

Occ-COVID Conversations: A 3 year “check-up” -- Not remotely "just a cold or flu"

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- Moderated by OHCOW MD - Dr Pravesh Jugnundan

February 10, 2023 1:30 - 3:00pm



Risk Perception

Risk perception is defined as people's judgments and assessment of hazards that might pose immediate or long-term threats to their health and well-being.

From: [Encyclopedia of Environmental Health, 2011](#)

PHO Respiratory Virus Testing

Data included in this section provide a summary of respiratory virus testing at PHO. PHO conducts approximately one-third of all seasonal respiratory virus testing in Ontario that is reported to the Public Health Agency of Canada.¹ Details on PHO testing for seasonal respiratory viruses and SARS-CoV-2, are provided in the [Technical Notes](#).

Table 3a. Number of specimens positive, tested and percent positivity for seasonal respiratory viruses and SARS-CoV-2: Tested at Public Health Ontario for the most recent two weeks

Respiratory virus	January 15 to 21, 2023 (Week 3)	January 22 to 28, 2023 (Week 4)
Influenza A	22/2,202 (1.0%)	10/1,852 (0.5%)
Influenza A/H3N2	8	5
Influenza A/H1N1pdm09	10	4
Influenza B	1/2,202 (<0.1%)	3/1,852 (0.2%)
Adenovirus	32/1,565 (2.0%)	16/1,387 (1.2%)
Seasonal human coronavirus	74/1,565 (4.7%)	51/1,387 (3.7%)
Enterovirus/rhinovirus	108/1,565 (6.9%)	116/1,387 (8.4%)
Human metapneumovirus	44/1,565 (2.8%)	36/1,387 (2.6%)
Parainfluenza virus	57/1,565 (3.6%)	64/1,387 (4.6%)
Respiratory Syncytial Virus	214/2,202 (9.7%)	168/1,852 (9.1%)
SARS-CoV-2	1,163/4,659 (25.0%)	921/4,270 (21.6%)

Note: Influenza A/H3N2, influenza A/H1N1pdm09 are subsets of influenza A positive specimens; therefore, percent positivity is not calculated for these categories. SARS-CoV-2 - severe acute respiratory syndrome coronavirus 2. This table includes SPSN specimens as detailed in table 3b.

Data source: PHO Laboratory Information Management System.



Appendix C: Severity Measures by Age and Sex

Table 4. Confirmed COVID-19 cases that were admitted to hospital, by sex and age group

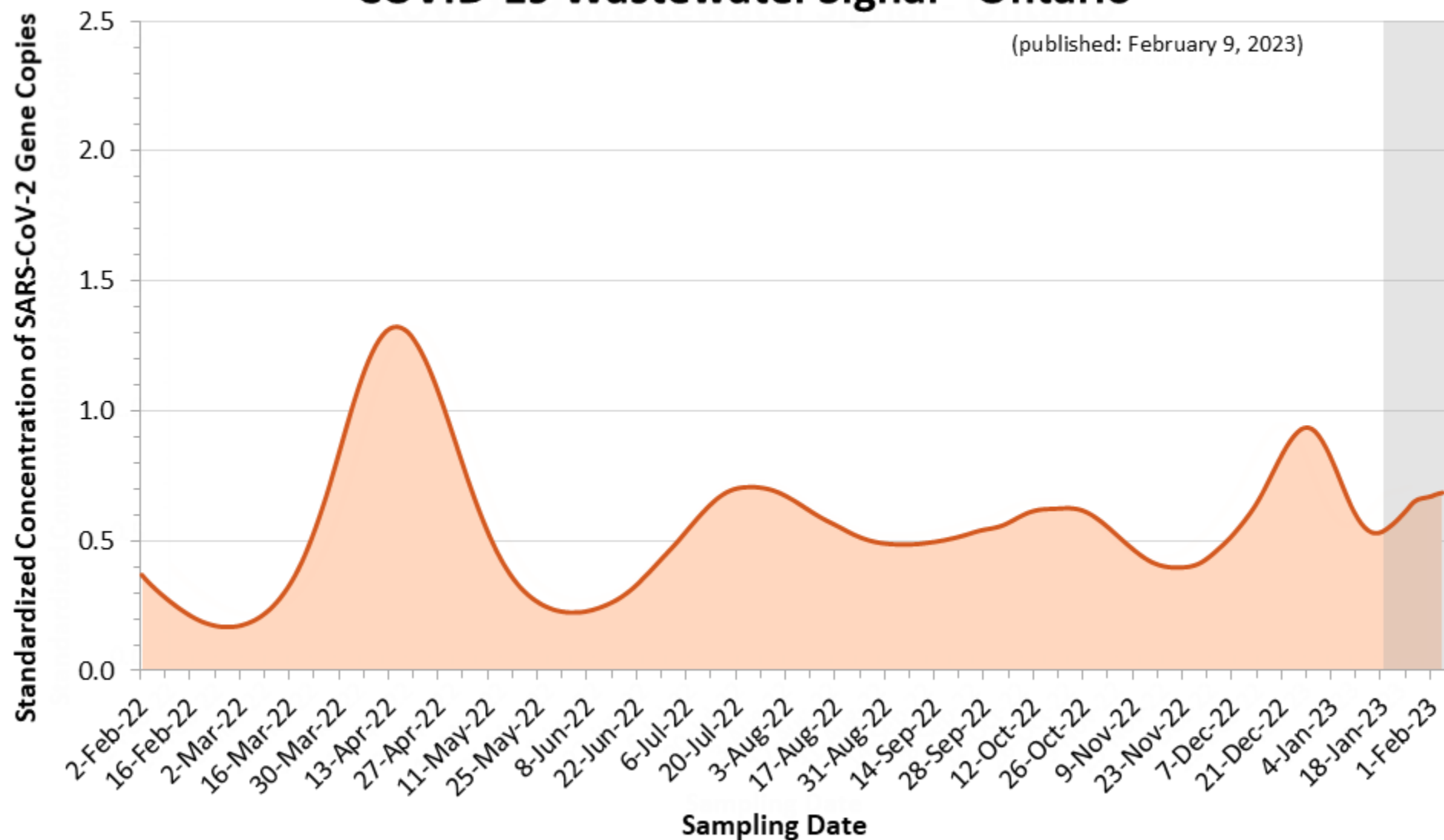
Sex and age group	Hospital admissions January 15 to January 21, 2023	Hospital admissions per 100,000 population January 15 to January 21, 2023	Hospital admissions January 22 to January 28, 2023	Hospital admissions per 100,000 population January 22 to January 28, 2023	Hospital admissions Past 52 weeks (January 30, 2022 to January 28, 2023)	Hospital admissions per 100,000 population Past 52 weeks (January 30, 2022 to January 28, 2023)
Total Cases	324	2.2	251	1.7	25,524	172.2
Sex: Female	141	1.9	104	1.4	11,915	158.9
Sex: Male	183	2.5	146	2.0	13,563	185.1
Sex: Did not specify female or male	0	N/A	1	N/A	46	N/A
Ages: <1	7	5.1	3	2.2	662	486.4
Ages: 1 – 4	1	0.2	4	0.7	447	77.5
Ages: 5 – 11	2	0.2	3	0.3	188	17.5
Ages: 12 – 19	0	0.0	1	0.1	207	15.8
Ages: 20 – 39	11	0.3	14	0.3	1,253	29.9
Ages: 40 – 59	27	0.7	19	0.5	2,538	65.5
Ages: 60 – 79	120	4.0	106	3.5	9,475	316.4
Ages: 80 and over	156	23.1	101	15.0	10,751	1592.8
Ages: Unknown	0	N/A	0	N/A	3	N/A

Table 5. Confirmed COVID-19 deaths, by sex and age group

Sex and age group	Deaths January 15 to January 21, 2023	Deaths per 100,000 population January 15 to January 21, 2023	Deaths January 22 to January 28, 2023	Deaths per 100,000 population January 22 to January 28, 2023	Deaths Past 52 weeks (January 30, 2022 to January 28, 2023)	Deaths per 100,000 population Past 52 weeks (January 30, 2022 to January 28, 2023)
Total Cases	63	0.4	38	0.3	4,509	30.4
Sex: Female	31	0.4	21	0.3	2,064	27.5
Sex: Male	32	0.4	17	0.2	2,438	33.3
Sex: Did not specify female or male	0	N/A	0	N/A	7	N/A
Ages: 0 – 19	1	<0.1	0	0.0	14	0.5
Ages: 20 – 39	2	<0.1	0	0.0	45	1.1
Ages: 40 – 59	2	0.1	1	<0.1	208	5.4
Ages: 60 – 79	11	0.4	10	0.3	1,356	45.3
Ages: 80 and over	47	7.0	27	4.0	2,886	427.6
Ages: Unknown	0	N/A	0	N/A	0	N/A

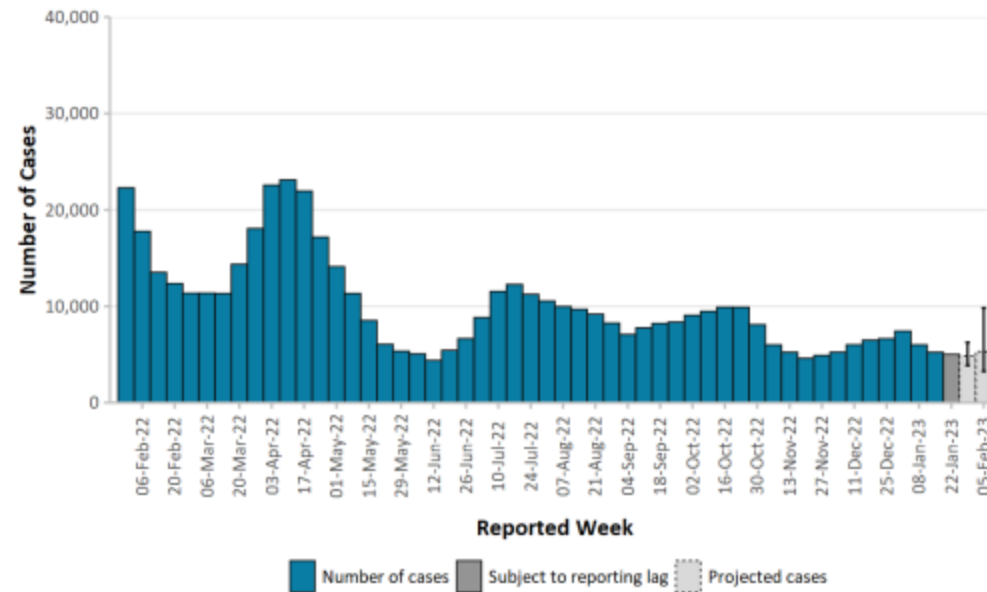
COVID-19 Wastewater Signal - Ontario

(published: February 9, 2023)



Cases

Figure 1a. Confirmed and projected cases of COVID-19 by reported week



Note: Projections were estimated using the daily distribution of SARS-CoV-2 lineages and COVID-19 cases over time to forecast COVID-19 cases into the future by 14 days. The error bars on the projected cases represent the 75% credible interval. For more information refer to [Appendix E](#). Projections are made based on our current knowledge of COVID-19, and thus cannot predict introductions of new lineages, which may impact model accuracy.



Dr Susan Kuo



In Ontario, PCR tests can only be used in certain situations. You can get a PCR test if:

- 1. You have COVID symptoms and are at higher risk of serious illness.** This includes:
 - » People 70 years old and older;
 - » People 60 years old and older who have had 0, 1, or 2 doses of a COVID vaccine;
 - » People who have a weakened immune system e.g. Common Variable Immunodeficiency (CVID), cancer chemotherapy or high-dose steroid treatment;
 - » People 18 years old and older who have had 0, 1, or 2 doses of a COVID vaccine and have other health conditions that increase the risk of serious illness (e.g. diabetes, obesity, high blood pressure, lung disease, heart disease, heart failure, serious liver or kidney problems, intellectual disability, cerebral palsy, sickle cell disease);
 - » Pregnant people.
- 2. You have COVID symptoms and you work with people who may be at higher risk of serious illness.** You can get a PCR test if you:
 - » Are a patient-facing healthcare worker;
 - » Work, volunteer, or live in a highest-risk setting e.g. hospitals, congregate living settings for medically and socially vulnerable people
 - » Live with a patient-facing healthcare worker or someone who works in a highest-risk setting;
 - » Are a first responder;
 - » Are a home and community-care worker;
 - » Work in or attend Provincial and Demonstration Schools;
 - » Are an international agriculture worker living in a group setting;
 - » Are underhoused or experiencing homelessness.
- 3. You identify as First Nation, Inuit or Métis community, or live in or are traveling to a First Nation, Inuit or Métis community;**
- 4. Your healthcare provider has instructed you to get a PCR test** (e.g. before surgery or a medical or dental procedure);
- 5. Public Health has instructed you to get a PCR test** as part of an outbreak investigation.

COVID centres and emergency rooms are not able to give you a PCR test if you do not meet the criteria.

Prescribing Nirmatrelvir/Ritonavir (Paxlovid®) for COVID-19: A Decision Aid for Community Practices

January 13, 2023

The chart below highlights key evidence to help guide your **Paxlovid®** treatment decisions. It is based on Ontario Health's [recommendation](#) (Dec. 2022) on which patients would benefit from receiving Paxlovid for COVID-19 infection. For a short evidence brief, including NNT/NNH, see the [Centre for Effective Practice](#).

In general, Paxlovid is **recommended for people age 18+ who are at higher risk of severe illness from COVID-19 infection**. The treatment should be considered for those with confirmed COVID-19 (i.e., positive PCR or rapid antigen test), who are within 5 days of symptom onset and experiencing mild-to-moderate COVID-19 (i.e., not requiring hospitalization or supplemental oxygen), and who meet one or more of the criteria below.

This information serves as a helpful guide. Continue to apply clinical judgment in assessing the potential benefits and risks of Paxlovid, including assessing contraindications and risks for your patient.

Considerations for Paxlovid Treatment

Benefit is likely to increase with the number of coincident factors.	
60 years of age or older	Increasing age is the most consistent and important risk factor for hospitalization due to COVID-19; evidence suggests that <i>older patients would be the most likely to benefit from Paxlovid treatment</i> .
18 to 59 years old and with inadequate vaccine/booster protection ➤ Unvaccinated or incomplete primary vaccine series OR ➤ Completed primary vaccine series AND last COVID-19 vaccine dose was more than 6 months ago or last COVID-19 infection was more than 6 months ago (see pp. 6-9 of Ontario's Vaccine Guidance)	Benefit of treatment may be greater in those who are unvaccinated or have not completed a primary series; however, <i>vaccination status alone should not determine whether a patient is offered Paxlovid</i> . In higher-risk groups, risk of severe infection/poor outcomes from infection does not appear to be mitigated by booster doses.
Immunocompromised and age 18 or older	Immunocompromised individuals may be especially vulnerable to poor outcomes from COVID-19 infection despite vaccine boosters, especially if they have multiple risk factors. Groups include those receiving B-cell depleting therapies, some solid organ and hematopoietic transplant recipients, some hematologic cancer patients, individuals with primary immunodeficiency, people with HIV and hemodialysis patients.

<p>18 to 59 years old with at least one co-morbidity</p>	<p>BMI of 30 or higher, immunosuppression, cardiovascular disease and neurological disease are among the conditions that may confer the greatest benefit with Paxlovid.</p> <p>See Health Canada's list of underlying conditions associated with more severe COVID-19 disease.</p>
<p>Belong to a group that is vulnerable due to social determinants</p>	<p>Certain groups are at higher risk of disease progression and poor outcomes from COVID-19 due to social determinants. Prioritize the following groups:</p> <ul style="list-style-type: none"> - Indigenous people - Black people - other members of racialized communities - individuals with intellectual, developmental, or cognitive disability - people who use substances regularly (e.g., alcohol) - people who live with mental health conditions - people who are underhoused.

SAFETY | RISKS

There are at present low rates of reported serious adverse events and treatment-related adverse events for Paxlovid (most commonly dysgeusia and diarrhea). New adverse events are likely to be revealed with continued use. Key safety considerations for Paxlovid treatment are:

- **renal impairment**
- **potential drug interactions with medications that are highly dependent on liver enzyme CYP3A4-mediated metabolism**
- **clinical impact of interrupting or replacing another medication to mitigate drug interactions.**

Especially for complex patients, consult with a pharmacist or other clinician experienced in managing drug-drug interactions or refer to [Nirmatrelvir/Ritonavir: What Prescribers and Pharmacists Need to Know](#) (Dec. 12, 2022, University of Waterloo/University of Toronto schools of pharmacy).

Case and Contact management

Updated Jan 27,2023

Vaccine Status	Case management - infected individual (ie. Symptomatic (Note 3) or test positive on PCR or RAT	Contact management – close contacts, non-household with a COVID positive or symptomatic person within 48 hours of symptom/test onset (6 feet for > 15 minutes cumulative without PPE)	Household contact management (living with, cared for by, or sexually active with a positive case – symptomatic, or positive PCR OR RAT)
Ontario			
Not fully Vaccinated; partially vaccinated or fully vaccinated and boosted	<p>Self-isolate until symptoms have been improving for 24 hours (or 48 hours if gastrointestinal symptoms) and they are afebrile.</p> <ul style="list-style-type: none"> Follow Preventive Precautions for 10 days (see Note 1 at bottom) Asymptomatic individuals with a positive test do not need to self-isolate unless they develop symptoms, follow Preventive Precautions for 10 days 	<p>Self-monitor for symptoms for 10 days after last exposure.</p> <ul style="list-style-type: none"> If you develop symptoms self-isolate and get tested if eligible. Follow the guidance for cases. Notify your employer Follow Preventive Precautions (Note 1) 	Same as non-household

	Case management	Non-Household Contact management	Household contact management
Ontario Special situations (Healthcare)	<p>If the symptomatic individual works in a "highest risk setting"*** they should avoid work for 10 days from symptom onset AND afebrile with symptoms improving for 24 hours (48 hours if GI) (Note: Testing for clearance is generally not recommended, BUT if requested by the employer, can return prior to 10 days if Negative PCR OR 2 consecutive negative RAT's collected at least 24 hours apart).</p> <p>For Critical Staffing shortages : COVID-19 positive cases that work in highest risk settings may return to work: 1) Earlier than day 10 (i.e., day 9,, preferable to day 8, etc.) without testing) AND 2) Provided they have no fever and symptoms improving for 24 hours (48 hours if GE Symptoms) 3) Assignment of staff on early return to work should be prioritized to caring for COVID-19 positive/recovered patients/residents, if possible.</p> <p>With appropriate IPAC/OH oversight, staff on early return to work may be assigned to care for all patients/residents (including COVID-19 negative patients/residents), with strict adherence to workplace measures for reducing risk of transmission, and avoiding caring for patients/residents at highest risk of severe COVID-19 infection, where possible</p>	<p>EE should speak with their employer and follow their workplace guidance for return to work.</p> <ul style="list-style-type: none"> Self Monitor for symptoms for 10 days and follow test strategy Following a negative molecular test (e.g., PCR, rapid molecular) collected on/after day 5 after last exposure OR Following a negative molecular test (e.g., PCR or rapid molecular) prior to first shift (if collected before day 5) AND perform daily rapid antigen testing for 10 days after last exposure or until a second negative PCR Test <p>If not testing then</p> <ul style="list-style-type: none"> Active screening for symptoms ahead of each shift. Individuals should not remove their mask when in the presence of other staff Working in only one facility, where possible. Ensuring well-fitting source control masking at all times 	Same as Non-Household



Allowed COVID-19 claims - Schedule 1 and 2

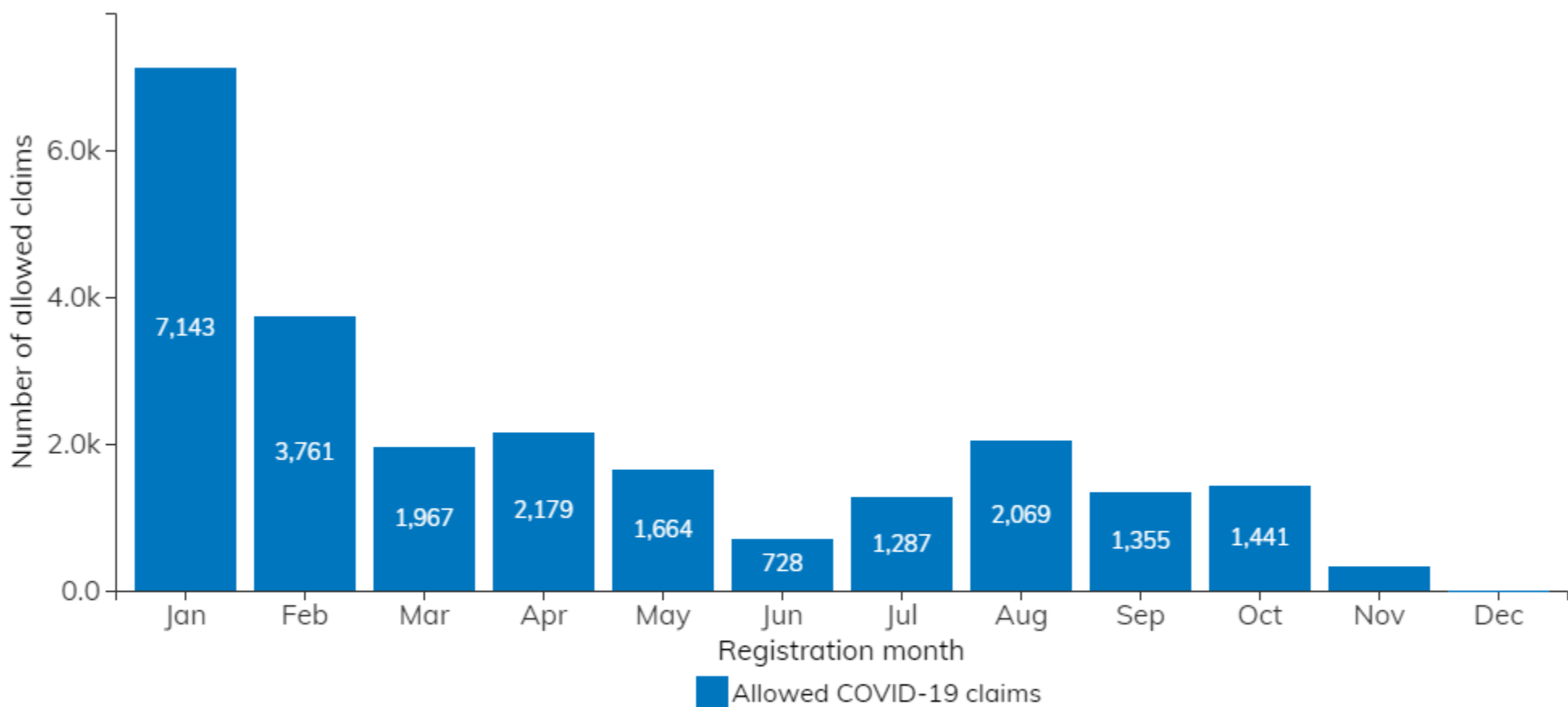
as of December 31, 2022

Allowed COVID-19 claims by registration year

Click on a bar to see annual breakdown

Download 





WSIB generated report for COVID-19 Claims

Data source: Workplace Safety and Insurance Board

Data maturity: As of December 31, 2022

This data is licensed to you under the Government of Ontario's Open Data License <https://www.ontario.ca/page/ontarios-open-data-directive#section-8> and subject to the provisions described therein.

Data downloaded from Provincial Statistics tool.

Report downloaded on 2023-02-10 8:27:30



NIH RESEARCH MATTERS

November 22, 2022

COVID-19 disrupts gut microbiome



At a Glance

- COVID-19 disrupts the gut microbiome, allowing pathogenic bacteria to thrive.
- It can also affect the lining of the gut, which may allow these bacteria to enter the bloodstream and lead to dangerous secondary infections.

The trillions of microbes living in the gut—bacteria, fungi, and viruses—are known collectively as the gut microbiome. Research has shown that changes in gut microbes may contribute to a variety of diseases and conditions.



NIH RESEARCH MATTERS

January 10, 2023

Gut microbes may affect motivation to exercise



At a Glance

- Researchers found a pathway by which gut microbes affect levels of exercise in mice.
- The findings, if confirmed in humans, suggest strategies to help encourage people to exercise.



CanTreatCOVID

Canadian Adaptive Platform Trial of
Treatments for COVID in Community Settings

Researcher-Sponsored



CIHR IRSC

Canadian Institutes of Health Research
Instituts de recherche en santé du Canada



Health
Canada

Santé
Canada



Public Health
Agency of Canada

Agence de la santé
publique du Canada



Occupational Health
Clinics for Ontario
Workers Inc.

Centre de santé des travailleurs et
travailleuses de l'Ontario

What are we trying to solve?

- What is the effectiveness of different SARS-CoV-2 therapeutics? Are they cost-effective?
- How does this differ by risk and across diverse populations?
- What is the effectiveness in reducing post-acute sequelae of SARS-CoV-2?

How do I refer patients?

Rectangular Snip

www.cantreatcovid.org

1-888-888-3308

info@cantreatcovid.org

**Refer any patient with a positive COVID test if 50+
or 18-49 with a comorbidity**

Also, with your permission, we can use EMR data to **prepare a list of potentially eligible participants and mail a letter** to them to notify them about the study and how they can get in touch if become symptomatic.



Occupational Health
Clinics for Ontario
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travailleuses de l'Ontario