, workers with disabilities, or workers who are also in school

Further research is also needed on:

- The impact of the COVID-19 pandemic on the working conditions and the physical and mental health of public transport workers
- The health impacts of systems of work organisation, such as outsourcing, incentive systems, and work intensification
- The health impacts of employment relations, such as work in an informal economy

Further research is needed on issues specific to the COVID-19 pandemic, for example:

- The mental health benefits to workers of negotiated agreements which protect against possible job loss due to vaccine mandates
- The impact of union education programmes on increasing vaccination rates or combating vaccine misinformation
- How best to protect workers, especially those at increased risk of serious COVID-19 (or with family members at increased risk), from infection as the result of union members who refuse vaccination.

Further research is especially needed to evaluate the impact of different types of programmes and policies designed to protect the mental health of public transport workers from traditional work stressors and from the effects of crises, such as the COVID-19 pandemic. Since COVID-19 may remain with us albeit at lower levels of infection (an "endemic" situation), research is needed to monitor operational changes in the transport industry and the effect of these changes on workers' health and working conditions. Such changes would include programmes and policies on improving work organisation, health and safety, ergonomics, schedules, the physical work environment, education and training, management style, communication, bathroom access and rest breaks, and on reducing assaults and threats of violence. Such changes can be achieved by collective bargaining, health and safety committees, participatory action research, advocacy campaigns, coalition-building and laws and regulations.

The interviews and focus groups conducted for this study are designed to start to fill these research gaps.

Finally, lacking to date and sorely needed is research on the potential benefits of efforts to provide sustainable funding for public transit on the working conditions and mental health of transport workers, as well as on the community and environment. Recent reports co-authored by the ITF highlight the connections between public transport and a green and equitable recovery from the COVID-19 pandemic, healthy and more secure working conditions and healthy communities, addressing climate change, and reducing social inequalities, congestion, long commutes and poor air quality. ${ }^{45,133,134}$ The ATU (USA) President along with the mayor of Austin, Texas wrote: "Investing in clean and efficient public transit systems [such as electric buses] is a critical pathway to lowering transport and overall emissions and is absolutely essential for maintaining the well-being of cities." The infrastructure funding bill signed by US President Biden on 15 November 2021 includes provisions to upgrade infrastructure, fight climate change, ensure workers' safety (preventing assaults) and training transport workers to operate, repair and maintain cleaner vehicles. ${ }^{135}$ The union-led Just Transition programme in the Philippines (case study \#3) similarly needs to be evaluated for its impact on workers' health, community health, the environment and climate change.

# 11. METHODS OF COLLECTION AND ANALYSIS OF DATA FROM FOCUS GROUPS AND INTERVIEWS 

## Institutional Review Board approval

Research teams in the six participating countries (Canada, Colombia, the Philippines, Spain, Uganda and the United States) applied to University-based Institutional Review Boards (IRBs) in their respective countries using a basic research protocol and consent forms developed by the Principal Investigator (Dr. Landsbergis, United States) in consultation with the other three core research teams (in Colombia, Canada and Spain). However, the specific procedures that each research team included in their IRB applications had slight variations in order to meet the requirements of their respective IRBs. The research protocol included the main research questions proposed by the study's sponsor, as well as the requirement that the participants be urban public transport workers and that most of the study participants be 35 years or younger.

## Participant recruitment

Researchers contacted International Transport Workers' Federation (ITF) affiliates in their respective countries to explain the purpose of the study and to recruit study participants. ITF affiliates provided contact information for potential study participants. Following IRB approval, research groups in each country contacted potential study participants and invited them to participate in either focus groups or interviews. Consent forms were administered to those persons agreeing to participate in the study. For the final report of study findings, participants had the option to:

1. Remain completely anonymous (that is, their words would not be quoted)
2. Remain partly anonymous (their words could be quoted along with their country, occupation, gender and age)
3. Be identified (their words could be quoted along with their name, photograph, country, occupation, gender and age).

## Data collection

In-depth semi-structured interviews and focus groups were conducted either in-person or through on-line video conferencing software, and all were recorded (audio or audio/video) and transcribed. The transcription data files were imported into qualitative analysis programs (nVivo and MAXQDA) to help with organisation and collective analysis. Information on age, gender and occupation of the participants was also collected.

## Data analysis

During the summer of 2021, the core research group had conducted a literature review to gain a better understanding of the topic. However, all researchers coded with an open mind, where codes and themes were allowed to emerge from the content.

The core research group used a thematic analysis to analyse the data. Thematic analysis aimed to identify common themes, experiences, concerns, and ideas that participants had. Guidance on analysing the data was taken from the "Framework Method". ${ }^{281}$ This method was chosen due to the collaborative effort of analysing the data between researchers and research teams. The Framework Method "provides clear steps to follow and produces highly structured outputs of summarised data. It is therefore useful where multiple researchers are working on a project, particularly in multidisciplinary research teams where not all members have experience of qualitative data analysis, and for managing large data sets where obtaining a holistic, descriptive overview of the entire data set is desirable" (p. 2)." ${ }^{281}$

The demographics (age, gender, occupation) of the interview and focus group participants were summarised.

## Procedures used for analysis (from the Framework Method) ${ }^{281}$

Stage 1:
Familiarisation with information gathered, including literature reviews, and policy documents from workplaces.

## Stage 2: Transcriptions imported into an analysis program (MAXQDA/nVivo)

Computer Assisted Qualitative Data Analysis Software is particularly useful at this stage because it speeds up the process and ensures that, at later stages, data is easily retrievable. Unlike software for statistical analyses, which carries out the calculations with the correct instruction, putting the data into a qualitative analysis software package does not analyse the data; it is simply an effective way of storing and organising the data so that they are accessible for the analysis process.

## Stage 3: Familiarisation with the interview

We became familiar with the whole interview using the audio recording and/or transcript and any contextual or reflective notes that were recorded by the interviewer. We re-listened to all or parts of the audio recording.

## Stages 4: Coding

We carefully read the transcripts line by line, applying a paraphrase or label (a 'code') that describes what we interpreted in the passage as important. At this stage 'open coding' takes place, that is, coding anything that might be relevant from as many different perspectives as possible. Codes could refer to substantive things (for example, particular behaviours, incidents, or structures), values (for example, those that inform or underpin certain statements, such as a belief in evidencebased medicine or in patient choice), emotions (for example, fear, stress, anxiety) and more impressionistic/methodological elements (for example, interviewee found something difficult to explain, interviewee became emotional, interviewer felt uncomfortable). Some codes were predefined (that is, based on the research questions for this study and the literature review). We aimed to classify all the data so that it can be compared systematically with other parts of the data set.

We looked out for the unexpected and did not just code in a literal, descriptive way. As well as providing a holistic impression of what was said, coding line-by-line alerted us to consider that
which may ordinarily remain invisible because it is not clearly expressed or does not fit with the rest of the account. Our goal was to reconcile and explain anomalies in the data so as to make the analysis stronger.

We used a "constant comparative approach" with back-and-forth comparisons between codes, transcript data, and the literature. Developing memos about ideas and codes allowed us to give a description, or added context to the codes. This was useful when sharing between countries. Finally, we saved quotes that were unique and summarised the codes/categories/themes.

## Stage 5: Combine and condense codes to create categories that summarise related sets of codes.

Discussions were held between members of the core research team to create new codes, combine codes or to identify related sets of codes as "themes" or "sub-categories of themes". We considered forms of a map of themes and sub-themes to better understand how they are related.

Stage 6: Develop and use a working local analytical framework, within each team/country (the
codes created in the initial transcripts to help guide future coding)
After coding the first few transcripts, researchers in each team discussed the labels they have applied and agreed on a set of codes to apply to all subsequent transcripts. Codes were grouped together into categories, which formed our working analytical framework. An "other" code under each category was used for data that did not fit. The software programs we used helped in this process. While agreeing on a set of codes, we remained open to emerging codes throughout the process.

## Stage 7: Condense categories into themes (stages 3-7 are continuously cycling throughout the analysis process)

We condensed categories into as "themes" or "sub-categories of themes", the final themes that summarise the data.

## Stage 8: Create and share matrix tables of codes, categories, themes with other teams

 We used spreadsheets and MS Word files to generate a matrix and then "chart" the data into the matrix. This included summarising the data by themes, sub-themes and codes from each transcript, and included interesting or illustrative quotations. MAXQDA and N -Vivo software helped in this process. We then synthesised the data into a narrative format with extensive quotations organised thematically.Data from the study teams in the participating countries were sent to the Principal Investigator for assembly into a final report. Data was de-identified, except for participants who agreed to have their name and/or photograph associated with their quotes.

## Stage 9: Re-analyse/review own findings using other team's tables

We read through other teams' findings and compared them to our own. We searched for differences, similarities, and transferability of findings.

## Stage 10: Compare interesting findings

We noted which themes and sub-themes appeared consistently across countries, and which only appeared in one or several countries. We attempted to explain differences or similarities between countries based on our data.
12. Table A. Participants in ITF study of mental health of young public transport workers, $n=70$

| Country | Union | Number of focus groups | Number of focus group participants | Number of interview participants | Total participants who were men | Total participants who were women | Total participants age $\leq 35$ | Time period of focus groups and interviews |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Canada | Amalgamated Transit Union (ATU) | 0 | 0 | 1 | 1 | 0 | 0 | November 2021 - <br> February 2022 |
|  | Canadian Union of Public Employees (CUPE) | 0 | 0 | 1 | 0 | 1 | 0 | November 2021- <br> February 2022 |
|  | Unifor | 0 | 0 | 4 | 1 | 3 | 3 | November 2021February 2022 |
| Colombia | SNTT | 0 | 0 | 12 | 7 | 5 | 10 | November 2021 |
|  | SINTRAMETRO | 0 | 0 | 2 | 0 | 2 | 1 | November 2021 |
| Philippines | National Confederation of Transport Worker Unions (NCTU) | 0 | 0 | 3 | 2 | 1 | 1 | April 2022 |
| Spain | Comissiones Obreras (CCOO) | 3 | 23 | 0 | 22 | 1 | 9 | October 2021 |
| Uganda | Amalgamated Transport \& General Workers Union (ATGWU) | 2 | 10 | 0 | 5 | 5 | 10 | February 2022 |
| United States | Transport Workers Union (TWU)* | 1 | 5 | 4 | 7 | 2 | 3 | November 2021 January 2022 |
|  | Amalgamated Transit Union (ATU) | 0 | 0 | 5 | 3 | 2 | 4 | $\begin{aligned} & \text { January - February } \\ & 2022 \end{aligned}$ |
| TOTAL |  | 6 | 38 | 32 | 48 | 22 | 41 |  |

*A focus group was also conducted of 7 young TWU leaders and members who work outside the urban public transport sector
13. Table B. Primary occupations of participants in ITF study of mental health of young public transport workers, $n=70$

| Country | Union | Bus operator | Train operator | Taxi, boda-boda driver\#) | Ticket seller | Dispatcher, Conductor | Maintenance worker | Administrative worker | Customer Service | Union official | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Canada | Amalgamated Transit Union (ATU) | 1 |  |  |  |  |  |  |  |  |  |
|  | Canadian Union of Public Employees (CUPE) |  |  |  |  |  |  |  |  | 1 |  |
|  | Unifor | 4 |  |  |  |  |  |  |  |  |  |
| Colombia | SNTT | 3 |  |  | 5 | 1 | 1 |  |  | 1 | 1 |
|  | SINTRAMETRO |  |  |  | 2 |  |  |  |  |  |  |
| Philippines | National Confederation of Transport Worker Unions (NCTU) |  |  |  |  |  |  |  |  | 2 | 1 |
| Spain | Comissiones Obreras (CCOO) | 21 |  |  |  |  |  |  |  | 1 | 1 |
| Uganda | Amalgamated Transport \& General Workers Union (ATGWU) |  |  | 4 |  | 2 |  |  |  | 2 | 2 |
| United States | Transport Workers Union (TWU)* | 7 |  |  |  |  | 1 |  |  |  | 1 |
|  | Amalgamated Transit Union (ATU) | 4 |  |  |  |  | 1 |  |  |  |  |
| TOTAL |  | 40 | 0 | 4 | 7 | 3 | 3 | 0 | 0 | 7 | 6 |

\#Boda-boda is the name for motorcycle transport in Uganda
*A focus group was also conducted of seven young TWU leaders and members who work outside the urban public transport sector
P. 108

# 14. COMPLETE RESULTS OF FOCUS GROUPS AND INTERVIEWS OF URBAN PUBLIC TRANSPORT UNION MEMBERS 

Between October 2021 and April 2022, following approvals from Institutional Review (research ethics) Boards in each country, research teams in six countries conducted a pilot study consisting of in-depth semi-structured focus groups and interviews of 70 urban public transport union members and leaders ( 48 men and 22 women). A total of 38 participated in focus groups and 41 in interviews, with 57 ( $59 \%$ ) being 35 years of age or younger (see Table A). We refer to workers aged 35 or younger in this report as "young workers". Detailed data collection and analysis methods are contained in "Methods of analysis of data from focus groups and interviews".

Listed below are the main themes and sub-categories of themes that were discussed by participants in the focus groups and interviews. Verbatim quotations from study participants are in italics. Translations of participants' statements into English were provided by the research groups in Colombia, Spain, the Philippines and Uganda.


## A. COMMON THEMES AND SUBCATEGORIES OF THEMES (DISCUSSED IN AT LEAST 3 COUNTRIES)

## 1. INCREASED MENTAL HEALTH SYMPTOMS DUE TO COVID-19

The COVID-19 pandemic increased symptoms of mental ill health, especially stress and fear including fear of contagion at work or outside work. Participants also reported symptoms of anxiety, depression, irritable mood, sadness, anger, sleep disruption and fatigue.

## Canada

A Canadian union Mental Health Advocate (MHA) reported that, since COVID-19 protective measures started very slowly at the beginning, drivers felt increased vulnerability and anger, and sometimes thought that the company was lying.
> "In terms of just the people that I know, people have gone on stress leave. People have been feeling apprehensive. People have not been wanting to work. I have a friend too who left the job. He quit because they couldn't handle it and that was stress related."
> - Bus driver, woman, young worker, Canada

"A young transit professional who's concerned about paying the bills or someone who's sick at home, now (there is) a pandemic to add to their stress. So therefore we (the union) have more of a concern to look after these workers... We also have a financial economic crisis that has occurred because of the pandemic. That's two huge elements that can play a role on someone's well-being. So that potentially escalates more of what they may endure."

- Union representative, man, Canada


## Colombia

Some reactions are transient and short-lived. For example, young workers reported that in social-media-based support groups, their co-workers often expressed concern, sadness, and frustration over deteriorating working conditions.
"In the audios that we receive, workers with suspended contracts tell us: What do I do? What do I do? Tell me what do I do with this anguish? Some have cried. All express a lot of stress."

- SNTT National Board of Directors, woman, ticket seller, young worker, Colombia
"[My co-workers] tell me they have a grudge against the company. In other words, there are some who no longer enjoy going to work. One tells them: "look, let's do this..." but the answer is "no, why am I going to start doing this if they're going to kick me out anyway?" or "if they are going to reduce my salary anyway?" I see them dispirited, worried all the time."
- Union official, man, young worker, Colombia

Other psychological reactions of workers are more lasting or intense and may be indicative of more serious problems, such as anxiety disorders and depression, which require specialised psychological attention and a change in the triggering working conditions:
"Why doesn't the company stop? If everyone else is teleworking, why not us? If there are some external ticket sales points, where users can load the cards without us, why are we still at the ticket offices?"

- SNTT National Board of Directors, woman, ticket seller, young worker, Colombia
"We recently heard about a co-worker who was diagnosed with depression. She says that her depression was caused by the fear of losing her job and being persecuted by a supervisor. Why? Because the supervisor was despotic with her and not with the other workers. So, she started to feel bad and went to the doctor, because she was having suicidal thoughts. She is 35 years old and a single mother. That situation is unfair."
- SNTT National Board of Directors, woman, ticket seller, young worker, Colombia


## Spain

Fear was the most frequently mentioned issue in the focus groups, along with feelings of restlessness, distrust, stress and constant vigilance. Mental-health-related sick leaves were frequent, which had repercussions on the workload at the group level:
"During the pandemic, there were many sick leaves due to anxiety and depression, and sometimes there were not enough staff to cover the services that were provided."

- Bus driver, man, young worker, Spain.
"I think that almost all of us became anxious or were depressed in some point. Some of the companions told us that it was very difficult for them to get out of bed, and others were terrified just imagining what could happen to them."
- Bus driver, man, Spain.
"At the beginning of the pandemic, we tried our best to keep things afloat, although the demands placed on us by the companies and the situation itself were increasing, to the point that after a few months we went to work knowing that we did not have much chance of changing anything, and that the situation was defeating us... but we still went to work, with some dignity."
- Bus driver, man, Spain.


## Uganda

The nation-wide lockdown to contain COVID-19 and restrictions on the transport economy affected the mental health of young transport workers. Being daily income earners, the abrupt manner in which the lockdown was announced had a large impact on young workers. They lost jobs and daily incomes, social support systems from peers and stress outlet systems. The lost income shock is still large months after the height of the pandemic. Transport workers do not know what the future holds for their sector.
"We spent months without working and it took a toll on us. To today, because of the pressure and stress from reduced number of passengers and thus reduced number of trips, many drivers are handing over taxis back to bosses because they are not making enough money to sustain the business including the daily payments to the taxi owner, and wages to the taxi conductor. All this mentally stresses and disturbs you. On top of that, each time you go to work, your family thinks that you are working and will not understand if you don't bring money, so to avoid all that, drivers give up, return the taxis to their owners and sit at home."

- Taxi driver, man, young worker, Uganda
"During the lockdown, I experienced heightened episodes of stress, I kept thinking that maybe I was going to even run mad. Not to say that before the lockdown I never had stress, but during the lockdown, it was too much."
- Union executive board member, woman, young worker, Ugand)
"When schools closed, there was uncertainty around when they would open. We had failed hope over and over again. The anguish and uncertainty took a mental toll on us as we tried to think of alternative livelihood plans."
- Boda-boda association member, woman, young worker, Uganda

Before COVID-19, the concept of "mental health" was unknown among young transport workers. All participants admitted to not having an understanding or even being aware of the term 'mental health'. During the nation-wide lockdown instituted to contain the spread of COVID-19, many young workers, being confined to their homes and watching programmes on mental health on television or social media, began to better understand some of the mental health issues they have been battling with. These included stress, anxiety, mood swings, frustration, anger, overthinking, negative thoughts and attitudes, suicidal thoughts, less interest in daily activities, paranoia, destructive behaviour patterns and escapism through alcohol and drug use, loss of appetite, increasing resentment of government and leaders in general, and hopelessness.
"Before the pandemic and lock down, I cannot say that mental health is something I was aware of. To me, whenever my mood was low, I thought it was because of the challenges I was going through and over all that was life and I would eventually be okay. And also because I was able to freely operate my daily activities without restrictions, I never had time to dwell on them on my mental health."

- Taxi driver, man, young worker, Uganda


## United States

"I think operators may be taking it upon themselves to use their sick time if they need to break if they need a moment, because, you know, even if they're not sick, but a mental health day may be in order at times."

- Regan Weal, bus operator, woman, United States
"I definitely think that the stress level that we are go through is definitely higher
- Raquel Rangel, transit operator, woman, United States
"We've lost family, people have lost family members to this and had to come back to work with no time to grieve."
- Timothy Koppas, subway signal maintainer, man, young worker, United States


## 1a. Impact on family

## Colombia

Due to the worsening or suspension of employment contracts, participants reported much concern about the worsening of their economic situation. Workers who experienced prolonged periods of furlough or reduction in wages/incentives reported difficulties meeting their financial obligations and supporting their families. This situation was more serious for workers with dependents, especially older adults or with small children:
"(During the last two years) Colombian families have suffered due to the increase in the cost of living, particularly food. The situation is worse in cases where there were salary reductions. At the SNTT, we have identified that many of our affiliates and transport workers in general are having difficulties feeding their families."

- Port worker, man, young worker, Colombia
"I have had the opportunity.... to talk with some workers who started to be hired by the hour and the truth is that it is sad to listen to them, because there are some who have families, wives, children, parents in charge and they say that they do not know what to do, because their salary is not enough. Some earn less than US\$100 a month and food prices in Colombia are too high."
- Union official, man, young worker, Colombia

Economic problems were also identified as a factor in the deterioration of family relationships, especially couple and parent-child relationships. For example, a bus driver in a city where the suspension of employment contracts lasted up to a year, reported that economic pressures and frustration due to the inability to provide economically for his home deteriorated his health, his couple relationship and finally, caused his divorce.
> "Before my contract was terminated, I took care of my home expenses. It is very difficult to reach the situation of not receiving "a peso". I understand my ex-wife, who wanted the divorce, because she had to take care of our obligations alone and that is not easy at all. It is very hard for a home not to have financial stability. She barely earned rent and food, and then it was very difficult to have a good family life."

- Bus driver, man, young worker, Colombia


## Uganda

Fuel prices increased while transport fares remained constant, an important source of mental health issues among young transport workers.
"The stress of it all is makes us more frustrated and irritable, even towards passengers. Also, as men, stress reduces our libido, which unfortunately our wives misunderstand for unfaithfulness and/or rejection which exacerbates mental health issues."

- Taxi driver, man, young worker, Uganda


## 1b. Difficult to talk about mental health issues in the workspace because of the stigma attached to them

## Philippines

COVID-related lockdowns were especially difficult for informal workers, who lack job security and basic employment protections, for example, jeepney drivers and operators in the Philippines.
> "Our transport workers will not admit that they have depression. I don't think they are able to identify it. Sadness and the range of emotions associated with it is not something they communicate openly. Our transport workers take pride in their hard work and ability to provide for their families. When we take that away from them, they feel worthless and usually respond to the situation by lashing out to the people they love. After the display of anger, they're usually apologetic but not because of their emotions. They constantly say sorry to their families for not being able to give enough."

- Hya Bendaña, daughter of a transport worker and sectoral coordinator for Move As One Coalition, young worker, Philippines
"During the pandemic, mental health and stress of jeepney drivers and operators became a cause for concern. They couldn't drive. They had no livelihood... It was really stressful. These were stories that our members told us. Although they did not know that it was already mental stress. They did not have an awareness of mental health issues. They were always saddled with problems. Of course, when we are confronted with problems, we get stressed. But they did not realise it was already a mental health issue."
- Angelica "Angie" Mata, union official, woman, Philippines


## Spain

"There may have been people who had a drinking problem, but (perhaps because "mental" remains a taboo) it went unnoticed."

- Bus driver, man, Spain.


## United States

"For most of us, even as the older generation, you know, mental health wasn't as looked into, especially for men, you know, we're always told that, you know, you got to be strong, don't worry about that, just, you know, bottle up your feelings, push past it."

- Jesse Argueta, subway tower operator, man, union official, young worker, United States
"[Bus] operators that are in the class, that is discussed. It's about the stigma, trying to get away from that stigma."
- John Pospishek, bus operator, man, union official, United States
"And there is a stigma... I feel like it's better now, though, we have more resources than we used to... when we first get hired and go to orientation... they provide us with resources for us to be able to speak to counsellors, if we need to confidentially... in my field, it's more male. So, for men, in general, it's harder for them to speak. It's more looked down upon than if they were a woman. So there's ads, that say that if they want to, it is available, they won't be looked down upon because of that."
- Wilma Pinales, bus operator, woman, young worker, United States


## 1e. Social isolation contributed to these symptoms

## Canada

A Canadian union mental health advocate reported that during the pandemic, workers lost their resources to decompress, for example, not having the gym, not being able to socialise, the usual places being closed.
"I was thinking about when I was sick and I was away for three weeks and just, you know, being confined in bed or what have you started to really impact my mental health because, like, the routine got broken and I started feeling anxiety about even just returning to work. But once I got in, got back in like, you know, rode the bus to work and then it was okay and then driving and then like the level of comfort comes back... I guess just maintaining a routine having co-workers or partners or somebody to like that I can relate to and talk to and vent. So, nothing really built up."

- Bus driver, woman, young worker, Canada
"I guess it's very personal because some people still don't really want to connect with others in certain ways, like they still don't even want to go to a barbecue or something. Some people are still harbouring quite a bit of fear. And so, for some people, I think connections have probably actually decreased or diminished because they've sort of closed themselves off from other people."
- Bus driver, woman, young worker, Canada


## Uganda

"As youths, we were used to hanging and confiding in each other but during the lock down, we were stuck at home with older people we could not trust with our issues and also around whom we were, not able to freely express ourselves. Being confined at home with them, we suffered a lot of stress, anxiety and sometimes would even fail to eat. It felt like being in prison and it was mentally disturbing."

- Taxi conductor, woman, young worker, Uganda


## 2. WORKING CONDITIONS DURING THE COVID-19 PANDEMIC

Mental health symptoms were caused by or made worse by hazardous and stressful working conditions during the pandemic.

## 2a. Risk of catching the virus at work, a risk highlighted by coworkers that died of COVID-19

## Canada

Workers expressed concerns about being exposed to the virus at work and also while travelling to and from work. Having contact with other workers and passengers, even if they have no symptoms, increases fear of getting infected. For those who need to work because of the lack of paid sick leave, the risk of infection or illness increases.
> "The white jumpsuits, I've seen a lot more of those in the last two years than I have seen in my prior 15 years at work... there's a mental stress there that they're concerned, right?"

- Bus driver, woman, union representative, Canada
"I take a pretty busy bus that serves like a major route. When I get on the bus, the bus is completely empty, but then [I] will go to the Canada line... and that bus feels completely full and then that's when I would feel really claustrophobic and hoping everyone around me is vaccinated and wearing a mask properly and not trying to eat a meal in front of me. So, it's always a relief when I finally get off that bus... I know some of the other bus drivers, they sometimes take their own personal cars to go drive towards their buses. [Their cars] will be for them to pick up and sometimes it lines up well. Other times like because I finished at like 3:45 in the morning, I may not necessarily have a bus to like go to wherever I left my car... So I don't really have that option available to me."
- Bus driver, woman, young worker, Canada
"We did lose one member. More than likely got it at work. They and their partner were both operators. They both got COVID and one of them passed away from COVID."
- Bus driver, woman, union representative, Canada


## Colombia

Participants reported fear of contagion, inside and outside of work. As frontline workers, transportation system employees continued their work uninterrupted, even during lockdowns. There was underreporting of positive cases by workers, due to the employer denial of sick leave, the order to use vacations or take unpaid leave in case of COVID-19 infection, or the loss of salary incentives. Some co-workers came to work with serious suspicions, or even a confirmed diagnosis of COVID-19.
"During the pandemic, if you become disabled, regardless of the illness you have, they deduct the "variable" (a salary incentive for good performance). So many of our colleagues with symptoms would rather go to work sick than lose money. From the Union, we had a dialogue with the company and managed to get them not to take away the incentives for workers with a positive test for COVID-19. But if the test is negative, even if you have symptoms, they remove the variable. This still happens today. So, there are sick colleagues who prefer to go to work and stay quiet, regardless of the risk to others."

- Vivian Acosta, SNTT, National Board of Directors, woman, young worker, Colombia
"[During the quarantines], everyone was in their homes, while we went out to work to guarantee the transportation service. So, we felt special, because we were essential workers, but we also felt much more exposed than most."
- SNTT National Board of Directors, woman, young worker, Colombia


## Philippines

"They are afraid of getting COVID. So, you get stressed. When you go out to drive, you don't know if you will get exposed. But if you don't go out then you will die of hunger. It was really stressful."

- Angelica "Angie" Mata, union official, woman, Philippines


## Spain

While contracting COVID-19 may potentially occur either inside or outside work, drivers tended to target the workplace as the most likely place for contracting COVID:
"The biggest fear source for most transport workers was the possibility to contract COVID because of our exposure to 100s of people every day. At the beginning, nobody was clear if you could catch it by someone's breath, in the money, on the surfaces of the bus... so, in the end, one ended up mistrusting everything and everyone. This causes a feeling of permanent fear and discomfort, plunging us into constant paranoia."

- Bus driver, man, Spain


## United States

"I think the pandemic has put [us]in a more stressful position, seeing how we have to carry a lot of people in the bus, which sometimes feels unsafe because of the distance from us to the passengers."

- Bus operator, man, United States
"It makes people a little bit more on edge, because there's a chance you can die. So, it's a lot more mental stress."
- Jesse Argueta, subway tower operator, man, union official, young worker, United States


## 2.b Risk of catching the virus at work and bringing it home to loved ones

## Canada

"I have avoided visiting like my friend group very much because it's just [worrying]. It would weigh on me really poorly if I got somebody sick. I know that I'm out in the public. I have a lot of exposure potentially to people with Covid... I didn't visit my parents or, say, Dad's birthday was recent. Told them sorry about that. I just [said] l'm busy at work. I don't want to get grandma sick. But no, isolation was a really big thing because, I know with the cell phones and Zoom and Skype, you could call somebody, but it doesn't always feel quite the same."

- Bus driver, woman, young worker, Canada
"The biggest fear, obviously, is fear of getting sick right from a passenger. But, also, I was kind of concerned that you know what, if I get it and I'm asymptomatic and I keep going to work and I make colleagues sick."
- Bus driver, woman, young worker, Canada


## Colombia

Workers reported feeling at high risk of contracting and dying from COVID-19 or expressed fear of infecting their families:
> "As ticket sellers, we work every day with hundreds of users. We have direct contact with them receiving money and recharging the cards. Of course, we are afraid because there is a risk in this situation. That has affected most of us, especially women. In this company, $70 \%$ of the workers of [our company] are women and most of them are single mothers... They are very afraid of infecting their children or their parents with COVID-19. Many colleagues still come with their parents, who are older and at higher risk of complications related to COVID-19."
> - Vivian Acosta, SNTT National Board of Directors, woman, young worker, Colombia
> "What workers experienced the most (during the pandemic) was anxiety. Anxiety, worry and a lot of anguish, not only because of our exposure at work, but because after we finished our workday, when we got home, one of our family members could be contaminated."

- SNTT National Board of Directors, woman, ticket seller, Colombia
"[During the pandemic we feel] a lot of anxiety and stress about the possibility of spreading this virus at home, thinking that our children or parents could get it. There are many workers who still come with their parents, who are already elderly."
- Vivian Acosta, SNTT, National Board of Directors, woman, young worker, Colombia

[^4]- SNTT National Board of Directors, woman, ticket seller, young worker, Colombia


## Spain

Some participants expressed their concerns about the overlapping of work and family domains. Their fear was not limited to contracting COVID-19 but rather to affect other people that they considered "vulnerable":
"Sometimes it was not because of us... even though most of us considered ourselves (middle-aged healthy people) as "immune" to such a flu (as it was initially presented in mass-media), there were some peers having vulnerable people at home, and you cannot isolate these two domains."

- Bus driver, man, young worker, Spain

Some participants modified everyday behaviour to avoid seeing family members, redelegating home care tasks (such as who does the shopping, who takes care of the parents), and even changing their place of residence:
"I had to... improvise because I was living with my parents. When I saw that things were so serious with the elderly, my older brother complained to me because I had a lot of contact with the public. In the end, I moved in with my brother and his wife, although they had children, but that was less bad than risking my parents."

- Bus driver, man, young worker, Spain


## United States

"So emotionally, physically, and you're worried about bringing it home to your family members. I mean, most of us are here in the system for sometimes well up to 16 hours a day. And with that being said, it's more opportunity to bring the virus home to your family."

- Timothy Koppas, subway signal maintainer, man, young worker, United States
"And I think about this, and then knowing that my dad has diabetes, high blood pressure, knowing that I could be bringing this home to my family, it was "Oh, my God", it was it was stressful, you know Having to isolate was stressful, because as human beings we are not meant to be alone".
- Bus operator, woman, young worker, United States


Figure 2. Timothy Koppas

## 2c. Lack of COVID-19 safety equpment and protocols (sucj as masks, distancing, barriers/shields, sanitizer), especially early during the pandemic

## Canada

A Canadian union mental health advocate (MHA) reported that COVID-19 protective measures started very slowly at the beginning, but drivers needed to continue working. He reported that, given the demanding and stressful nature of a bus driver's job, not enough attention, action or protection from the company contributed to drivers' feelings of vulnerability, anger, or that the company was lying.
"Public health rules [mean] masks are mandatory, but they're not. I'm not allowed to say anything to anyone getting on the bus. I'm not allowed to refuse service if someone gets on the bus coughing all over the place and isn't wearing a mask."

- Bus driver, woman, union representative, Canada
'There has been a concern about the delay [in] how long we have to wait... When we want certain controls put into place like an administrative control that communicates properly to... stay away from the workstation where the operator is, it takes numerous conversations. And many months of going back and forth. Numerous battles... All of this is creating the psychosocial hazard. So, yes, there has been much accomplished. Yes, there are many controls into place. Face masks, hand sanitising, disinfecting equipment, announcements for patrons. But once again, a lot of this depends on administration or application and having to have this done in a timely manner. So, there is a human element to this and our timing has to be right. It's one thing to have everything in place as far as what's on the shelf. But application is one of the most important things that demonstrates minimising risk."
- Union representative, man, Canada
"The company has provided some PPE. It's been a little bit limited. They provided a number of masks and they provided very tiny alcohol wipes that you were supposed to clean the steering wheel and stuff where that was a bit of a joke, but they have provided several masks."
- Bus driver, woman, young worker, Canada


## Colombia

Participants reported that, at the beginning of the pandemic, biosafety protocols implemented by transport companies were minimal. Organisational responses to the pandemic were not timely, which may have caused a high number of infections that were not recognised as occupational cases of COVID-19.
"When the pandemic started, we had to ask companies to implement biosafety protocols. This was before the government decrees came out. So, we said: 'Hey, in the activity we carry out we have direct contact with people's objects, such as money and cards. So, we think that we should be guaranteed at least some gloves and face masks'."

- Ticket seller, woman, young worker, Colombia
"At the beginning, not all biosafety measures were implemented and thus the outbreaks (of COVID-19) began. But since the companies later increased biosafety, all contagions were handled as if they happened outside the company."
- Ticket seller, woman, young worker, Colombia
"The biosafety measures were only implemented when the audits began. Before we were evaluated, the company brought us all the cleaning supplies... When they arrived at my workplace, I told them: "I'm not going to be a liar, you just brought all that and if they ask me, l'll tell the truth."
- Ticket seller, woman, young worker, Colombia


## Spain

Fear of being infected and bringing the virus home because workers were not equipped with appropriate personal protective equipment, even though they were given masks and face shields.
"At first, nothing was known, but over time it became clear that we had to put screens on the buses to protect us. Do you know how long it took some companies to source and install poor quality displays? Well, a lot. Meanwhile, we were still on tenterhooks, and not even with the possibility of doing a test to find out if we were infected or not, and that daily uncertainty was terrible. I was scared to go home every day not knowing if I had COVID."

- Bus driver, man, young worker, Spain


## United States

"We have crowded buses again. I mean, we don't have the same safety precautions we had when they realised how serious it was... as many people as there were prepandemic can be on the bus now."

- Regan Weal, bus operator, woman, United States


## 2d. Intimidation or assaults by passengers

## Canada

"Passengers will lean around it to talk to you and they'll just put their face over the barrier, around the barrier. And someone who's tall, someone who has longer arms they can reach over that particular barrier design, they could still punch you. They could still do it. It's going to be awkward, but it's possible. So it wasn't a good design because you still have that transmission, that air that's passing through... So, I mean last year someone threw a coffee at me and they can just throw it around the barrier, over [the] barrier, right, so. It really did not change things and the statistics reflect that."

- Bus driver, woman, young worker, Canada
"We do see like a lot of people angry with the bus drivers... You know, yell at us and stuff even more, right? It's that you know it's so petty. It makes the driver feel really like crap. It really doesn't make us from feel so good, right? And the crime rate has gone up in the downtown Vancouver area, so a lot of businesses actually... boarded up their business because [of] the break ins and there's a lot of homeless... on the streets and they're not getting the help that they need. You know committing a lot of crimes and there's been a lot of stabbings and on innocent people, right? Which have been unprovoked, so that's a scary thing."
- Bus driver, man, young worker, Canada
"I don't say anything anymore because of the recent news and attention. I do remember one of my co-workers. I remember he relayed a story to me about somebody who was coughing quite vigorously on this bus with no mask on and like you know, the customers were all kind of visibly alarmed. So, they kind of sat back. However, he told me at some point he did stop the bus. Got out of his seat and asked the guy very politely, "Can you put on a mask?" He told me that the customer really didn't take it well. So, the bus driver went back to the seat, resumed driving. And I think that customer got up and tried to swing a punch. But luckily my friend saw it in time, like caught the guy's arm. Called security, so it turned out all right and no one got hurt, but I do remember that story."
- Bus driver, woman, young worker, Canada


## Colombia

The strain associated with work and non-work COVID-19-related changes deteriorated the relationship between workers and users of urban transportation systems. Participants reported that discourteous treatment and even aggression from passengers had increased over the last two years. Bus drivers and train ticket sellers associate this situation with passengers' frustration with mobility limitations (few bus/subway lines and fewer open stations). In this sense, the workers played the role of "scapegoats" in the face of passenger dissatisfaction with the operation of the transportation systems.
"The stress of the pandemic has generated more aggressiveness. In the case of the Metrolínea company, some routes stopped working. This complicates user movements. It is difficult, because people pay the same ticket, but have access to fewer routes... So, people's treatment of the box office staff is harsh, because for them the responsible persons are those who are in charge... and with whom they are relating. They vent."

- Ticket seller, woman, young worker, Colombia


## Uganda

"The way our customers treat us in the market place emotionally tortures us. They bark and yell at us while others sexually harass us. Working [in] such environments is distressing and demoralising most of the time, to a level that I hate coming to work yet I used to love my job."

- Officer of taxi association, woman, young worker, Uganda


## United States

"As operators, I feel we need a lot of support mentally. Just... "Hey, hang in there"... because every day I go to work, not knowing which passenger is going to try to spit on me, or which passengers gonna... call me all sorts of names. l've been in different kinds of jobs. l've worked at retail, restaurants, real estate, mechanic, and l've never had to go to work thinking who's gonna hate me? Or, "oh, God, I hope I make it through the day"... If you work at a restaurant, you're not thinking who's gonna come and spit at you, or who's going to come and punch you, you know. And, as a driver, l've always used my shield, because, at least if they tried to hit me, I want to see it coming. l've had that happen. I've had two guys, one at seven in the morning, one at one o'clock in the morning [doing lewd acts] and I'm like, who goes to work thinking that they're gonna go through that?"

- Raquel Rangel, bus operator, woman, United States

Intimidation or assaults by passengers arose sometimes, since bus operators were asking passengers to wear masks during the pandemic:
"If you say something you get in trouble. If you don't say something, you get in trouble, because then somebody will contact 311 and say, "Hey, this driver isn't saying anything. She's letting people on without a mask." And so either way, you get in trouble... That's an extra stress that we have to go through with the public and with management."

- Raquel Rangel, bus operator, woman, United States
"Just last week, they poured something on him because he asked them to put on their masks, and they didn't want to put on their masks. So, they poured something on him. And you know that that's always a safety risk."
- Regan Weal, bus operator, woman, United States
"Since the pandemic, things have gotten a lot worse for us. It's like we're a target. And, you know, be it subways or the buses, whatever the situation, it seems like we're more of a target. And, you know, we're damned if we're saying anything, we're damned if we don't say anything."
- Regan Weal, bus operator, woman, United States


Figure 3. Raquel Rangel


Figure 4. Regan Weal


Figure 5. Wilma Pinales
"You have to be aware of all your surroundings now, which is more stressful because now you have to be worried about the passengers if they're wearing their mask or not... about you yourself getting sick about, you know, going to work is a risk every day".

- Wilma Pinales, bus operator, woman, young worker, United States
"Yeah, that policing of the mask is definitely something that has raised the stress level. And not only that, but also the people who have been getting on the bus lately have all this backed up energy and stress too. It's not only us who are stressed, it's also the passengers who are stressed."
- Transit operator, man, United States


# 2.e Layoffs, contract termination, reduced paid work hours, wage reductions, denial of sicl leave benefits, mandatory vacations, technology to substitute for human labour, shortterm or part-time hiring, leading to financial strain (inability to meet financial obligations, financial dependency) all of which can worsen the mental health of workers 

## Canada

"The ridership has gone down. Quite a lot. You know there was a scare that [company] was going to lay off a bunch of workers, and I was very close to being one of those that were laid off, but luckily there... weren't any layoffs."

## - Bus driver, man, young worker, Canada


#### Abstract

"At the very start of the pandemic, when everyone told to stay home, nobody's taking the bus so they cancelled a lot of buses and they almost laid off a lot of drivers. There was, I think, 1,500 drivers who actually received layoff notices and that's stressful, right, you know and it's done by seniority. So, a lot of the drivers affected would have been young. And you know, you just started your career. You just chose this, and now you're being laid off because of something you can't control. Thankfully, they were able to avoid doing those layoffs, so those people did keep their jobs, but that's extremely stressful."


## - Bus driver, woman, young worker, Canada

> "So, with [agency] we get six sick days in a year which, especially now with Covid, if they want you to self-isolate all these things right so. I had used up all my sick days so there were times actually I was "hey do I go to work 'cause I can't afford to lose pay, you got a family to support". So, it was pretty stressful and, so, I had taken some days off work 'cause I tested positive for Covid and had used up all that and so some of those days were unpaid. Which was pretty crappy. But we could definitely have better sick days. But then you have to go through like a third party so you have to fill out a form. You know with the insurance company and then you have to submit it and you have to go through all these different steps and it takes about 14 days for the insurance company to adjudicate your claim. So, it can be pretty frustrating, like sometimes people don't even get paid like they have to wait like a month for their payment. So, you know people will go to work 'cause they don't want to lose their pay. Well, they're going to work sick."
> - Bus driver, man, young worker, Canada

## Colombia

During the COVID-19 pandemic, economic and social crises arose that directly affected transportation workers and companies. In cities, the most noticeable change was the decrease in travel demands, due to anti-COVID-19 measures, such as quarantines and increased remote work. Organisational responses to the low demand for transport focused on controlling losses through the reduction of labour costs. Since 2020, most fixed-term contracts have not been renewed and many workers with indefinite-term contracts have been fired or furloughed:
"Since there were few people working (in person), then the frequencies of the buses were lengthened and of course, when the frequencies were lengthened they no longer needed as many drivers or open stations. So, the drivers who were finishing their contracts did not receive new ones."

- Maintenance worker, man, young worker, Colombia
"Isolation and capacity controls put a lot of economic pressure on transport companies. But since the Medellín Metro provides an essential public service, it had to continue operating, albeit with just a few stations. Then, for the outsourced workers came the suspended contracts, or contracts that were not renewed."
- Ticket seller, woman, Colombia

Due to the economic situation generated by the COVID-19 pandemic, the national government authorised emergency measures to prevent business closures, including the mandatory advancement of vacations, the suspension and termination of contracts, and hourly hiring. These measures, perceived by workers as a serious deterioration in their employment conditions, have been maintained to date despite the lifting of most health restrictions.
> "[The decrees issued by the Colombian government] allow companies to advance workers' vacations, suspend employment contracts, authorise layoffs, and implement hourly work, which is something we are still suffering from, despite the fact that the health emergency has lowered."

- Port worker, man, young worker, Colombia
"For all of us who had pending vacations, there were no medical disabilities. The moment someone got COVID-19 they were sent on vacation. For many, the holidays were brought forward until the year 2024."
- Ticket seller, woman, young worker, Colombia

Faced with the imminent possibility of being laid off, many outsourced workers (since before the pandemic) were forced to change their full-time contracts for hourly contracts. Hourly contracts allow the adaptation of transport operations to reduced passenger demand. However, unionised workers perceive this type of contract as an employment deterioration. According to the participants, hourly contracts eliminate fringe benefits and allow companies to pay wages below the legal limit. In addition, in some transport companies, hourly contracts require the worker's availability during the entire working day, regardless of the fact that they only work for a few hours.

> "I have had to talk to some of these workers (laid off during the pandemic and rehired [on] the hourly contracts) and the truth is that it is sad to listen to them, because many have families and earn very, very little, something like 70 USD each month. That in Colombia is not enough for anything."

- Bus driver, union official, man, young worker, Colombia
"Hiring by the hour is not a decent employment opportunity. You have to be available 24 hours a day at home, waiting for them to call you and you only get paid for the few hours you work."
- Bus driver, union official, man, young worker, Colombia

Just as workers with fixed-term contracts experienced a reduction in wages related to part-time hiring, workers hired indefinitely faced wage reductions due to the elimination of incentives and overtime, which could represent up to $30 \%$ of their wage:
"Before the pandemic, the volume of work was high and, normally, one worked overtime or covered shifts on Sundays to increase the salary... All extra payments were eliminated during the pandemic and some drivers had to negotiate reductions in their fixed salary".

- Bus driver, union official, man, young worker, Colombia

Companies also denied or withdrew benefits and labour rights guaranteed by Colombian law or that had been offered by employers before the pandemic, such as sick leave and shared transportation services for workers (especially on night shifts).
"Disability management (during the pandemic) was a complete mess. Occupational hazards administrators, health insurance companies and the company did not agree, because none wanted to pay for the disability. To avoid problems, many workers with symptoms of COVID-19 did not report them."

- Ticket seller, woman, young worker, Colombia
"The night transport that the company provided us was withdrawn....it became more difficult for us to transport ourselves because there was no transport at that time." ---- Ticket seller, woman, young worker, Colombia

Participants reported that transport companies used economic coercion measures to force workers to accept poorer conditions of employment or even end their contracts.
"The company called several drivers and said: "Well, I'll offer you X amount of money. Do you want it? Ok, then sign the termination of your contract." There are people who had been in the company for 15 years with an indefinite contract... More than one felt pressured by the economic situation, or because they had debts, or for any other reason and then, they ended up signing."

- Bus driver, man, young worker, Colombia

To reduce the risk of contagion, some companies increased the use of machines to offer services previously performed by employees, especially the sale and reloading of tickets. Ticket sellers saw this as a threat to their jobs. Participants reported that many contracts terminated during the quarantines were not recovered with the reactivation of transport, due to the substitution of human labour by ticket selling machines:
"Technology should in fact be an opportunity to re-educate people, to develop their skills, to improve their jobs. Advances in technology are inevitable, but replacement of the worker is not inevitable. The ticket selling machine needs maintenance and someone to collect the money. But the workforce is shrinking. And the few that enter no longer have good conditions. They are outsourced and have fixed-term contracts, or they pay them a pittance. So, it seems that we are at the service of technology and not the other way around, as it should be."

- Ticket seller, woman, Colombia


## Spain

This was not a core issue for our participants, given that they were considered an "essential" workforce. Their organisations, positions and payrolls remained mainly unaffected because of the pandemic. Our participants were not aware of layoffs in this sector. However, policymaking was excessively generic, and (in practical settings) did not involve any additional resources, efforts or measures aimed at protecting essential workforces:
"It is interesting that this is a labour force that is essential, and that has not stopped working. However, what they (public bodies) did so far to face the consequences that the pandemic has been really generic, and not accurate to cover all cases. Same as healthcare personnel, we couldn't stay home, and we had a very different set of impacts in comparison with other workers. I'm [saying] that some groups (like us) became more affected than others, requiring, let's say, a special consideration."

- Bus driver, man, Spain


## Uganda

Fuel prices increased while transport fares remained constant, an important source of mental health issues among young transport workers.
"Fuel prices even before the pandemic have always been fluctuating, mostly on the increase, yet the transport fares remain more less the same, which affects our daily income and expenditure. Anything that affects our meagre incomes affects us so much. We start to over think and fail to sleep, yet we have to work early hours."

- Taxi driver, man, young worker, Uganda


## United States

There appeared to less of a problem with layoffs in the United States because of the funding that was made available to transit agencies.
"I asked one of our union executive members [about] the potential for layoffs. I was one of the lowest seniority operators; traditionally, in the past, the way it's worked is last hired, first fired when it came to layoffs... They basically said that layoffs weren't on the table because there was budget outlay for us already... they're not doing layoffs because they want the buses out right now."

- Bus operator, man, United States


# 2f. Increases in workload/work hours, work intensification, unrealistic goals, excessive monitoring, fewer work breaks, pressure for production, in part to cover the shifts of workers who were out sick - without additional compensation, added to workers' mental health burden 

## Colombia

Changes in the organisation of work in transportation systems sometimes led to increases in workload. Work intensification was mainly due to economic "reactivation", lifting of some biosafety restrictions and the resulting increase in demand for transportation, without the expected renewal of contracts suspended or terminated during the pandemic. Transportation systems continue to operate with a reduced workforce. Therefore, workers report that they have fewer breaks, more overtime, or must assume additional functions to those performed before the pandemic. There are also difficulties in filling the positions of workers infected with COVID-19:

"When a ticket office worker was infected, many times there was no one to replace [them]. Sometimes, the supervisors had to cover people because they were disabled for several days."<br>- Ticket seller, woman, young worker, Colombia<br>"Due to staffing shortfalls, we've decreased breaks by about 15 minutes. Colleagues from the night shift are leaving much later than normal."<br>- Ticket seller, union official, woman, young worker, Colombia

> "Before the pandemic, we (ticket sellers) only recharged cards. [The company] told us that they had many losses due to the decrease in transportation demands. So, they asked us to assume the new position of "PAC Advisor" for the same salary. Now, in addition to recharging, we take care of entering user data into the system and printing travel cards, balance transfers and giving information to users."
> - Ticket seller, union official, woman, young worker, Colombia

Production pressure was reported especially by urban bus drivers. Many urban collective transport cooperatives operate using a rental system, in which the driver pays the owner of the vehicle a percentage of the daily tickets sold. During the first months of economic reactivation, when all biosafety restrictions had not yet been lifted, buses had a limited capacity, which the drivers continually exceeded due to pressure from the owners. Violation of capacity restrictions caused fines for drivers and a greater contagion risk for themselves and passengers:

> "In this job you have to produce or else you're useless... Before the pandemic, a driver might have $300-350$ passengers in one day. But during the public health restrictions, only $120-150 . .$. Less than half. At first, the owner of the bus did not say anything to me... But if the buses do not produce money, they produce expenses... One day, the owner began, as they say, to "harass" me, to ask me for more production. It was very difficult because we could only fill the buses to $50 \%$ of their capacity. Many of my colleagues began to violate the biosafety rule and carry standing passengers... They did it out of fear that the owner would be upset by the low production and fire them. Several had to pay traffic fines for violating capacity restrictions."

- Bus driver, man, young worker, Colombia


## Spain

A large concern of transport workers was the systematic worsening of their working conditions, given that policymaking did not involve any additional resources, efforts or measures aimed at protecting essential workforces:
> "We did not stop working but worked even more to cover the shifts that many of our colleagues with COVID left free. I'm not saying we were given less, but we weren't given more either. At least we could be treated better."
> - Bus driver, man, young worker, Spain

Apart from having to drive for longer, and sometimes more frequently to cover the sick leave of a coworker, drivers emphasised that the COVID pandemic has given them a series of additional tasks, and that these tasks put them at risk. Specifically, to comply with safety protocols, they had to start cleaning their vehicles before and after each trip without having adequate experience, materials or instructions:
"They gave us some chemicals and a sprinkler and made us clean the bus. We had to do it ourselves because there was no staff for so many buses, even less several times a day. On top of that it was a lot of extra work. It wasn't something I wanted to do either, because a vehicle like this is used by so many people."

- Bus driver, man, young worker, Spain

Other work-related tasks also increased among professional drivers, even though many of them were not in their typical task repertory, suggesting work intensification:
"We had to do a lot of logistics. In fact, there were colleagues who did not go home but stayed more time waiting for something to happen, because they knew it would. Every day there was a request to us to answer phone calls, to change schedules, to seek available companions... all in addition to driving."

- Bus driver, man, Spain


## Uganda

Heavy traffic and working very long hours were major work-related drivers of mental health issues among young transport workers.

## United States

"So, it's a combination of issues with COVID An employee shortage, and of course, longer hours... we are contracted to 90 minutes over our time if we don't have a relief driver. So, that can have adverse effect on employees who are current and employees that are new and it can dissuade... prospective employees, operators. It's just the nature of the beast. Not even just transit really, it's across the board."

- Jamar Dunbar, bus operator, man, young worker, United States

[^5]"Why [do] people want hazard pay? Because we were working every day under these conditions. And that was scary for us, because we didn't get any time off."

- Regan Weal, bus operator, woman, United States
"People are being forced now to work longer hours, especially... where you have to make a schedule."
- Timothy Koppas, subway signal maintainer, man, young worker, United States


## 2g. Service reductions (fewer buses), forced shift schedule changes, changes of work location, leading to more crowding, passenger frustration, more stress for bus operators

## Colombia

Less demand for transport services during periods of mandatory isolation brought changes in work shifts and in the location of workers. Generally, work shifts and the location are assigned according to the distance between work and home, or according to the workers' extra-work responsibilities, such as education or child care. Therefore, shift and location changes were perceived negatively by workers.
"They are doing job transfers. They change shifts or send us away from home. We can't do anything - they don't give us further explanations."

- Ticket seller, woman, young worker, Colombia


## United States

"[The agency is] cutting lines, reducing lines, eliminating service, and the brunt of the consequences are burdened upon the shoulders of the operators, because they are the face of the agency, the face of public transportation and anytime that a line gets cut or service gets reduced, it's the operator that suffers the consequences. Upper management does not see that. Operators suffer a lack of appreciation, and a lack of respect."

- Roger Marenco, transit operator, local union president, man, United States


Figure 6. Roger Marenco

## 2h. Bullying, intimidation, social exclusion and lack of respect or compassion from management

## Colombia

Increases in workplace intimidation of unionised workers during the pandemic is a central concern. Bullying of unionised people is motivated by:
a) all Colombian unionised workers have indefinite-term contracts. Therefore, they are perceived by employers as an economic burden in times of economic crisis and as obstacles to the implementation of the flexible contracting policies recently approved by the Colombian government.
"All unionised workers have an indefinite-term contract and it's like it's no use for the companies to have us. So, they have begun to put disciplinary processes on us for insignificant problems. In the face of the slightest problem, they summon us to discharge... After we created the union in the company, they did not use indefinite contracts again. The contracts are not for more than one year for fear that if the workers last in the company for more than a year, they will unionise."

- Ticket seller, woman, young worker, Colombia
b) Intimidation occurs as retaliation for the protest of unionised workers against the deterioration of working conditions. This problem existed before COVID-19, but bullying has also occurred in response to union demands, such as compliance with biosafety measures.
"In this company there are only eight workers affiliated with the union. For us, recruiting workers has been a tough battle because everything that has to do with the union is "bad". All the company's problems are the fault of union activity. The supervisors tell us: 'If the union didn't exist, the companies wouldn't be so harsh with the workers!'"
- Ticket seller, woman, young worker, Colombia
"When we requested that the biosafety measures [were] complied with, the sanctions were increased... For example, with the cameras, they began to penalise us for crossing the yellow lines that they put in the stations so that the passengers kept their distance."
- Vivian Acosta, SNTT National Board of Directors, ticket seller, woman, young worker, Colombia

Ticket sellers in urban transport systems were the most affected by workplace bullying. Bullying actions were connected, involving job design, supervision, work incentives and promotion opportunities. The "bullying chain" began before the pandemic, with the establishment of unrealistic goals for ticket sales. In particular, excessively narrow margins of error in the counting of cash collected by ticket sellers and economic sanctions for non-compliance with those margins were imposed by transport companies. Ticket sellers in two cities reported that this happened in retaliation for the unionisation of workers.
> "Many colleagues complain about the creation of the union... They tell me: 'Why did you get into that? What they are doing is damaging the company. Look how things are now, they lowered the margin of imbalance to 50 pesos, when before we were fine, before (the union) they didn't monitor us using surveillance cameras either.'"
> - Ticket seller, woman, young worker, Colombia


Figure 7. Rosa Elena Salinas
"In some stations, we have to serve more than 900 people in an eight-hour shift. Can you imagine us, with so many distractions, without being able to lose 50 pesos? Because then, you fail the daily supervision and lose a percentage of the variable (a salary incentive)... they suspend you for two or three days, or they take away a Sunday off."

- Rosa Elena Salinas, SNTT National Board of Directors, ticket seller, Colombia

Unrealistic goals and financial penalties went along with increased monitoring of individual performance. During the pandemic, security cameras were installed to monitor ticket sellers and the frequency of cash checks by supervisors increased. Ticket sellers report constant fear of being fired due to difficulty meeting unrealistic targets.
> "All the workers, but especially the unionised ones, perceive that when they want to fire us, all they have to do is check the cameras and automatically many of us fall, because with the new margins we have all had imbalances... The fear is constant - fear of being fired, of being called to a performance audit, because that is what the company has generated in the worker ... In other words, you can't do anything because you're watched by those cameras that are inside the stations and they automatically call you for releases and possibly you'll be fired. Every day you live with that fear."
> - Vivian Acosta, SNTT National Board of Directors, ticket seller, young worker, Colombia
> "The cameras were installed, supposedly, to be able to verify when there was some inconsistency in the accounts with a user, but in reality they were used to monitor whether we drank water, or ate during the shift... which is 8 hours ... locked up, almost always with high temperatures."
> - Ticket seller, woman, young worker, Colombia

Participants also reported that unionised workers have fewer opportunities for promotion and are socially excluded by supervisors and co-workers. The participants even suggest that interacting socially with unionised workers can cause exclusion from the selection and promotion processes of transport companies. These problems became more noticeable during the pandemic, due to staff turnover and the implementation of "flexible" labour policies.
"Union members don't have the opportunity to get promoted at work. It does not matter if we meet all the requirements of the company. They prefer to bring in personnel from outside rather than give us the opportunity to move up."

- Administrative worker, woman, young worker, Colombia
"To control union activity, the company has made a move to secretly promote people who are not unionised."
- SNTT National Board of Directors, ticket seller, man, young worker, Colombia
"In Colombia, people think that unions destroy the companies, that the unionist is a bad worker, that they want everything for free, that the union member is only good for causing problems. The unionist is not allowed to ascend."
- Union official, ticket seller, woman, young worker, Colombia
"When a new worker in the company is doing paperwork to start work, if he's a friend of mine, I tell him, don't let them see him talking to me because that's where your income came from."
- Bus driver, man, young worker, Colombia


## United States

Referring to a shooting of co-workers by a transit operator in a nearby city in 2021:
"...we don't want what happened down in [nearby city]... to happen here... And in some situations it's sort of getting to that point, because of the mistreatment, the mismanagement that operators are suffering at the hands of their superiors, at the hands of the [agency], in terms of cutting lines, reducing lines, eliminating service, you know, and the brunt of the consequences are burdened upon the shoulders of the operators, because they are the face of the agency... Upper management does not see that. And I'm afraid that somebody might snap, one of these days, and do what happened in [nearby city], just because of the lack of appreciation, the lack of respect, the amount of just everything that we're not receiving in terms of hazard pay, recognition and salary."

- Roger Marenco, transit operator, local union president, man, United States

Or, being questioned when needing to use sick time:
"Even though they gave you the hours to call in sick. I used them for myself or because of my kids' school closures and I received a notice from my employer that I needed to discuss my attendance."

- Raquel Rangel, bus operator, woman, United States
"It's always the employer's view that the operator or the employee is always just trying to get one over on them, like they're fake. They're just taking advantage of the situation. That's not the case. It's just like the employer treats people like they're just abusing the situation."
- John Pospishek, bus operator, union official, man, United States


## 3. WORKING CONDITIONS BEFORE COVID-19

Some participants pointed out that sources of work stress (such as passenger verbal abuse or assaults or risk of traffic accidents or management's lack of concern) existed well before the COVID-19 pandemic:

## United States

"It's mentally stressful because you have to be worried about everything. You have to be worried not only of passengers in your bus, but about the cars driving the streets, the bicycles in the streets."

- Wilma Pinales, bus operator, woman, young worker, United States
"Just keep going, that's the feeling that there's no compassion or no caring for the mental health of the operator. If you interviewed a lot of operators that have been doing the job for a long time, I would say that that would be the way they would describe it - that the agency doesn't care. They just want you out there, continuing." - John Pospishek, bus operator, union official, man, United States


## 3a. Many emphasised the worsening of conditions due to COVID-19

In Spain, drivers recognised that work intensification, in addition to risks such as contagion and social isolation, represented a clear source of stress, possibly affecting their work performance. Some of them acknowledged that they felt more prone to crashes as a consequence of this situation:

## Spain

"We carry an average of 20 people, living all day in a very narrow space, and that (added to the problems of the road) already predisposes us to be stressed. However, this situation aggravated it more, causing us to live in permanent stress, hypervigilant, restless, and we all know it affects driving quality and passenger safety. What seems strange to me is that we didn't have more accidents."

- Bus driver, man, Spain


## 4. DIFFERENCES BETWEEN GROUPS

## 4a1. Some participants felt that the impact of these working conditions on mental health was greater on women workers

## Canada

"I mean in terms of receiving like abuse on the job... in terms of being a woman on the job. In my own experience, I haven't encountered a lot of that, but I know other women on the job who say that they have. They get called names or they get told like this is a man's job and whatever."

- Bus driver, woman, young worker, Canada
"Single family providers or parent like families where families with your children have been like very severely impacted, especially when everything was closed down. Because then you've got the problem of trying to deal with children at the same time as you're trying to run your life. If you can actually do that. So that is putting a lot of strain, specially finding spaces for childcare for workers who are sort of needing to be on the front lines. But then you know, being like slammed with affect will now you've got a lot of childcare spaces that are closed or not accessible to them because they're being prioritised to healthcare workers, which I totally understand. But then, you still need to have the services run for other for other professions that are on the front lines. And so that's been a source of a lot of stress for family, young families, or whether or not the worker themselves as young. So that's been a significant issue, especially If they were single parent families."
- Union representative, woman, Canada


## Colombia

The transportation systems of the main Colombian cities employ a majority of women in ticket sales positions. According to the participants, most ticket sellers are mothers and heads of households. This situation represents a risk factor for financial stress problems, especially in situations of high job insecurity, such as fixed-term contracts. Women also report difficulties in balancing work and family life:
"More than $70 \%$ of the workers at [our company] are women and most women in the company are single mothers with many financial obligations."

- Vivian Acosta, SNTT, National Board of Directors, woman, young worker, Colombia
"Working mothers experience greater difficulties [in mental health], because we all have a world at home and another world at work, and some carry the cares of the house while they are at work."
- Rosa Elena Salinas, SNTT National Board of Directors, ticket seller, woman, Colombia


## Uganda

While all groups of workers continue to experience mental health issues, the focus groups revealed that workers in the informal sector, women, especially single mothers and youth have been affected the most. However, men have also received mental health "shocks", who may transfer the shocks on to women by abandoning their family responsibilities.
"Men, frustrated from loss of jobs, abandon their responsibilities. Yet women, faced with the same predicaments, have found a way of throwing themselves in different livelihood activities - including prostitution - to take care of the family. Even now, street vendors, the majority of whom are women, have been chased away from the city. How do you think they are feeling now?"

- Taxi conductor, woman, young worker, Uganda


## United States

"[Talking to an unruly passenger] We're having a bit of a back and forth... He gets off the bus but I really knew that had I been a woman, he would have come back."

- Bus operator, man, young worker, United States


## 4a2. While others felt that there was a similar impact for men and women

## Spain

"Uniformly, and regardless of gender, ... I believe that we were all equally affected by the mental health situation."

- Bus driver, man, Spain


## United States

"[Referring to threats or assaults] I think it's about the same. I don't I don't think it matters, whether it's men or women"

- Regan Weal, bus operator, woman, United States


## 4b1. Some participants felt that the impact of these working conditions was greater for younger than for older workers

## Canada

A Canadian union mental health advocate reported that younger workers were more heavily impacted by loss of opportunities to socialise, leading to feelings of anger and hopelessness.
> "I guess some of the older drivers probably chose to retire early when the pandemic started. They thought like, you know, "why am I here? Why am I dealing with this now so close to retirement? Just take it early, right?" For the younger drivers, ... not sure because like ... you're probably closer to the start of your career ... It's a career like it's different from some jobs. Like this is one of the few places where you get a pension still, right. So, it's for the most part, I think a lot of people going into it with a longterm idea, right? Like this [is] somewhere I'm going to retire to take advantage of my pension. Right. So yeah, if you're young, you're going to be closer to the start of that and you're going to try to push through it right?"

## - Bus driver, woman, young worker, Canada

## Colombia

Young workers reported greater fear and anxiety than their older co-workers due to the possibility of infecting their older loved ones, since age is a risk factor for developing COVID-19 complications and, in general, young workers perceive that COVID-19 represents a greater risk for their families than for themselves:
"Young people feel affected by the emotional burden generated by the probability of infecting our parents ... If I get sick, it is most likely that my body can resist the virus. The problem is that we are a risk of infection for our family. So, I know that many coworkers have isolated themselves from their parents. They spent a long time without seeing them in person."

- Union official, ticket seller, woman, young worker, Colombia

Young transport workers reported higher levels of job insecurity, since most have fixed-term contracts. In Colombia, flexible contracting policies in the transport industry are relatively recent and because the lack of education and professional experience in a labour market with few opportunities, this forces many young Colombians to work in adverse employment conditions.
"A few years ago, transport companies began to hire fixed-term workers. These people have been the most vulnerable during the pandemic and most of them are young. And they not only suffered from the suspension or termination of their contracts during 2019 and 2020. Since before the pandemic, they suffer a lot because every three months their contract ends, and they do not know if they are going to [be able to] renew their contract or not."

- SNTT National Board ofDirectors, ticket seller, woman, young worker, Colombia
"[After contract terminations related to the pandemic], only older workers keep our jobs... The new girls have had a hard time making a career because the company does not renew the contracts of many of them. [After completion of the contractual period of three monthsl, most leave the company. Sometimes they hire workers who are 18 or 19 years old, but they are the first to leave due to contract termination. Generally, workers 30 and up last much loner."
- Rosa Elena Salinas, SNTT National Board of Directors, woman, ticket seller, Colombia


## United States

"I'm younger, so I haven't been in the job that long. You have the older operators that have been in the job for 10 plus years. So, they have more experience, they know how to deal probably with difficult passengers better than we do that are just starting off."

- Wilma Pinales, bus operator, woman, young worker, United States
"I remember when I was fresh out of training, I was nervous because I didn't want to do anything wrong because I didn't want to get in trouble and get fired."
- Bus operator, man, young worker, United States


## 4b2. While others felt that there was a similar impact for older and younger workers

## Spain

Younger drivers had to "step up" their efforts in certain circumstances. However, our participants understood this as something positive, strengthened by a collaborative and mutually supportive attitude:

> "In this sector, people have the right to choose their shifts (more flexibility, at least) as they get job tenure. When COVID hit, this didn't change anything, because older (and tenured) drivers started choosing less congested routes or avoiding working during peak hours. Of course, we all agreed because they were more sensitive to the virus, and the younger ones ended up covering these routes."

- Bus driver, man, Spain


## United States

"You had the veterans that retire because of COVID, and you have people... that came in during a time where ... we face all these issues and of course it's not attracting new employees ... And employees that do come. They end up resigning because it's not like ... anybody wants to drive a bus anymore, across the board."

- Jamar Dunbar, bus operator, man, young worker, United States
"Our younger workers were having the same kind of issues as older workers ... I would say the younger folks may have handled it better, or may have saved face more, as opposed to maybe the older folks who dealt with it, because you know, younger folks try to always have this strong facade, like nothing affects them. But deep down, they were probably worried about it, because you can see a lot of people were taking extra precautions at the time."
- Regan Weal, bus operator, woman, United States
"I think it's been similar across the board."
- Timothy Koppas, subway signal maintainer, man, young worker, United States


## 4c. Difference by race or ethnicity

To some extent, greater impacts of the pandemic on mental health among Asian, East Indian and Black workers was reported in Canada, although not among foreign born workers in Spain. Some effects of ethnic group (tribe) membership were described in Uganda.

## Canada

A Canadian union mental health advocate reported that the fewer opportunities to socialise, and greater social isolation during the pandemic was more difficult for workers of colour (Asian, East Indian) and LGBT+ workers. The MHA reported that more people from these groups approached the MHA. Racially motivated attacks against Asian and Black transport workers also increased during the pandemic. The MHA suggested that this may have been due to increases in homelessness, mental ill health and addiction in the city during the pandemic.
"In terms of receiving abuse on the job. Yeah, there's definitely been instances of racially motivated verbal assaults on drivers. Unfortunately, that's not actually that uncommon."

## - Bus driver, woman, young worker, Canada

"I would say maybe different demographics like different races right? Maybe the Chinese or Asian people are being, you know, I think being called names now because of this [is where] Covid kind of came from, you know ... They say came from China, right? So, I think they've kind of had a difficult time, being blamed for it."

- Bus driver, man, young worker, Canada


## Spain

None of the focus group participants, which included some foreign-born workers, reported having felt especially vulnerable because of their ethnicity or immigration status.

## Uganda

The transport industry is diverse in terms of age, gender, tribe and especially affiliation to different political parties and ideologies. Politics play a role in daily transport operations. Diversity can also be a source of discrimination and exclusion.
"For me, even before the pandemic, my mental health issues have always been from the constant subtle discrimination and passive aggression [from] my peers and workmates because of my tribe ... They are always making comments insinuating that I am a spy among them. It is more mentally disturbing because I am not accepted by the group of people I should belong to."

- Boda-boda [motorcycle] association member, woman, young worker, Uganda


## 5. EMPLOYER MENTAL HEALTH SERVICES AND PROGRAMMES

Workers described various mental health services available through their employer:

## 5a. Health insurance coverage for mental health (negotiated by employers and unions) tends to be available in highincome countries - however, participants were not always satisfied with the process

## Canada

"[Need] more support for mental health stuff, like 10 visits per year isn't very much. I get unlimited massages, but I can only talk about my brain health 10 times a year?"

- Bus driver, union representative, woman, Canada


## United States

"That whole process took like, a month or so. And then they want to be re-evaluated by a psychologist, which I was "okay", but then they brought back the paperwork a couple of weeks later, saying that I hadn't crossed out something. And I was just like, "Oh, that's too much ... l've had enough of this." So, I just decided not to go through with the paperwork anymore, and just go back to work."

- Bus driver, man, young worker, United States
"With our insurance, you get three free sessions and then after that, of course, they charge you per session. But ... as far as long-term mental, that is something that, of course, you would, if you were to start a regimen with that again, you would have to come out of pocket."
- Bus driver, man, young worker, United States
"So I remind people... now, our health insurance is nationwide. So, I got a lot of coworkers who live in [other states]. I said, look, you know, you can find doctors out there as well."
- Jesse Argueta, subway tower operator, union official, man, young worker, United States
"If you have to see a psychologist, or if you're in some type of therapy, it's covered by your insurance. If you want to, if you regularly see someone, because you just want to talk to someone. Yeah, it is covered."
- Regan Weal, bus operator, woman, United States


## 5b. Participants did not always trust the employer-sponsored Employee Assistance Programs (EAPs)

## Canada

"If you ever mention drugs or alcohol, not even a problem with drugs or alcohol to anyone through the EAP system, you will be sent to a drug or to an addictions doctor... that is a whole other level of stress for members, [that] any [drug] use equals addiction."

- Bus driver, union representative, woman, Canada


## United States

"Throughout the years, and this is built up over a lot of years,... there is no trust within our company or agency with the workers.

- John Pospishek, bus operator, union official, man, United States
"EAP is publicised, of course. They have it branded on the doors and it's encouraged through email and letterheads and memos for us. But a lot of the operators I know, and I've seen over the years, they don't really know that it's there, [or] they know it's there but they don't know it's there. Even when there's issues personally going on..."
- Bus operator, man, young worker, United States


## 5c. Others reported little or no mental health support from the employer

## Canada

"Members seeking support for mental health and being afraid of losing their jobs, that's huge. Especially if ... your doctors issued medications and you're worried about [that] and there is no clear list ... of what medications will prevent you from having a class D driving license in Canada. There are some clear lists in the United States. So, and when there's not a clear list, that leaves it open to interpretation, which is always a little scary."

- Bus driver, union representative, woman, Canada
"Getting members to take the time off to deal with their mental health stuff that maybe need to be dealt with away from work. We have difficulty getting sick pay. Sometimes you could wait for 6-8 weeks before you get any money out of the employer. So, that's a fear too. Like if you can't live for that long without a pay cheque and you got [to] book off to take care of your mental health."
- Bus driver, union representative, woman, Canada


## Spain

There was a lack of institutional policies and actions aimed at helping transport workers deal with the mental health impact of the pandemic. There were no specific government policies aimed at helping professional drivers cope with the crisis. Instead, the government allowed companies to increase working hours to help solve emerging transportation needs:
"The only government intervention in the transport sector was to allow companies to make us work more (overtime) hours. We did not know of any programme to take care of us, nor received information from the ministry. In this sense, we were not made visible, and nothing was done for us. It was a bit outrageous."

## - Bus driver, man, young worker, Spain

Workers felt that transport organisations were not sensitive to their needs, and were not able to respond to them with adequate actions:
"There was little sensitivity with us. The number of deaths increased as if they were talking about peanuts and we were talking about families and people ... Many people died, and we suffered, but it seems that the companies did not know what to do... Barely, the director and the human resources manager sent us information by mail and by phone... that's what we had."

- Bus driver, man, Spain


## Uganda

There are no known mental health support services to young workers at their work places.

## United States

"So, after this tragedy, no-one could get any counselling for mental health. There was a skill lack. There was, because of all with COVID, there's a big strain on the mental health aspect just state-wide or in our area."

- John Pospishek, bus operator, union official, man, United States


## 6. UNION MENTAL HEALTH SERVICES AND PROGRAMMES

Workers described services and programmes specifically related to mental health available through their union:

## 6a. Union-sponsored Union Assistance Programmes (UAPs), peer counselling or mental health training programmes

## United States

The importance of informal discussions with peers, such as union representatives
"I've explained to people, you know, sometimes just talking with us as the reps when they see us, they get their emotions out. I've had a couple [of] people yell at me, curse at me about things. And, you know, I just sat there and I listened. And then, I said, "Okay, well, you know, is there anything I can do to help?" And, they'll ask me, I'll answer their question, I'll go talk to other people, and they'll pull me to the side after and say, "Look, you know, I just want to apologise. I don't mean to give you my frustration. You know, it's just a lot going on, I appreciate you [are] here and I appreciate you listening!'"

- Jesse Argueta, subway tower operator, union official, man, young worker, United States

And, other resources available through the union:
"There are some other resources at play that you can utilise. Don't forget you have health insurance, you have these free mental health places, your mental health assistance lines that popped up, the UAP, the EAP."

- Jesse Argueta, subway tower operator, union official, man, young worker, United States
"I was assaulted in February of 2020. They reached out to me before I even had a chance to reach out to them, so they were aware of it. I think the system is working well in terms of them knowing what's happening with the operators. They reached out and provided me with lots of resources. And, you know, going forward, I'm still receiving therapy and all sorts of resources are made available to me to help me deal with the anxiety that came from that assault."


## - Transit operator, man, United States

"If I go into that Union Assistance Programme, or, going to see a doctor that's covered by health insurance, so you don't worry about the cost of that."

- Wilma Pinales, bus operator, woman, young worker, United States

See also case studies of union mental health programs in Canada, Colombia, Spain and the US.


Figure 8. Subway signal maintenance workers, members of TWU Local 100

## 6b. Union member education on mental health, stress management

## Spain

Although no official actions were carried out, these social media channels seemed to be helpful for drivers to organise their routes and fix last-minute issues, and also to share personal thoughts and concerns:
> "They [the unions] were helpful [in getting us] to self-organise, but also by providing us with permanent news about the progress of the situation [the pandemic], and trying to talk to our companies, ... addressing our problems with rotations, stress and lack of protective materials."
> - Bus driver, man, young worker, Spain

"As a union, the commissions [CCOO] were always there for what we were commenting on, which the government and some of our companies stopped doing: collaborating at all times."

- Bus driver, man, Spain


## Uganda

The ATGWU has organised training to create awareness on issues of mental health. Each association or shop (company) sends a representative to the training, who is then expected to pass on the training to group members. The union has a flexible training schedule and limits sessions to one hour to allow for members to join and also not lose a day's income. The union funds and facilitates election exercises at shop and association levels to ensure that young workers have structures and systems for support.
"Through the union, I have come to know, defend and demand for my rights as a worker in a work place."

- Taxi conductor, woman, young worker, Uganda


## United States

One local union officer described a programme provided for the union's members conducted by a local mental health centre:
"The way she explains it is, you have a backpack on and all these little traumas are building up within you. And so you're carrying this and how do you deal with that? How do you lighten your backpack? And she does this presentation and senior operators that have been here for years after the class, some people, they're sharing what goes on ... There's plenty of people that have just broke down in this thing. And then senior operators have come to me afterwards that have been here for 20 years and say this was the best class. It was just something that was so needed, and they couldn't believe that we haven't had this before."

- John Pospishek, bus operator, union official, man, United States


## 6c. Negotiations over work schedules, working from home, wages, contracts

Other workers described other services and programmes, including collective bargaining, and other forms of support, which could indirectly promote members' mental health:

## Colombia

Between 2019-2021, SNTT union actions were focused on collective bargaining and legal support to stop the massive layoffs and worsening employment conditions of transport workers. Due to the decrease in transportation demands, the contracts of more than 1,100 bus drivers from the main cities of Colombia were suspended. Currently, most of these contracts have been reactivated due to SNTT legal actions. The participants reported that SNTT legal support has been crucial to recover the suspended contracts and improve working conditions:
"The actions of transport companies against employment contracts were the main concern of the SNTT during the pandemic. We had the case of Cartagena, for example, where more than 30 bus drivers were fired, arguing that due to the pandemic, the demand for transportation and the income of the companies have dropped. Through the actions of the legal team, it was possible to reactivate the employment of all these workers. It was an important agreement. On the other hand, [another company] wanted to arbitrarily reduce the salary of its workers. The SNTT achieved in a social dialogue with that company that the salary reduction was not $40 \%$, but $20 \%$, and only while mobility restrictions due to the pandemic lasted. When people began to need transportation again, workers' wages were raised. The union had a lot of weight in this situation because the company did want to use the pandemic as an excuse to fire workers, especially unionised workers."

- SNTT National Board of Directors, ticket seller, woman, young worker, Colombia


## Spain

Most participants were not covered by any government or company-based programme, campaign or initiative aimed at protecting or improving their mental health, as a response to the pandemic. The only actions they took part in were their own initiatives, most of the time strengthened by their union, for example, asking for a mental health hotline at his company:
"We spent some time talking with the company's health and human resources areas, but we always got "no" for an answer. Commissions [CCOO] helped us ... they even talked to them, apart from encouraging us to ask for something if we needed it. [In] the end, it didn't come, but it was a great support."

- Bus driver, man, young worker, Spain


## 6d. Encouragement of COVID-19 vaccinations

## Canada

Vaccine mandate is set out by the employer, and unions encouraged their members to be vaccinated. There are disciplinary actions from the employers for workers who refuse to be vaccinated.

## United States

Unions encouraged their members to be vaccinated, while negotiating over the process of employer or government vaccine requirements (see case study \#3).

## 6e. Advocating for personal protective equipment or engineering controls for members

## Canada


#### Abstract

"Engineering controls are recommended by the union. [These] were barriers for the transit professionals who are driving equipment predominantly for the buses. We also recommended MERV 13 filters for viral transmission particulates. So, there was some good stuff that came out of this, no doubt about [it], there was some good cooperation with the Joint Health and Safety Committees and having to work with being progressive with this. We've learned a lot, so there's been engineering controls... as l've said, with the barriers, there's been disinfecting, administrative control. At one point in time, there was rear door boarding which I thought was the best control available, 'cause you separated the young professional workers from the patrons during this pandemic. And if there's something that you would like to actually get out of this and make a recommendation, I would strongly recommend that the buses of the future should have rear door boarding. And then that you should have a barrier that is between the operator and the patrons, and that if [they] need... access and go through that barrier with the door, that [they] can... That would be the best way to eliminate assault, violence and viral transmission, were really good recommendations."


- Union representative, man, Canada


## Colombia

Collective agreements were signed focused on companies providing basic biosafety elements (masks, gloves, alcohol, and hand washing facilities), not only for workers in urban transport systems, but also for freight, port, and logistics workers, who were also classified as frontline workers at high risk of COVID-19 contagion. These collective agreements are recognised by the SNTT members as a crucial advance in the control of occupational infections of COVID-19, because during the first months of the pandemic transport companies were not proactive in complying with the biosafety protocols established by the government, nor did they contemplate special protection measures for workers with comorbidities (having more than one disease at a time).
> "The SNTT mobilised socially and legally to force transport companies to provide basic biosafety elements to workers. We also included in the dialogue with companies the protection of workers with health conditions that increase the risk of being aggravated by COVID-19. [The transportation companies] did not want to extend the discussion beyond economic issues, until they had so many infections that work disabilities began to hinder transport operation."

- Vivian Acosta, SNTT, National Board of Directors, young worker, Colombia


## 6f. Legal, financial and other support

## Colombia

The SNTT provided financial assistance to unionised and non-unionised workers who were fired or suspended. These economic aids were delivered in cash, during the first two months of unemployment, and basic packages with food and essential household items were also provided to workers who were unemployed for several months.
"The union has helped me a lot. They helped me by giving me markets for seven months, until, thanks to the dialogues with the company, they reactivated the contracts of the suspended workers. Thanks to this I was able to overcome very difficult financial times. If it weren't for the SNTT we would still be unemployed."

- Bus driver, man, young worker, Colombia


## Philippines

"We have no programmes, such as counselling, that specifically cater to mental health issues. But we contribute to alleviating anxiety of jeepney drivers and operators by assisting them in their issues. We in NCTU anticipate, for example, what will be the difficulties that jeepney cooperatives will face. We can already forecast those problems that they will confront.... through interventions responding to local problems, NCTU is able to help them in resolving these issues. Thus, we are able to mitigate stress because they know assistance is available."

- Jaime Aguilar, union official, man, Philippines


## Uganda

The ATGWU advocates for workers in legal matters, loan services, and arbitration, especially in cases of wrongful termination of employment. The union is considered an instrument of protection in the transportation industry.
"When corrupt traffic police stop you and you show them your union membership card, they do not harass you like they would one who doesn't belong to the union."

- Taxi driver, man, young worker, Uganda


## 6g. Other services that union members would like to see include:

## Canada

Resources from unions are limited and sometimes insufficient for the kind of problems that existed before the pandemic and that escalated during the pandemic.
"The one thing I can say though, is that whenever we were at the start also preface this by saying that by the time of violence to me it's ... not a tiny thing, is usually a much bigger thing than it would be ... because there's only two provincial health and safety specialists for the entire province and we have a [large number of] members in [this province]. "
-Union representative, woman, Canada

## Uganda

Participants suggested that the union needs to find a way of engaging with informal sector employers to ensure some job security and protection for informal workers. Also, the union should organise more regular, extensive and inclusive trainings on mental health.
"Calling one member to represent 1000 people in a workshop, becomes hard for that one person to effectively pass on the training."

- Taxi driver, man, young worker, Uganda

The union needs to keep in close contact with its members, especially now post-lockdown.
"I think the union should have reached out to us especially during the lock down. Imagine opening up your messages and read or hear, "Hello this is so and so, your chairman and I would like to say that we stand with you, please take heart..." It's something that would have given someone a push through those days."

- Union trainer, IT staff, man, young worker, Uganda


## United States

The importance of peer counselling or other union programmes:

> "Just last week, another operator voiced concern that for mental health, having someone to talk to or even having, like a focus group of operators to set that standard for mental health and navigating through that process. Because it's a process and you have the stewards and then you have the board ... but it's issues that someone would have to be relatable to because you've got people who don't want to disclose or open up because they feel like they don't have anybody to relate to."

- Jamar Dunbar, bus operator, man, young worker, United States
"Some people don't feel comfortable with that, especially maybe the younger generation or even the old, not everybody likes to ask for help by speaking to somebody directly, they're worried about who may know, or how somebody may interpret it, but, if it's on a website, people can go on their own, it's not tracked to see who it is, they can call, they can have somebody else call them, whatever it is, stuff like that may be good. Or even just, we do a lot of email blasts about stuff, maybe an email blast reminding people about talking to somebody if they need to."
- Jessee Argueta, subway tower operator, union official, man, young worker, United States


## 7. YOUNG WORKER INITIATIVES

## 7a. Informal support groups, including through social media

## Spain

Due to overtime work, and the need for social support, participants did not notice much drug or alcohol use:
"I think that most of us had our thoughts at work or supporting with colleagues and families, and that is always favourable."

- Bus driver, man, Spain

Actions benefitting participants consisted mainly in the creation of support groups based on social networks, in which doubts/emergencies were collectively dealt with.
"Sometimes, we shared personal experiences or concerns, and our own colleagues
advised us to find solutions, or just supported us to feel better."

- Bus driver, man, young worker, Spain


## Uganda

Young workers' friends, peers and workmates have become confidants and a safe place to discuss challenges and mental health issues. Young workers also help each other by sharing job opportunities and have organised revolving funds.

"As a young driver, I have met young drivers in the union who are my support system and I am able to navigate many issues."<br>- Taxi driver, man, young worker, Uganda<br>"I have learnt to talk to myself about scenarios. So, I advise myself into and out of situations."<br>- Taxi conductor, woman, young worker, Uganda

## 7b. Through their union

## Colombia

The SNTT supported self-organised efforts by workers to protect their mental health, especially social media support groups to prevent isolation and provide emotional support to workers infected with COVID-19. These support groups have also been used to spread information about union activities and health protection. An outstanding example of support for workers' initiatives to improve mental health is the programme Surviving Men and Women: Brave Men and Women, which focuses on the discussion of emotional experiences of workers infected with COVID-19 through speech and expressive writing (see case study). This programme began as an informal activity, but has been well received by workers and transport companies. Currently, the programme is funded by the SNTT:
"In the company where I work, a colleague who is part of the union is leading a project where people who were infected with COVID-19 share their experiences to, precisely, socialise the personal situations they faced, which we often try to hide or carry alone. And it is good to see that there are many people who share our situation, that we had very similar experiences ... Recently, the company gave the go-ahead for the project, which is also being supported [financially] by the SNTT. Now, the idea is to take it to all sectors of the transportation system where there are recovered workers."

- SNTT National Board of Directors, ticket seller, woman, young worker, Colombia


## Uganda

The ATGWU organises an annual youth camp as a safe space for youth to engage and discuss issues that inform the activities of the union for each new year.

## United States

A transport worker described the importance of recognition for essential work:
"What was great about the video was that all bus operators pretty much united ... and felt like they weren't being heard. And they felt the same as us that we're out here. We're here for the people and we're the ones moving the frontline workers."

- Regan Weal, bus operator, woman, United States, referring to a video from TWU Local 100, New York City: "We Are Front Line Workers - and We Matter!", https://wwww.youtube.com/watch?v=3uw7zByvX9Y)

The national Transport Workers Union (TWU) helped to organise the Future Leaders Organising Committee, a young union member organisation within the TWU: http://floc.twu.org/ (see case study)

## B. OTHER THEMES MENTIONED IN FOCUS GROUPS AND INTERVIEWS IN ONLY ONE OR TWO COUNTRIES

## 1. Fear of political violence

## Colombia

An economic and social crisis aggravated by the pandemic led to a massive social movement, which lasted for more than four months, with blockades of urban and inter-municipal highways, damage to urban transport infrastructure and excessive police force in the control of protests. In Bogota, the capital city, damage to urban public transport infrastructure was more than USD \$5 million. Urban public transport workers were in crossfire between police and protesters. Some workers were physically assaulted. Additionally, participants reported a lack of concern for their personal safety from transportation companies, which forced them to stay at their workplaces during the riots on several occasions.
"The workers had anxious thoughts like: "Well, I get to work, in the afternoon there are going to be protests, I'm going to stay again in the middle of the riots, I don't know how I'm going to get back to my house when there's no transportation, I don't know until what hours I'm going to work today, if they're going to shorten the operating hours of the transportation system". So, it was a constant day-to-day uncertainty of not knowing what was going to happen - maybe someone was going to be beaten or threatened today."

- SNTT Board of Directors, ticket seller, woman, young worker, Colombia)
"In the protests, there was violence against the bus stations. In fact, there are still vandalised stations, some were not reopened, because people got in and completely destroyed them. When the police used tear gas, evacuating us was not a priority for the company. There were comrades who had to stay at the stations and put up with tear gas, or stones being thrown at them. We were very scared and worried that something would happen to us."
- Ticket seller, woman, young worker, Colombia


## 2. Stigma of COVID-19

## Colombia

Participants reported an increase in tensions between workers during the COVID-19 pandemic. Difficulties in complying with distancing measures in narrow spaces such as buses and stations, and fear of physical contact with apparently infected workers were associated with feelings of isolation and stigma. These feelings caused some infected workers to hide their symptoms or lie about the reason for their work disabilities.
> "At first, it was practically a taboo to have any symptoms related to the virus, even if you were not sure if you were infected. Suddenly, they saw you with a stuffy nose or some respiratory symptom and everyone moved away. You already thought about it even to sneeze ... to cough, to clear your throat and the people who came out of isolation preferred to say that they had had something else, some kind of family problem or that they were on vacation, or on leave, but they did not want to accept that they were infected by fear of rejection."
> - Ticket seller, union official, woman, young worker, Colombia

"When the drivers arrived, [transport terminal workers] said: "how am I going to take care of it? How am I going to receive the documentation (without running the risk of infecting myself)? I better put on my gloves and mask first". Obviously, they (the drivers) realised and felt uncomfortable."

- Administrative worker, woman, young worker, Colombia


## 3. Gender Equity

## Uganda

Gender equity is a core programme of the ATGWU. Union activities are centred on encouraging women to join the workforce and also negotiating for work spaces for women.

## 4. Impact on drug and alcohol use

## Spain

Participants did not notice much drug or alcohol use during the pandemic:
"We did not lose the job, but we had more and there was no time for that. It was "drive and rest". We also had a commitment to the people, and we were very strict with it."

- Bus driver, man, young worker, Spain


## 5. Impact of crime and addiction in the community

"There's a very high level of opioid related deaths that are happening in [city], and there's a significant [number] of incidents that happen with security teams in the transit hubs. So, you've got people who are coming in from the cold who are trying to just stay warm and they're staying in, say, transit shelters. And then security personnel having to deal with these individuals. So, in that context, I find that there's been a lot of those interactions. There's a lot more stress that's been placed on these workers, because now they're not only doing the everyday job of trying to police what's going on, just for, like the regular transit drivers. But now ... the pandemic is raising the stress level, it's raising ... homelessness, [numbers] of addictions and these are all places where people will interact with the transit system, especially if they're trying to get downtown."

- Union representative, woman, Canada


## 6. Differences between countries in environmental conditions

In Canada, the winter time lasts about six months of the year. People look forward to summer and fall to get vacation days. An interviewee suggested this as a reason for the variation of violence episodes during the year during COVID-19 pandemic.
"We all know that based on statistics, mental health has been on the rise in general and assaults can occur whether it's verbal or physical, and that's something that our workers are subjected to more added stress ... Some increase in the summer and also, I believe, in the fall time, but I don't have specific numbers ... During the hot humid months and having to be subjected to lockdowns or restrictions by the government. This creates more frustration."

- Union representative, man, Canada


## 7. Resistance by some union members to vaccine requirements

## Canada

"We had co-workers that didn't get the vaccination and [agency] is one of the employers that put a vaccine mandate. If you wanted to continue working right. So those people are off work right now. And it's been pretty sad. Like you know, 'cause these are people I know... I kind of felt like the union didn't do much for them, because right now they're not being paid."

- Bus driver, man, young worker, Canada
"People may have choice over that as well as whether they take it [the vaccine] or not. That in itself has now caused stress to young transit professionals. The stigma of not having to take a vaccine or how it may interfere with their belief system. So overall, if you were looking at the psychological factor, the hazard. That has been created ... we need to look at the format or the platform that has been given to us by those who have had to administer the message and the direction."
- Union representative, man, Canada


## United States

"The members feel like they should not be forced to take a vaccine."

- Timothy Koppas, subway signal maintainer, man, young worker, United States
"The local union has not yet been able to reach an agreement with the city on the vaccine mandate. We are looking for a 120-day extension. We do not want anyone to lose their job over this."
- Roger Marenco, transit operator, local union president, man, United States


## C. CONCLUSIONS

In our pilot study, consisting of focus groups and interviews of urban public transport workers in six countries, transport worker union members and officials eloquently described the major impacts of the COVID-19 pandemic on the mental health of young transport workers, including increases in anxiety, stress, fear, depression, irritable mood, sadness, anger, sleep disruption and fatigue. Prompt action is needed to address these impacts and to protect the mental health of transport workers.

## Causes of mental health problems

Participants also powerfully described various causes of these mental health impacts, including:

- Social isolation because of quarantine or social distancing
- Risk of catching the virus at work, a risk highlighted by co-workers that died of COVID-19, including fear of bringing the virus home to loved ones
- Lack of COVID-19 safety equipment and protocols (such as masks, distancing, barriers/shields, sanitiser), especially early during the pandemic
- Intimidation or assaults by passengers, including due to mask requirements
- Layoffs, contract termination, reduced paid work hours, wage reductions, denial of sick leave, and short-term or part-time hiring, all leading to financial strain
- Increases in workload/work hours, work intensification, unrealistic goals, excessive monitoring, fewer work breaks, pressure for production
- Service reductions (fewer buses), forced shift schedule changes, changes of work location or routes, leading to more crowding, passenger frustration, more stress for bus operators
- Bullying, intimidation, social exclusion, and lack of respect or compassion from management

Some participants pointed out that sources of work stress (such as passenger verbal abuse, assaults, risk of traffic accidents or management's lack of concern) certainly existed before the COVID-19 pandemic. However, many participants emphasised the worsening of working conditions due to COVID-19.

## Differences between groups

Employment conditions and government responses to the pandemic varied across the six participating countries, both of which can impact the mental health of young transport workers. "Informal" workers in public transport appeared to face greater risks to their mental health. Efforts to bring informal workers into formal employment in low- and middle-income countries (or prevent the loss of workers from the formal economy) has been one important strategy for transport worker unions in these countries.

Local attitudes towards and awareness of mental health also varied. In some countries, workers reported not being aware of mental health issues.

Local circumstances, such as political conflicts, can also impact working conditions and mental health. For example, an economic and social crisis in Colombia aggravated by the pandemic led to a large social movement, which lasted for more than four months, with blockades of urban and inter-municipal highways, violence against urban transport infrastructure and excessive police force in the control of protests. Urban public transport workers were in the crossfire between police and protesters.

While some of our focus group and interview participants reported similar impacts on younger and older workers, others suggested greater impacts on younger transport workers. This may be due to various factors, including greater job insecurity, having less experience in dealing with the hazards of the job (including threats from passengers), or wanting to keep the job by not making mistakes, fear of infecting older relatives with SARS-VoV-2 (corona virus), or not being able to retire (as some older workers did to avoid the pandemic),

On the other hand, young transport workers have also taken the initiative to create youth organisations, with the assistance of their unions, including an annual ATGWU youth camp in Uganda, and the TWU's Future Leaders Organising Committee in the USA. A young taxi conductor in Uganda told us "Through the union, I have come to know, defend and demand for my rights as a worker in a workplace." Similarly, the union can be a source of social support for young workers.

Past research has focused mostly on bus drivers, with some studies of train drivers. And, bus and train operators in our focus groups and interviews reported stressful working conditions and mental health impacts both before and during the pandemic. However, in our study, workers in other occupations reported similar experiences: for example, customer-facing workers often had to continue to work in person during the pandemic, leading to greater exposure to the virus and facing threats from aggravated passengers.

A number of workers in our interviews and focus groups pointed to greater mental health impacts of work on women transport workers. Factors mentioned by our participants included women working in a non-traditional job (such as driving), or the stresses of being single parents. Finally, a few participants from our focus groups/interviews in Canada mentioned greater difficulties during the pandemic for Asian, East Indian, Black and LGBT+ workers.

## Programmes and policies to improve young transport worker mental health

Focus group and interview participants reported a wide variety of programmes and policies, both from employers and their unions, designed to improve the mental health of transport workers. In high income countries, health insurance negotiated as an employee benefit between unions and employers often covers at least some mental health services. However, limited data suggested a lack of trust by union members in employer-based Employee Assistance (counselling or referral) Programmes (EAPs), and little or no mental health support from the employer in other cases.

A variety of union-based programmes were described with pride by the focus group and interview participants, with more details also presented in our case studies. Programmes involved:

- Peer counselling, either informal, or more formal, such as mental health advocates (MHAs) in Canada, who are union members assisting workers to find pathways for professional assistance
- Union Assistance Programmes (UAPs), such as in TWU Local 100, New York, NY, USA
- Affiliations with local counselling organisations, such as in ATU Local 265, San Jose, CA, USA
- Surviving Men and Women: Brave Men and Women, a support group focusing on the emotional experiences of workers infected with COVID-19 through SNTT in Colombia.
- Advocating for personal protective equipment for members, especially during the early period of the COVID-19 pandemic
- Negotiations with employers over work schedules, working from home, wages and contracts
- Union member education, on workers' rights, mental health, or stress management
- Legal, financial and other support

Union members suggested the need for more peer counselling programmes, overcoming stigma, more training sessions on mental health, greater job security, and greater assistance to young workers who are sick or injured.

## Young transport worker initiatives

Young transport workers have also taken the initiative to organise informal support groups, either on their own, or with the assistance of their unions. Innovative programmes now supported by transport worker unions include:

- Informal support groups and worker education through Comisiones Obreras (CCOO) in Spain (case study \#9).
- An annual youth camp as a safe space for youth to engage and discuss issues that inform the activities of the ATGWU in Uganda (case study \#10).
- The "Future Leaders Organising Committee", a young union member organization within the Transport Workers Union (TWU) in the United States (case study \#11).


## Further research

Given the relatively small sample, and the not necessarily representative sample, in this pilot study, further research is needed to confirm and better understand these findings. Further evaluation research is especially needed on the impact of programmes and policies designed to protect employees from the mental health effects of the stressors of public transport work, and the effects of crises, such as the COVID-19 pandemic. Given that COVID-19 may remain with us in the future even if at lower levels of infection (an "endemic" scenario), research focused on long-term monitoring of operational changes in the transport industry and the effect of these changes on workers' health is also needed.

## Further union action

The role of transport worker unions in protecting young worker mental health is multi-layered and diverse, including:

- Providing support and treatment for workers struggling with mental health issues
- Educating young workers on the important role played by labor unions in their workplaces and in society
- Opening opportunities for younger workers to enter leadership positions in their unions
- Negotiating contracts that provide for a less stressful organisation of work and protection of workers from health and safety hazards
- Influencing the economies and politics of their countries, through coalition-building. advocacy, and political action, especially by bringing workers into, and keeping them in, the formal economy

We hope that this report will provide concrete ideas and inspiration for further union action worldwide.

## 15. COMPLETE CASE STUDIES

## A. NEGOTIATIONS WITH EMPLOYERS

## Case study 1:

## CAMPAIGNS FOR HAZARD PAY DURING THE COVID-19 PANDEMIC (USA)

Transport workers are "essential" workers. However, they may feel that the sacrifices and risks that come with the job, especially during the COVID-19 pandemic, are largely unacknowledged. The hazards of the job along with the lack of recognition can take a psychological toll. 68 In response, a number of transport worker unions in the US have demanded "hazard pay" as a concrete form of recognition of the hazards they have faced and have suffered from - recognition that may positively contribute to their mental health.

## San Francisco Bay Area, CA, Hazard Pay Coalition (ATU Locals 265 and 192, TWU Local 250A)

In the summer of 2021, San Francisco Bay Area ATU members "began to meet first informally and then formally through a union vote to develop the Hazard Pay Coalition." ${ }^{68}$ Connie McFarland told the Board of AC Transit (Oakland, CA) that: "We really would like to have some form of appreciation that's more than lip service." ${ }^{41}$ Demanding hazard pay "united ATU Local 192 with Local 265, representing workers at the Santa Clara Valley Transportation Authority (VTA), and TWU Local 250A, which represents San Francisco transit workers". ${ }^{41}$
"Hazard pay was absolutely the right demand," said bus operator Anne Marie Ruiz, a Local 265 safety steward. "There's a lot of anger out of our rank and file. We're moving the county while management's working from home and not giving us the things that we need to keep ourselves safe."41
McFarland agreed, saying that every member shared the experience "where somebody in management treated us poorly and put their health and their safety so far above us, and then dismissed our concerns as if they were irrelevant." ${ }^{41}$

Union leaders and members agreed that a hazard pay campaign in 2021 would serve as a "dress rehearsal" to organise for their contract campaigns in 2022."41 The three local unions have also come together with rider and community groups and are continuing to prioritise worker, union, passenger and community concerns through the People's Transit Alliance ${ }^{42}$ and Voices for Public Transportation. ${ }^{43}$

See video of John Courtney, ATU Local 265 president, and other members of the Hazard Pay Coalition, rallying in San Jose, CA, October 23, 2021: https://www.youtube.com/watch?v=Dws4etsXWkY\&t=64s

In response to this pressure, "In San Jose, VTA management proposed a \$3,500 "appreciation bonus" as part of a contract proposal that also included a 10 percent raise over three years.
Negotiations over the new contract were not slated to begin for several months. Local 265 members ratified the proposal by a 3 to 1 vote on January $5 . " 41$

Efforts continue by the other two local unions to obtain "hazard pay" and by all three to bargain new contracts in 2022.


Figure 17. Rally to Demand Hazard Pay for Frontline Transit Workers in front of Oakland, CA City Hall, December 4, 2021, attended by the 3 unions in the Hazard Pay Coalition -- ATU Locals 265 and 192, and TWU Local 250A.


Figure 18. TWU Local 250A members at a Hazard Pay Coalition rally in from of San Francisco city hall, February 16,2022 . The local union was also demanding that the city hire more transport workers.

## TWU Local 100 campaign, New York City, NY

At a July 7, 2021 parade in New York City, TWU Local 100 president Tony Utano President Utano emphasised that transport workers deserve hazard pay. 136 He has said that transport workers "need to be recognised for what we do". 137 The demand will be an important part of contract negotiations for the contract that expires 16 May 2023.


Figure 19. TWU Local 100 members marched with other essential workers and were cheered for their pandemic service by thousands of New Yorkers who lined the "Canyon of Heroes" from Battery Park up Broadway to City Hall for the Hometown Heroes Parade, 7 July 2021.

## Case study 2:

## BARGAINING OVER VACCINE POLICIES (USA)

COVID-19 vaccination requirements, from Federal or state governments or employers, have been a source of disagreement and stress among many workers in the US, including transport workers. A US bus operator participating in one of our focus groups said: "The members feel like they should not be forced to take a vaccine." The Amalgamated Transport Union (ATU) and the Transport Workers Union (TWU) have responded to the COVID-19 pandemic in a variety of ways, including addressing vaccine mandates.

## ATU Response

The ATU encourages vaccination, while opposing firing workers who are not vaccinated. ${ }^{40,138-}$ ${ }_{140}$ John Costa, ATU International President, writes that the ATU "believes that the vaccination of transit workers is vital but warns that mandates may be counterproductive, especially at locations that don't have comprehensive programmes to encourage vaccination....we are sceptical that transit systems facing driver and mechanic shortages will implement their mandates uniformly and are concerned that abruptly pulling unvaccinated employees from service will exacerbate the widespread driver fatigue problems and hours of service violations which are disturbingly common in our industry." ${ }^{138} \mathrm{He}$ argues that employers can improve conditions and reduce COVID-19 risk through more and improved PPE, better ventilation, decreased overcrowding, and easier COVID-19 testing.

The ATU has been attempting to combat vaccine misinformation, such as through sections of national and local websites that describe each vaccine in everyday language and address specific concerns members may have. ${ }^{39,40,139}$ In addition, the ATU has been placing pressure on transit agencies to make vaccination easier for members financially, and to create fair policies on vaccinerelated employment separation and vaccination timelines. ${ }^{141}$

ATU locals have also been bargaining over the terms of vaccine mandates. ${ }^{39,40}$ For example, ATU Local 1576, Everett, WA, negotiated an agreement with Community Transit (CT) on 5 November 2021 that includes: ${ }^{40}$

- Any ATU-represented employees granted an exemption based on a medical disability or sincerely held religious belief but cannot be reasonably accommodated will be subject to involuntary separation from employment that will not be regarded as "misconduct".
- If the first dose of a two-dose regimen was begun prior to 31 December 2021, the member can avoid separation, as long as they get the second dose three weeks after the first. During this time, the member would be on paid leave.
- Members will receive both retroactive pay for weekly testing, as well as additional COVID leave, and vaccine-related side effect leave.
- For those who do leave by 31 December 2021, they would receive $100 \%$ of their "paid time off" (PTO) and sick leave balances when they leave.
- If a member who was previously separated does get vaccinated, or if the employer's policy changes, members have the chance to be allowed back (through a recall list), with their seniority, starting on 1 July 2022 and continuing to 31 December 2024.

According to ATU Local 1576 Vice President Dani Julien, as of March 11, 2022, "less than 10 people changed their minds and got the vaccine, agency-wide, as the result of the mandate". ${ }^{37}$ CT employees lost their jobs due to the policy. 52 of 59 employees who requested it were granted a religious exemption and 4 of 5 employees who requested it were granted a medical exemption. However, the agency only kept ("accommodated") 5 of those exempted employees whose work could be done without public or co-worker contact. None of those 5 employees were Local 1576 members.

Ms Julien reported that the resulting staffing shortage has led to much overtime, many 9- and 10 -hour days, and bus operators are tired. CT also announced a temporary service reduction for weekday commuter routes due to the staffing shortage, from 14 February to 18 March 2022. The local union negotiated a $\$ 3,000$ retention bonus for those members who stayed at work (paid in two payments in February and June, 2022), along with a $3 \%$ cost of living adjustment, effective January 1, 2022, while the union continues to bargain for a new contract.

## TWU Response

TWU President John Samuelson argued that: "We're opposed to any mandate that requires someone to lose their job if they don't want the vaccine." ${ }^{142}$ Due to the pandemic there are already staff shortages and therefore, losing a significant number of employees would create even more service delays and possibly unsafe conditions. ${ }^{142,143}$

Roger Marenco, President of TWU Local 250A in San Francisco (SF), reports that a vaccine mandate is in effect for SF City employees. Despite advocacy by the union, a "vaccine or test" option was not implemented. The deadline for receiving the vaccine was 1 April 2022, thus, unvaccinated transport workers may lose their jobs after that date. During the October 2021-March 2022 period, the numbers of unvaccinated SF transport workers has steadily decreased, likely due in part to concerns about job loss.

In September 2021, members of TWU Local 100, which represents many employees of the Metropolitan Transportation Authority (MTA) in New York City, asked for alternatives to vaccination, such as weekly testing. ${ }^{142}$ Local 100 said they opposed mandates and warned that any mandate would face a legal court fight, and workers would take time off using vacation and sick time, further exacerbating staff shortages. Given the shortages caused by the Omicron variant as well, the governor of New York has not mandated vaccines for MTA employees. ${ }^{143}$ Local 100's web site provides extensive information on COVID-19 with links to more information. ${ }^{145}$

To date, the TWU Local 100 has successfully advocated for the MTA to:

- Increase the number of testing sites for employees and passengers alike ${ }^{144,145}$ Create testing sites specifically for transit employees on employer property and on work time ${ }^{144,145}$
- Provide members with "up to four hours of pay to receive shots" 146
- Provide a $\$ 500,000$ death benefit for families of MTA employees who had passed away from COVID-19 ${ }^{146}$
- Not require MTA workers to be vaccinated, instead they have the option to be vaccinated or test weekly ${ }^{143,144}$

However, in June 2021, the MTA decided to discontinue the death benefit for any employees who are unvaccinated, while continuing to provide the benefit, in addition to three years of health insurance, for any vaccinated employees who died from COVID-19. ${ }^{146}$ This decision has been a source of stress for the Local 100 membership, especially since vaccinations are not mandatory.

By the end of November 2021, about 70\% of MTA workers (members of Local 100) had submitted proof of vaccination, compared to 87-93\% for the NY Police and Fire Departments, Emergency Medical Services, and the Department of Sanitation. ${ }^{282}$ As of December 27, 2021, 80\% of MTA workers are vaccinated, according to NY Governor Hochul. ${ }^{143}$

## Future research and education

The mental health impacts of job loss and fear of job loss were well known, ${ }^{283}$ long before COVID-19. Thus, it was necessary for transport worker unions to negotiate over the terms of vaccine requirements which could cost workers their jobs. Listed above are examples of public transport union efforts to avoid or greatly reduce the risk of job loss due to vaccine mandates. However, this issue has been a source of disagreement and conflict in various local unions. Further research is needed to better understand:

1. The mental health benefits to workers of negotiated agreements which buffer the employment impact of vaccine mandates,
2. The impact of conflict within local unions over this issue on union functioning,
3. The fears of vaccinated workers, especially those at increased risk of serious COVID-19 (or with family members at increased risk), of the spread of SARS-CoV-2 due to union members who refuse vaccination
4. The impact of union education programmes on increasing vaccination rates
5. The extent of staff shortages created by lack of compliance with vaccine mandates, and resulting long work hours, fatigue and stress

6 Factors that promote belief in vaccine misinformation

## B. NEGOTIATIONS WITH THE GOVERNMENT

## Case study 3:

## EFFORTS TO IMPROVE THE JOB SECURITY AND MENTAL HEALTH OF WORKERS IN THE JEEPNEY SECTOR IN THE PHILIPPINES


#### Abstract

It is believed that informal workers in the jeepney sector, without job security or employment protections, experienced a "silent pandemic" of mental health issues amidst COVID-19. This was mainly due to the widespread loss of income and livelihood due to lockdowns imposed to control COVID-19 and because of the uncertainty created by the abrupt implementation of the government's long-delayed jeepney modernisation plan.


## Background

Jeepneys, an indigenous form of transport, are redesigned World War Two-era US Army jeeps. Jeepneys are the most prevalent form of public transportation in the Philippines because of inexpensive fares and limited alternatives.

The exact number of jeepneys using the roads is unknown due to the significant number of unregistered units, called "colorums". Estimates range from a low of 180,000 to a high of 300,000 jeepney units across the whole country. ${ }^{284-287}$ In Metro Manila alone, there may be 50,000 ${ }^{288}$ to 70,000 jeepneys on the streets. ${ }^{285}$

The jeepney sector is highly fragmented with an operator (owner) owning an average of 1.3 vehicles and the vast majority or $80 \%$ possessing just one unit. ${ }^{284}$ This data for Metro Manila is likely similar in the rest of the country.

Frequently, operators are also drivers. However, operators may also hire drivers who drive the jeepneys. The driver pays a "boundary" to the operator for the opportunity to drive the jeepney for a day. Any revenue above the boundary and operational expenses, such as gasoline, goes to the driver. The operator's boundary in Metro Manila is from PhP 800 to 1,100, while the driver's income is about PhP 500 to $800 .{ }^{287}$ Both jeepney operators and drivers are within the informal sector with vulnerable livelihoods and little social protection. As informal workers, drivers are not covered by occupation safety and health standards. They normally drive over eight hours a day without benefit of overtime pay but in pursuit of increasing their take-home pay, which is dependent on the number of passengers. They frequently suffer from heat-related conditions and respiratory diseases due to the lack of respirators to protect against air pollution encountered as part of their working conditions.

Jeepney operators and drivers have been blamed and scapegoated for numerous ills of public transport in the Philippines such as congestion, pollution and greenhouse gas emissions. Public and private transportation emits 28 to $35 \%$ of greenhouse gas emissions in the country ${ }^{289-292}$ and contributes $65 \%$ of total air pollution. ${ }^{290}$ Meanwhile in 2017, delays due to congestion in Metro

Manila costs USD $\$ 24$ billion annually, or $10 \%$ of annual GDP. ${ }^{291}$ Yet, it is the more numerous private vehicles, not public transport which are the main cause of air pollution, greenhouse gas emissions and traffic. ${ }^{290}$

There is also a common stereotype that jeepney drivers lack discipline in the streets. The "anarchy" in the streets has an objective basis in the boundary system and the jeepney fragmentation which leads to extreme competition for passengers. Thus, the consolidation of the jeepney sector and mitigation of climate change were the main rationales for the government's public utility vehicle modernisation programme (PUVMP). ${ }^{44}$ A key component of PUVMP from the start, consolidation is to be achieved through the formation of fleets of jeepneys. Renewal of franchises to operate routes would only be issued to fleets composed of at least 15 modern jeepneys instead of individual operators. These jeepney fleets can either be organised as corporations or cooperatives. The main characteristic of modern jeepneys is the use of Euro-4 (less polluting diesel) or electric engines. But other requirements for modern jeepneys included passenger doors facing curbside not on the rear of the vehicle, and such add-ons such as GPS.


Figure 20. Board of Directors of Lahug Apas Transport Cooperative, during their blessing of their modernised Public Utility Jeepney (PUJ).

The PUVMP covers both public jeepneys and buses but its implementation by the government solely focused on jeepneys and did not involve buses. Thus, PUVMP has always been perceived as a jeepney phaseout and "anti-poor" by operators and drivers. As a result, PUVMP has been vigorously resisted by jeepney associations since it was first proposed a decade ago. Jeepney strikes successfully delayed the implementation of PUVMP until the pandemic arrived.

The pandemic lockdown banned all forms of public transport. After $21 / 2$ months, with the loosening of the lockdowns, some types of public transport, excluding jeepneys, were allowed. About 50,000 jeepney drivers (not including operators) in Metro Manila alone became jobless and their lost income conservatively estimated at PhP 2 billion in the 106 days that they were not allowed to drive their routes. ${ }^{288}$ It took more than three months before the first modern (not traditional) jeepneys organised in fleets were allowed to drive the streets and only those which complied with the regulations. Through lobbying by groups such as the National Confederation of Transport Worker Unions (NCTU-ITF) and the transport advocacy coalition Move As One, exemptions to the strict rules were allowed and so some traditional jeeps were allowed to operate. Yet many routes formerly operated by traditional jeepneys remain unserviced as of the end of 2021. The implementation of the PUVMP did not comply with the International Labour Organization (2015) guidelines on just transition for workers and social dialogue as key mechanisms in climate change adaptation and mitigation. ${ }^{44,293}$

## Silent pandemic

These extreme economic difficulties set the context for the mental health issues of jeepney operators and drivers. The extent of the humanitarian crisis experienced in particular by informal jeepney workers was expressed by them begging for food or alms amidst the pandemic.

During interviews, Jaime Aguilar, secretary-general of the NCTU-ITF, Angie Mata, secretary-general of the Cebu chapter of NCTU-ITF, and Hya Bendaña, of the Move as One Coalition and daughter of a jeepney operator/driver, agreed that the extended loss of livelihood for the duration of the pandemic was an important cause of mental health problems of informal jeepney workers. They called it a "silent pandemic" since jeepney operators and drivers would not admit to its presence as a condition to be treated.


Figure 21. Jaime Aguilar, national secretary, National Confederation of Transport Worker Unions (NCTU), during a regional conference.


Figure 22. Angelica "Angie" Mata, secretary-general of the Cebu chapter of NCTU, driving a modernised Public Utility Jeepney (PUJ) during the blessing of an affiliate, Lahug Apas Transport Cooperative.

Although rarely acknowledged by the jeepney drivers themselves, the symptoms of mental health problems were expressed in various forms. First, extreme sadness, if not outright depression. Second, incidents of anger at family members and friends. Third, low self-esteem at the loss of "breadwinner" status. Finally, inability to adapt and function normally in the new situation of lack of income and uncertainty of regaining livelihood due to the PUVMP.

Most jeepney operators and drivers were full-time in their jobs and thus had identities as breadwinners for their families. Their working hours were more than the normal working day of eight hours so, as a result, they usually had little contact with their children. Their spouses bore the burden of maintaining the family even as they may have their own paid work in the informal economy. Thus, the identity, status and role of many jeepney operators and drivers were tied to their economic role as primary income-earner in the family. But the loss of their jobs during the pandemic shattered this "normality" and led to mental anguish.

Jeepney drivers and operators who were forced to stay at the home during the pandemic lockdown had difficulty finding new roles to play in the households since this had traditionally been their spouses' role. Much of the drivers' sense of community had also been tied up with camaraderie among fellow jeepney workers in their informal garages, such as by playing basketball, but this form of socialisation was closed as a result of the lockdown.

Further, most jeepney drivers and operators had been working in the sector for the better part of their lives and thus would be quite challenged looking for a new job. Likewise, as informal workers with little in educational attainment, they would find it difficult transitioning to a better livelihood in ordinary situations, but especially during the pandemic.

In an even worse situation were those jeepney drivers and operators who had not yet settled down in the city and were recent migrants from the provinces. Those who were not able to leave the cities in time to go back to the provinces would have had to temporarily use their jeepneys as lodging spaces. For the extended period of the lockdown, they lived in the jeepneys but without an income to sustain themselves.

## Responses by NCTU-ITF

The NCTU-ITF did not have any direct intervention for its members at the level of diagnosing and treating mental health issues. This was initially due to their own lack of awareness of it as a problem. And later, due to their limited financial resources, to organise a direct medical response.

The labour movement in the Philippines does not have a large understanding of mental health as a workplace issue and even less the resources to draw upon for an effective response. Mental health as a workplace issue is a recent realisation for the labour movement. As a result, the labour centre Sentro ng mga Nagkakaisa at Progresibong Manggagawa (SENTRO), to which NCTU-ITF was affiliated, held at least one educational session among its key officers and staff on mental health during the pandemic. It was out of this activity that NCTU-ITF became aware of mental health as a distinct concern that needed intervention. Unfortunately, it proved difficult replicating this down the line of the organisation and especially at the level of rank-and-file union members.

The response of the NCTU-ITF to the silent epidemic of mental stress among its members included initiatives to provide immediate economic relief and to campaign for a "just transition" for workers affected by PUVMP. Given that the main source of mental health issues was the loss of income during the pandemic and the loss of permanent livelihood due to the PUVMP, this was an effective,
if indirect, intervention. At the local level, jeepney associations affiliated to NCTU-ITF used their leverage to access support from local governments and gather donations from local contacts. SENTRO itself provided assistance, known as "ayuda" in Spanish, to its affiliate unions, such as NCTU-ITF, by soliciting contributions from local and international contacts. These took the form of rice, canned goods and other food items. While temporary and immediate, this aid to union members, including workers in the jeepney sector, was much appreciated.

The strategic response of NCTU-ITF and SENTRO was to fight for a "just transition" for jeepney operators and drivers in the implementation of the PUVMP. The realisation of this demand would remove the uncertainty troubling informal jeepney workers over the fate of their livelihood and thus partly alleviate their mental stress. A just transition would ensure that jeepney operators and drivers would have decent livelihoods that guarantee adequate incomes, safe work and stable jobs with social protection and labour rights. Please see video of Angie Mata discussing "A worker-led just transition in public transport in the Philippines": https://www.youtube.com/watch?v=FJHD6Cg664Q

## Just Transition for informal jeepney workers

The fight for just transition, ${ }^{44}$ designed to improve job security and employment protections among "informal" jeepney operators and drivers, could help to mitigate mental health issues. There were several dimensions to the just transition demand. First, a longer period for the implementation of PUVMP. Second, a higher government subsidy for the modern jeepneys. Third, fleet consolidation of jeepneys in the form of cooperatives instead of corporations. Fourth, permission for traditional jeepneys to operate as the economy was opened. Finally, "service contracting" of jeepney associations to provide jobs to operators and drivers, alleviate the lack of public transport, and be the prototypical "new normal" in mass transportation. ${ }^{44}$ However, mental health was not explicitly included as an aspect of just transition.

PUVMP is a programme that had been long delayed by resistance through strikes. In fact, its implementation faces continuing opposition and is being revised as a result of lobbying and engagement by jeepney organisations such as NCTU-ITF and civil society groups, such as Move As One.

While a number of different jeepney organisations were raising similar concerns, NCTU-ITF was alone in comprehensively framing its set of demands as a just transition for workers amidst the PUVMP. In this advocacy, NCTU-ITF had an ally in the Move as One Coalition, which formed during the pandemic as an advocacy and lobby group in response to the transport and humanitarian crisis precipitated by the lockdown and the enforcement of the PUVMP. The ban on the operation of traditional jeepneys during the pandemic was criticised by NCTU-ITF, Move As One and other groups as discriminatory, since other forms of public transport, except traditional jeeps, were allowed to operate when the lockdown was relaxed starting in June 2020. Aside from NCTU-ITF, the Move as One Coalition included trade unions, community organisations, human rights organisations and public transport advocates. The Coalition proved instrumental in strengthening the policy analysis and lobbying capability of NCTU-ITF as well as in projecting a broad social movement in support of just transition to the PUVMP. Together with Move as One, NCTU-ITF was able to garner solidarity to its just transition demand from certain legislators, including Senator Risa Hontiveros, who was a champion for the jeepney sector's concerns.

As a result of all of these combined efforts, NCTU-ITF was able to achieve concrete wins when traditional forms of resistance, such as a jeepney strike, was impossible and even modest types of collective protest were problematic, either due to safety concerns or state repression using the lockdown as an alibi. Among the gains in the campaign for just transition was increasing the subsidy
for modern jeepneys from PhP 80,000 to PhP 160,000. Still, both NCTU-ITF and Move as One are still advocating for a subsidy of PhP 500,000, since the cheapest modern jeepney costs around a million Philippine pesos.

Another gain was the increasing number of traditional jeepneys allowed to drive their routes. However, thousands of jeepneys are still banned from many of their former routes so both NCTUITF and Move as One are advocating loosening of restrictions. This is done both at the national level through lobbying with the Department of Transportation and the Land Transportation Franchising and Regulatory Board, and at the local level through social dialogue with provincial, city and municipal governments.

Due to persistent lobbying, the deadline for fleet consolidation through jeepney cooperatives was moved from the original 30 June 2020 deadline, to 31 December 2020 and then finally to 31 March 2021. While a majority of jeepney associations have transitioned to form cooperatives, there are still calls to allow more jeepney associations to transition. However, there are still jeepney groups who remain opposed to PUVMP.

PUVMP, which was an executive order and not based on legislation, allowed jeepney fleets in the form of cooperatives. NCTU has organised 18 cooperatives in nine key cities and provinces, with a total of 4,392 members. The shift from jeepney associations to cooperatives entailed challenges to groups such as the NCTU. Jeepney associations comprised both operators (owners) and drivers but cooperative members were mainly operators since drivers were now formally employed by the cooperative. NCTU encouraged drivers to also be cooperative members but, in their experience, this has proved difficult. Likewise, the challenge of cooperatives managing fleets of jeepneys and their drivers prodded NCTU to formulate training programmes for their leaders. These trainings included orientation in cooperative principles and organisational management.


Figure 23. Jaime Aguilar and Members of Mactan Lapu Lapu Mandue Transport Cooperative, during their special General Assembly.

Finally, the NCTU-ITF and Move as One have been able to secure two rounds of funding for "service contracting" - that is, jeepney cooperatives, as well as bus companies and newly established jeepney corporations, are contracted by the government for a fee to provide free transport for commuters on select routes and for a certain period of time. The service contracting scheme was allotted PhP 5.5 billion in the Bayanihan 2 Law in 2020, which was the second pandemic assistance legislation enacted that year. However, the programme encountered a lot of implementation issues including extreme delays in paying jeepney drivers engaged in service contracting. As a result, an unspent PhP 3 billion was returned to the national treasury. In the most recent national budget, another PhP 3 billion was provided for service contracting and thus service contracting resumed in September 2021 until the fund was depleted. In particular, jeepney associations of NCTU-ITF's chapter in Cebu have been beneficiaries of the service contracting programme. This has alleviated members' anxieties as service contracting provided guaranteed income for the duration of the scheme.

However, both Move as One and NCTU-ITF are calling for service contracting to shift from being a form of pandemic assistance to being the "better normal" of public transportation - since service contracting should benefit all actors: commuters through a safe and convenient transport system; jeepney drivers who will gain status as employees of jeepney cooperatives and thus enjoy the rights and benefits of formal workers; and jeepney operators organised in cooperatives who will have a guaranteed source of income from service contracts of several years in duration.

NCTU-ITF has also welcomed the "Tsuper Iskolar" programme of the government, which is a skills retraining programme for jeepney operators and drivers who opt out of the sector. Several of their members have used the programme which provides an income subsidy while undergoing retraining. Chapters of NCTU-ITF have also been active at the grassroots level to struggle over local issues.

These organisational initiatives for tactical economic relief and the strategic fight for just transition for jeepney operators and drivers (previously informal workers) have partly alleviated their mental health concerns. Had PUVMP been implemented along the lines of just transition -with social dialogue, and the voice and participation by jeepney drivers and operators (owners) ensured, with working conditions improved towards "decent work" - then the negative impacts on mental health would have been lower even in the beginning. Just transition for workers in the PUVMP has been accepted by the mass of NCTU-ITF's members as a result of awareness raising and the results of the struggle. However, the mental health of drivers and operators (owners) has not been an explicit component of the definition and advocacy for just transition. Nonetheless, the diagnosis and treatment of mental health problems of jeepney operators and drivers is a need that should still be addressed, with the appropriate allocation of financial and human health resources.

\author{

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## C. MENTAL HEALTH SUPPORT AND SERVICES

## Case study 4:

## UNIFOR WORKER REFERRAL ASSISTANCE PROGRAMME AND MENTAL HEALTH ADVOCATES (MHA) WORKING WITH BUS DRIVERS IN VANCOUVER, BC, CANADA

Unifor is Canada's largest private sector union, with more than 315,000 members across the country, working in every major sector of the Canadian economy. The Unifor mental health programme started years ago in the province of Ontario, and then began, as a joint Union-Company programme, in British Columbia (BC), two months before the COVID-19 pandemic.

Unifor published a book of resources on mental health in 2019 aimed at guiding local unions and union representatives on ways to developing contract language on mental health in collective bargaining. ${ }^{52}$ Starting in December 2019, Unifor Locals 111 and 2200 included the idea of a "mental health advocate" in bargaining, whereby the company committed to paid time off (10 hours/month) for one union representative per transit depot to fulfill this role. The advocate would receive 40 hours of training on mental health, and provide guidance for members in need of counselling or care on the services available through the EFAP (Employee and Family Assistance Programme) and community resources, while protecting their confidentiality.

Unifor Local 111 represents 5000 transportation workers in Vancouver, BC, with five bus depots in this area and one MHA assisting workers in each depot. MHAs in Vancouver meet every two months, discussing different issues in the different areas.

We interviewed an MHA in central Vancouver serving 1200 members, who now has 10 hours per month paid by the company, with the union providing extra paid hours when needed. In the next contract, the union will propose increasing the number of hours paid by the company.

The MHA reported that managers in the company are not very knowledgeable about the programme. He focuses on the need to reduce disciplinary measures, which are not productive for workers with anxiety or depression. The MHA publicises the programme to the union's membership through bulletin boards (Figure 24) and by being "very approachable".


Figure 24. Unifor mental health bulletin board at bus depot in central Vancouver, BC, Canada.

## Referrals

Referrals to services in the Vancouver area include community-based services, such as BC 211 (https://bc211.ca/), those listed in the Blue Book BC, counselling services through the company Employee and Family Assistance Programme (EFAP), and through the use of employee health benefits that cover expenses up to CAD $\$ 2000$.

The MHA has referred 5-10 members monthly during 2020-2021. While the programme is strictly private and confidential, stigma plays a role. There is a concern when bus drivers need help for addiction, since bus drivers are monitored by alcohol and drug testing in order to keep their job.

## Union manual, "COVID-19: We're in this together. Mental Health Resource Guide"

Below (Figure 25) is a section from the Unifor "COVID-19: We're in this together. Mental Health Resource Guide", ${ }^{46}$ available on the Unifor web site. ${ }^{70}$

With this in mind, the national union formed a COVID-19 Mental Health Working Group to gather, create, and share important resources that members may find useful during the pandemic.

This resource uses a four-pillar approach to help identify key areas where support is needed, including relevant information and resources:

## Pillar 1 - Mental Health and Wellness: provides an overview of national supports available for those facing mental illness and/or addictions

Pillar 2 - Quarantine and Isolation: speaks to the impact isolation measures have on those experiencing domestic violence

Pillar 3-Challenging Stigma, Prejudice and Racism: outlines the disproportionate impact the pandemic has had on equity-seeking communities and ways you can combat harmful stigma, prejudice, and racism

Pillar 4 - Take Action: notes ways you can support others through sharing information and how to identify yourself as a mental health ally that people can reach out to

## Case study 5:

## SURVIVING MEN AND WOMEN: BRAVE MEN AND WOMEN

## National Union of Workers of Colombian Transport and Logistics Industry (SNTT) and Recaudo Bogotá (Colombia)

Our interviews with transport union leaders (SNTT) in Colombia revealed that workers who became infected with COVID-19 faced isolation and uncertainty about the recovery process which increased negative moods, anxiety and/or depression. Also, fear of re-contagion and witnessing illness and even death among infected co-workers made returning to work a difficult process for recovered workers. Unfortunately, psychological health issues related to COVID-19 have not yet captured the attention of employers, since the current economic and health crisis pushes them to prioritise what is "urgent" (compliance with mandatory COVID-19 protocols) over what is "important" (psychosocial long-term effects of the pandemic).

In the absence of formal programs, Vivian Acosta and Elena Salinas, workers in the transport company Recaudo Bogotá, and members of the SNTT union National Board of Directors, took the initiative to offer a friendly space so that workers recovered from COVID-19 could share their experiences and concerns related to mental health. The programme was named Surviving Men and Women: Brave Men and Women.

This self-organised programme is based on the benefits of expressive talking and writing. Evidence suggests that writing or talking about past emotional events in our lives result in psychological, social, and physiological changes that can lead to improvements in health for those who participate in the disclosure process. ${ }^{147}$ Efforts to communicate one's emotional experience in writing or talking, help people to acknowledge, explore and understand one's emotions. Previous research demonstrates that emotional expression and processing can enhance adjustment to the effects of stressors. ${ }^{148,149}$ Expressive writing and talking based interventions, which may be used for both patients and for people with symptoms who have not yet gone to see a doctor or therapist, has been found to improve participants' long-term psychological, physiological, behavioural, and social functioning. Additionally, research suggests that emotional expression is most beneficial in response to situations which feel uncontrollable, such as COVID-19 contagion, and in supportive social environments. ${ }^{147}$

The "Men and Women Survivors Programme" has four stages, in which COVID-19 recovered participants:

1. Select and read aloud a sentence taken from a list of 40 phrases called "pills" (figure 26)
2. Briefly recount their recovery from COVID and relate their experience to the selected "pill"
3. Share in writing (on a public billboard, see figure 26) their interpretation of the shared experience, according to the selected "pill"
4. Receive a snack


Figure 26. "Pills" (left) and Elena Salinas next to an expressive writing board (right) during a Men and Women Survivors Programme session.

In the words of Vivian Acosta (personal communication, 29 October 2021)): "The programme allows a direct meeting with workers, who need to feel heard, and puts the mental health consequences of COVID-19 into perspective. We think that this process of (emotional) expression is equivalent to 'taking a pill', which helps a little, in a very simple way, to heal people".

Initially, this intervention was focused on the employees of "Recaudo Bogotá", the company which operates the Bus Rapid Transit (BRT) System Transmilenio ticket offices. Programme participants were workers recovered from COVID-19, located in the stations at one of the BRT lines of Transmilenio. However, due to high participation and good reception by the workers, the "Surviving Men and Women Programme" was extended to all BRT system ticket sellers.

During the first weeks of running the programme, Vivían and Elena collected video evidence showing the intervention results. Here are some prominent examples of experiences shared by participants:

## Woman 1

Pill: The fight you are in today builds the strength you need for tomorrow.
Experience:
"Covid was a battle that I went through with my husband and children. From the hand of God, we got ahead, but it was a very hard battle. A person in my family also got sick and died. The teaching that all this has left me is very important. We have to value ourselves and value the time we spend with our family. That way we won't have to regret the things we didn't do. Thank God for keeping us united in my family and for restoring my health."

## Woman 2

Pill: Any achievement starts in the same place in your mind.

## Experience:

"When you have COVID, you find a time during which you reflect, learn to value life, and see things from a different point of view, also to value the things you have and think about what you can have in the future. One does not normally think about these matters. So, one learns to value family and co-workers."

## Woman 3

Pill: The battles of life are continuous.

## Experience:

"my experience with COVID-19 was very hard, but with the help of God, I have managed to get ahead. God only gives to his best warriors the greatest battles. I have overcome the hard times and I am now well, surrounded by my family."

## Woman 4

Pill: Every cell in your body reacts to what your mind wants.
Experience:
"Everything we feel and what we think is under control in our mind. If we think positive, things will turn out well and we will move forward. But if we think negative, we are going to have a worse time. COVID-19 generated a negative emotional change in me. But my family was with me as well as my colleagues. With strength on my part, I managed to get ahead, now l'm in good spirits, I feel happy."

## Woman 5

Pill: Losing patience is losing the battle.

## Experience:

"I thank life very much, because after having COVID I learned to value time. For a few days I felt empty and very sad. I couldn't find meaning in life. All my emotions were unsettled. Thanks to my colleagues, who were with me giving me strength and encouragement, I am here. I'm fine, my family is fine and I'm back at work. I thank God for my work."

These testimonies suggest that the programme allows participants to see negative experiences related to COVID-19 as learning situations, which, despite being unpleasant, prepare people to face demanding situations in the future. Likewise, participants' reflections show an increased awareness of family and co-worker social support, which are central in coping with stress. The participants' testimonies also suggest that religiosity is a key factor in dealing with COVID-19. The willingness of the "Surviving Men and Women Programme" beneficiaries to find the "positive side" of COVID-19 convalescence suggests that the intervention may promote resilience processes that improve an individual's ability to return to basic life domains, such as work and family.

The programme shows that emotional expression can be a highly cost-effective strategy to deal with COVID-19 related mental health problems among workers in the public transport industry. Of course, this programme does not seek to replace psychotherapy, which may be necessary in specific cases. Single sessions of emotional expression can bring wellness but are usually not enough to completely heal from traumatic events. In severe cases of trauma, incomplete processing of negative experiences can worsen mental health. However, in people who are not patients, the "Men and Women Survivors" programme paves the way for the implementation of simple interventions, such as support groups and psychological first aid, which can be administered to many workers, without the need for specialised professional assistance.

Recently, the results of the programme have impressed the Board of Directors of the SNTT and the management of Recaudo Bogotá, which have begun to provide financial and logistical support to extend the programme to a greater number of participants. For the programme to grow, it is important to increase the involvement of the transport companies' management. Union leaders can also be key facilitators in disseminating information about the programme, and even in carrying it out. In addition, keeping a detailed record of participants, monitoring their mental health, and referring people for professional care can maximise the positive effect of the programme in the transport industry.

Although worker-led mental health promotion initiatives are valuable and should be supported by transport companies and unions, they do not displace employer responsibility for occupational safety and health management. Worker-led programmes are severely limited in changing healthrelated working conditions, such as overtime, work intensification, or occupational exposure to COVID-19. Therefore, addressing mental health issues related to the pandemic requires making workers' initiatives work alongside evidence-based organisational interventions.

## Case study 6:

## HEALTH INSURANCE AND MENTAL HEALTH SERVICES AMALGAMATED TRANSPORT AND GENERAL WORKERS UNION (ATGWU) - UGANDA

All employees in shops (companies) in formal employment that subscribe to the union (that are unionised) are entitled to free medical care for all general medicine-related health issues. The medical care extends to their spouses and four legally recognised children. However, each shop has a monthly limit for every employee household (for most, UgX 500,000, or about USD \$142) beyond which the employee meets the additional medical care costs.

Though accessible on request or recommendation, mental health care is not explicitly included in the medical care packages and, doctors typically do not investigate or diagnose mental health issues. In addition, there is no trusted mechanism at the workplace for young workers to "open up" and discuss their mental health issues. They tend not to trust counselling or therapy services paid for by their employers to keep their issues confidential.

Young transport workers in the informal transport sector, including taxis and boda-bodas (bicycles and motorcycles offering passenger and parcel service at a fee), do not have access to health care packages. Health insurance is mainly accessible to young transport workers in formal shops in aviation and transport and logistics companies. Union negotiations for health insurance for workers also varies from shop to shop depending on how flexible and accommodating the shop is. In light of COVID-19 and its impact on young workers, the union is reviewing its collective bargaining agreements with each shop, to put together lessons learned from the pandemic to ensure that the union is equipped to negotiate for better working conditions, including extensive health insurance that covers counselling and mental health care services.

- written by Judith Mbabazi and Paul Mukwaya, Makerere University, Kampala,
Uganda


Figure 27. The Old Taxi Park, Kampala, Uganda

## Case study 7:

## ATU LOCAL 265 MENTAL HEALTH PROGRAMMES (USA)

ATU Local 265 (Campbell, California) members experienced a tragic event on May 26, 2021, when a member of the local union, an employee of the Valley Transportation Authority (VTA), brought a gun to work and killed nine of his co-workers and then himself. ${ }^{51}$ Local 265 President John Courtney was frustrated that the VTA had refused to remove that department's management following the shooting, pending an investigation into the work culture: "the same folks were gonna run the show when they brought light rail back ... The managers knew that there were problems. I don't mean problems about the killer - just general problems that could lead to a mentality in the workplace where the workers feel that no-one cares about them, that they don't care about our safety." He was "flabbergasted" at management's seeming eagerness to rush traumatised people back to work.
${ }^{51}$ Over the previous year, union members felt disrespected over VTA's resistance to pandemic safety measures, especially as such decisions were being made by managers working from home. Courtney said:

> "Every time that door opens we don't know if we're going to get assaulted, spat on, cursed at. These are little traumas, mini-traumas, that happen every single day." ${ }^{69}$

ATU International President John Costa said,
"This tragedy once again underscores the need to make mental health a priority in the workplace. Unfortunately, the VTA has taken no action to address the grief, the mental health, [or] the safety of employees who have been under unfathomable, extreme stress after this tragic shooting ... VTA workers must have immediate access to the full spectrum of mental health services ... We have to end the stigma around asking for help." ${ }^{51}$

Mr. Courtney pointed out that

> "Most of our employees don't want to go [to the Employee Assistance Programme] because it's company-oriented." Instead, they would prefer a resource where the unions can vouch confidentiality. "I also want to have a place where we can safely take a member who we may or may not think is having problems, to develop tools where we can approach these members - without insulting them, without disrespecting them - where we as shop stewards can walk up to them and say, 'Hey, I noticed your day's a little off today. Can you talk?'" 51

Following the tragedy, the local contracted with FHE Health, a national behavioural health treatment provider which was able to refer members for PTSD treatment to an inpatient centre in Florida.

## The Bill Wilson Center, 150 Santa Clara, CA, as a resource for the Local union

The Bill Wilson Center's (BWC) Centre for Living with Dying and Bay Area Critical Incident Stress Management (CISM) team are local resources for the union's members. These programmes provide both immediate CISM Support and ongoing counselling. BWC's CISM team provided peer support training in the past for VTA/Local 265 members and for AC Transit (Oakland, CA). After the 26 May tragedy, BWC staff and CISM crisis volunteers responded immediately and have continued
working closely with Local 265 members. While CISM training is usually provided to emergency responders to help them deal with traumatic events, it had typically not been provided to bus or train operators, despite the fact they also experience traumatic events, such as assaults, suicides and passenger or pedestrian injuries. The Joint Workforce Investment (JWI) portion of the annual Verification of Transit Training (VTT) programme now includes a segment facilitated by BWC on "Managing Stress and Building Resilience" based on the CISM model. BWC will be working with Local 265 to create a Peer Support team for union members. Additionally, a Resiliency Centre has been created to provide counselling services and workshops for all VTA employees and family members. This is funded by state and federal grants in a partnership with Santa Clara County and BWC.

## Funding from the state of California (SB 129)

Following the 2021 tragedy, California legislators passed a law (SB 129) to provide USD $\$ 20$ million in funding (which began in February 2022) to promote mental health at VTA, and to help change the agency's work culture. ${ }^{69} \mathrm{~A}$ joint union/management committee is determining how best to spend the new state funding. Included will likely be mental health services, including group and individual counselling for members and their families. Also, "mental health days" (time off of work), a four-day training for workers to enable them to provide "peer support" to co-workers, reducing stigma for discussing mental health issues, and a "threat assessment" process.


Figure 28. Sue Cronin from the Bill Wilson Center discussing mental health in the Joint Workforce Investment (JWI) portion of Verification of Transit Training (VTT)for ATU Local 265 members. http://atulocal265.org/


Figure 29. John Courtney, President and Business Agent, ATU Local 265
http://atulocal265.org/?zone=/unionactive/officers.cfm


Figure 30. ATU 265 Executive Board Officers http://atulocal265.org/?zone=/unionactive/officers.cfm

## Case study 8:

## TWU LOCAL 100 UNION ASSISTANCE PROGRAMME (USA)

TWU Local 100 in New York City initiated a Union Assistance Programme (UAP) in June 1988 to help provide confidential intervention services for members and their eligible dependents for substance abuse and mental health/family issues, including stress, depression, anxiety, eating disorders, or gambling.

TWU leaders negotiated a new contract in 1988 to include provisions for a UAP, which would allow union members to volunteer for drug and alcohol treatment before being caught by the employer's random alcohol and drug testing program. The cost of the treatment is provided by the employer above and beyond the health benefit plan. Volunteering insures the employees' confidential treatment.

The programme also provides supportive counselling and referral assistance to those with personal and family problems. The UAP is dedicated to the health and welfare of the union membership and to an alcohol and drug-free workplace. It is not designed to oppose the employer's employee assistance programme, or to shield members from discipline. It does, however, make TWU members more responsible for following their prescribed rehabilitation plans.

UAP staff are clinically prepared to perform a full intake, assessment, evaluation and make a referral in accordance to each member's needs. The staff will then monitor the progress of each client, along with the clinical teams/licensed therapists to help the members reach their goal of successfully completing the programme and re-entering the workforce focused on a positive outlook and plan for their work life and home life. The UAP outreach team gives interactive presentations weekly to new hires as well as at various locations in the transit system including depots, quarters and on the road at subway terminals and booths, including materials with UAP contact information. And, any member can call the UAP office for help.

In addition to members who volunteer to use UAP services, the UAP also sees and monitors members who are required to attend because of a "first time marijuana positive" drug test or because they were "driving while intoxicated".

Terence Thornton, UAP Clinical Director, stated that, since the COVID-19 pandemic began:
"Our mental health-related special intakes (such as stress, depression and anger management) have greatly increased." He also reports that an evaluation in 2015 conducted by Columbia University concluded that "the UAP is functioning effectively and has had a productive year meeting the higher-than-average demand from transit employees for a variety of UAP services."

The UAP web site also includes links to other sources of information and assistance. ${ }^{151}$


Figure 31. TWU Local 100 Union Assistance Programme

## D. INFORMAL WORKER SUPPORT GROUPS AND UNIONS

## Case study 9:

## TRANSPORT WORKER AND UNION ACTION: "IF THEY DON'T DO IT, WE WILL" (SPAIN)

In response to the COVID-19 pandemic in Spain, transport workers created informal support groups based on social networks (such as WhatsApp and Telegram), in which concerns or emergencies were collectively discussed. Some of our focus group participants described the benefits of these local initiatives, highlighting their usefulness, for example, for receiving social support; providing it in the event that a co-worker had become ill with COVID-19; or reorganising shifts due to personal or mental health issues experienced by drivers. For example:
"During the pandemic, there were many sick leaves due to anxiety and depression, and sometimes there were not enough staff to cover the services that were provided. So, we needed to be supportive and organise ourselves to be able to comply with the routes and shifts that were needed.
"Sometimes, we shared personal experiences or concerns, and our own colleagues advised us to find solutions, or just supported us to feel better".

These self-organised actions were strengthened due to involvement by unions, whose attention provided some resources and strategies to the workers in terms of changing working conditions. Two of the participants stated that:
"The role of the CCOO in this regard, even when limited, has been important. Although they were attending to many other groups of affiliates affected by ERTES (temporary employment regulations) or job cuts, normally there was someone trying to help us.
"They (the unions) were helpful in self-organising ourselves, but also by providing us with permanent news about the progress of the situation (the pandemic), and trying to talk to our companies, so that they would address our problems with rotations, stress and lack of protective materials."

Even though the unions do not have specific services for mental health care on a large scale, the role of workers' unions tends to be well valued, as a body that defends workers, and contributes to making their needs visible. One of the participants affirmed that:
"Comisiones Obreras (CCOO), unlike many other bodies in Spain, have taken a bit of action regarding mental health, since companies do not... If they don't do it, we will."


Figure 32. CCOO learning-by-doing occupational health and safety activities, February 2022, Reus, Spain

The $\mathrm{CCOO}^{85}$ and the UGT ${ }^{84}$ also developed educational materials and COVID-19 response protocols for their affiliates. In some cases, these protocols were implicitly - and almost exclusively - directed at transport workers, given their emphasis on "highly mobile" workers, a group considered to be at higher risk, given their exposure.

Since 2001, the CCOO, and its affiliated research institute ISTAS (Instituto Sindical de Trabajo, Ambiente y Salud ${ }^{53}$ ), have been carrying out research, education and trade union action on preventing psychosocial risks and improving work organisation, to reduce mental health problems and other work stress-related illnesses. ${ }^{54}$ This is in accordance with the legal framework for action in the European Union (EU) and in Spain, which calls for avoiding occupational risks, and, if they have not been avoided, assessing them and combatting the occupational risks at their source (article 15 of the Law on the Prevention of Occupational Risks). The union also demands that companies improve their health surveillance, so that work-related diseases can be identified and compensated, and defends workers who are denied compensation. ISTAS-CCOO carried out two surveys among affiliated workers during the pandemic with data on work exposures and mental health. $25,49,55$ The 2020 survey showed that work stressors ("job strain") were reported by $44.3 \%$ of workers, $41.6 \%$ reported severe trouble sleeping during the last month, $55.1 \%$ were at risk of poor mental health, and consumption of tranquilisers and opioid analgesics, all more than doubled compared to pre-pandemic levels. ${ }^{49}$ Similar increases were seen in 2021 survey results (published in Spanish). ${ }^{25}$ Younger workers tended to have higher work psychosocial risks and worse health. ${ }^{49}$ However, data were not available specifically for transport workers, except for a February 2022 study of cargo drivers, which found that COVID-19 implied a substantial work intensification, as well as a clear worsening of their working conditions and mental health outcomes. ${ }^{154}$

Focus group participants' testimonies endorse the idea that the involvement of unions as a supportive body for improving working conditions for transport workers during the COVID-19 pandemic has been a positive resource for making visible their needs and may lead to more communication, permanent support for their issues and development of collective actions. Our focus group results suggest that further efforts by public authorities, transport companies and unions are needed to provide education, research and workplace programmes related to COVID-19, work and mental health specifically addressed to transport workers.

Note: English translation of focus group statements by Dr Sergio Useche

## E. YOUTH ORGANISATIONS WITHIN TRANPORT WORKER UNIONS

## Case study 10:

## UNION YOUTH CAMP - AMALGAMATED TRANSPORT AND GENERAL WORKERS UNION (ATGWU) - UGANDA

The ATGWU young workers' committee, representing young workers from all shops (companies) and associations, during the annual delegates conferences in 2018, proposed a youth camp. The camp is designed to provide the space for young workers to interact and engage with issues specific to them, collectively. The event was later adopted by the union as an annual youth event that, save for the last two years due to COVID19, is scheduled to take place 13-17 November every year.

The young workers' committee proposed the annual youth camp in response to growing demands by young workers for spaces for engagement and interaction among themselves. The annual youth camp has become a safe space to discuss many issues, including those related to mental health. As a result, the union uses the findings gathered during the youth camp to create awareness on issues raised.

In the ATGWU consolidated report that covered the period of August 2018- June 2021, issues raised by the young workers were mainly due to the outbreak of COVID19 and included;

- Increased turnover of young workers at the shop and association level
- Increased job inequalities and insecurity at workplaces
- Increased unemployment and depression, anxiety and less interest in daily activities.

The union hopes in the future to design programs that specifically address mental health issues. Current sensitisation and awareness activities have been centred on issues of unemployment, workers' rights issues, drug abuse and domestic violence. Young workers' leaders at the shop and association levels are trained and are charged with the responsibility to pass on the information to colleagues in a peer-to-peer learning approach

[^6]

Figue 33


Figue 34


Figue 35

## Case study 11:

## TRANSPORT WORKERS UNION (TWU) FUTURE LEADERS ORGANIZING COMMITTEE (FLOC) (USA)

The Future Leaders Organizing Committee (FLOC) is "devoted to empowering and educating the new and young workers of the Transport Workers Union" by providing the next generation of union workers "the tools, resources, and relationships that will prepare them to take action and further worker's rights". The first FLOC conference was held in December 2018, during which "workers attended workshops, participated in leadership building activities and networked with other young workers throughout the TWU". FLOC has three committee meetings each year plus an annual conference, which is "a three-day event and includes workshops, guest speakers, open forums and leadership building activities". ${ }^{152}$ See a short video about FLOC here: http://floc.twu.org/who-weare/

FLOC bylaws emphasise the importance of uniting young workers, working with local leadership to help mobilise younger members, and establishing local young workers committees throughout the US. ${ }^{294}$ Co-chairs of this committee include one man and one woman, if possible, from among the candidates, who are elected every two years along with the other two board positions. ${ }^{294}$ The second board elections were held in April, 2021 over Zoom, while an in-person membership meeting was held in Las Vegas, NV in September, 2021. ${ }^{295}$

At a meeting in Miami, FL, 6-8 August 2019, FLOC members learned about "how the salary gap between CEO's and workers, between races, and between genders has been widened ... the trend only continues to widen. 'Runaway Inequality' explains the process by which workers fall victim to systematic wealth extraction by their corporations, banks, private equity firms, and hedge funds. It reveals how financial strip-mining puts enormous downward pressure on jobs, wages, benefits, and working conditions while boosting the incomes of the financial elites." They stated that "it's a call upon us to build a collective movement to tackle the sources of increasing income and lowering wealth inequality". ${ }^{153}$


Figure 36. FLOC Members at the 2019 Miami conference sharing a photo with AFSCME Local 199 President Se' Adoreia "Cee Cee" Brown


Figure 37. FLOC members at the 2019 Miami conference during the "Runaway Inequality" workshop with Bianca Cunningham from Labor News.

In their 3-5 December 2019 Dallas/Fort Worth, TX meeting, FLOC members met with TWU members to learn about effective communication, receive steward training, and exchange perspectives with members of the TWU International Veterans Committee. ${ }^{296}$ FLOC members said that "now more than ever, the survival of labour unions depends on our support and efforts. The more we come together, the more power we have in confronting the hardships we face. Not just as laborers, but as individuals, all moving forward with the same common goal". ${ }^{296}$


Figure 38. Training class at 2019 Dallas/Ft. Worth FLOC meeting.


Figure 39. After training sessions, FLOC members donated their time and effort to a local Food Bank

While FLOC began in the union's air transport division, the 2021 TWU Convention passed a resolution unanimously to expand FLOC to all divisions. While transport worker mental health has not been a specific issue addressed in past meetings, it is being considered for future meetings.


Figure 40. Eric Espaillat (Top Right) and Jordan Bravo (Bottom Right) - Co-Chairs Anthony Hernandez (Bottom Left) - Recording Secretary Jarrod Gillen (Top Left) - Communications http://floc.twu.org/floc-updates/history-is-written-during-the-last-floc-membership-meeting/

## F. UNION SUPPORTED RESEARCH

## Case study 12:

## ISTAS, A UNION RESEARCH INSTITUTE (SPAIN)

Since 2001, the Spanish labour federation Comisiones Obreras (CCOO), and its affiliated research institute ISTAS (Instituto Sindical de Trabajo, Ambiente y Salud ${ }^{53}$ ), have been carrying out research, education and trade union action on preventing psychosocial risks and improving work organisation, to reduce mental health problems and other work stress-related illnesses. ${ }^{54}$ The union also demands that companies improve their health surveillance, so that work-related diseases can be identified and compensated, and defends workers who are denied compensation.

ISTAS-CCOO carried out two surveys among affiliated workers during the pandemic with data on work exposures and mental health. ${ }^{25,49,55}$ The 2020 survey showed that $44.3 \%$ reported "job strain", $41.6 \%$ reported severe trouble sleeping during the last month, $55.1 \%$ were at risk of poor mental health, $15.4 \%$ reported new or increased tranquiliser use and $12 \%$ reported new or increased opioid painkiller use - all more than double compared to pre-pandemic levels. ${ }^{49}$ Similar increases were seen in 2021 survey results. ${ }^{25}$ Younger workers tended to have higher work psychosocial risks and worse health. They were more likely to have lost their jobs, faced a temporary layoff or have high job insecurity during the pandemic. ${ }^{49}$ However, data were not available specifically for transport workers. A February 2022 study of cargo drivers, conducted separately from ISTAS, did find work intensification during the pandemic, and a substantial worsening of both working conditions and mental health. ${ }^{154}$


## G. HONOURING WORKERS

## Case study 13:

## MEMORIAL PAINTING FOR TRANSPORT WORKERS LOST TO COVID-19 - TWU LOCAL 100, NEW YORK CITY

The Memorial Painting is the work of Brooklyn artist Taha Clayton. It prominently features representations of five union members in the uniforms or attire worn by workers in the seven departments: Maintenance of Way; the Manhattan \& Bronx Surface Transit Operating Authority; Car Equipment; Stations; Rapid Transit Operations; MTA Bus/School Bus/Private Operations; and TA Surface. The concept, with a central grouping of transit workers demonstrating both grief and strength, originated with union staff and leadership in conjunction with the artist. It was fully developed, refined and brought to new heights by Taha through a series of sketches that led to the final oil-on-canvas creation.

In additional, on September 30, 2021, TWU Local 100 also unveiled a permanent memorial to the members they had lost to COVID-19 in a moving ceremony at the Union Hall. The Memorial Plaque features the engraved names and titles of Local 100 members who died after contracting COVID-19.
http://www.twulocal100.org/node/102384
https://www.laborpress.org/lighted-twu-local-100-memorial-honors-the-more-than-100-members-lost-to-covid-19/


Figure 41


Figure 42

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[^0]:    Local circumstances, such as political conflicts, can also impact working conditions and mental health. For example, an economic and social crisis in Colombia, aggravated by the pandemic, led to a large social movement, which lasted for more than four months, with blockades of urban and inter-municipal highways, damage to urban transport infrastructure and excessive police force in

[^1]:    Young transport workers meeting at an ITF summer school in 2019 in Italy focused on many of the same issues described in this report:

[^2]:    However, we did not find any research studies that examined these issues among public transport workers. Clearly, issues of race, ethnicity, tribe, immigration, disability, or managing work and school, are important areas for further research, union education and bargaining.

[^3]:    Retrieved for separate analysis
    From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71. 179 For more information, visit: http://www.prisma-statement.org/

[^4]:    "We live in the dilemma between saying: "well, I stay at home and put my health before my job stability" or, on the contrary, "I go to work and risk infecting myself and my family"."

[^5]:    "There's been more need for a lot of people to do extra hours and overtime... it would probably be in the stations department with the station agents."

    - Jesse Argueta, subway tower operator, union official, man, young worker, United States

[^6]:    - written by Judith Mbabazi and Paul Mukwaya, Makerere University, Kampala, Uganda

