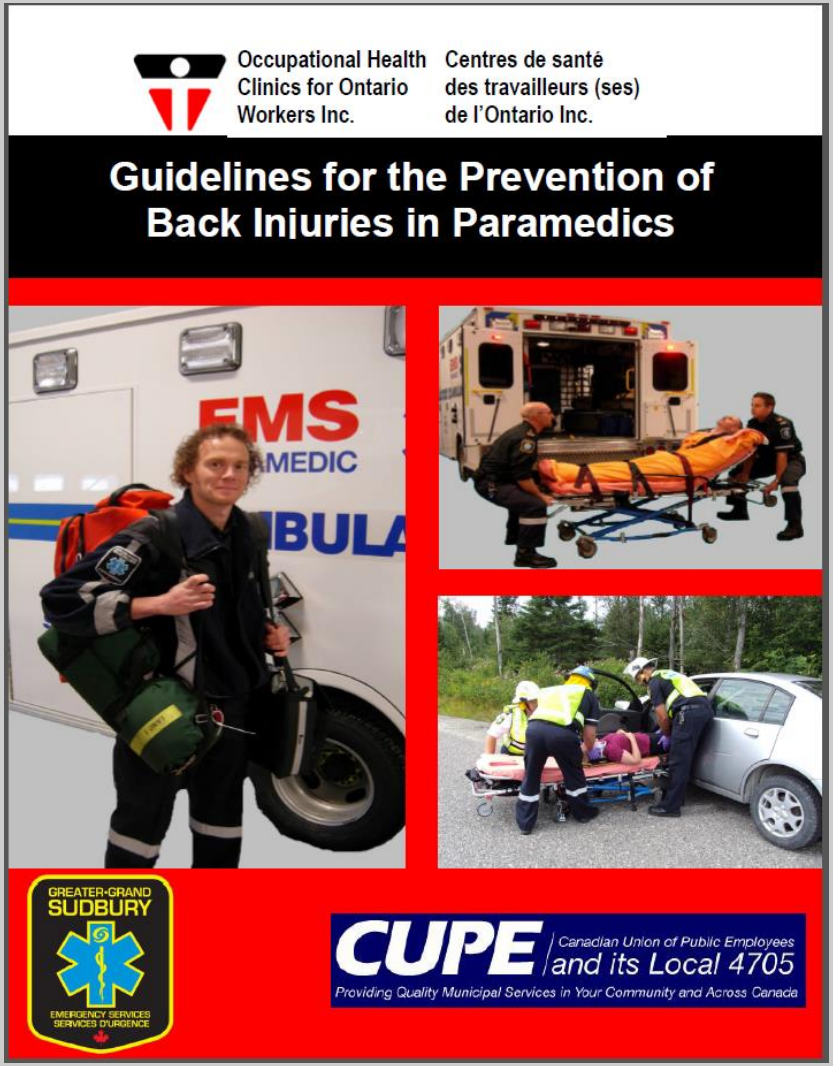
Guidelines for the Prevention of Back Injuries in Paramedics



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Centres de santé des travailleurs (ses) de l'Ontario Inc.

Overview

- Program consists of 3 modules:
  - Module 1: Injury statistics, Anatomy & Physiology, causes of back problems, assessment of risk factors to paramedics.
  - Module 2: Introduction to basic concepts of the program - 7 P's for safe lifting, SPINES acronym.
  - Module 3: General safe lifting, situation specific scenarios for lifting & back safety

MODULE 1

- Goals:
  - Understand the importance of back care for Paramedics
  - Understand the basic anatomy of the back and how it works
  - Understand why and how Paramedics are injured
  - Get an introduction to basic concepts of biomechanics and ergonomics
  - Understand the importance of good body mechanics

Injury Statistics

- Back injuries are the leading causes of on-duty injuries among EMS personnel:
  - 30% twisting
  - 11% bending
  - 9% pulling
- Once you've had a back injury, the chance of re-injury is 3 to 5 times greater.

Concerns with Work Tasks

- Patients and equipment are increasing in weight.
  - Paramedics face a greater risk of overexertion and spine injuries.
- Almost 60% of EMS workers complain of back strain after administering CPR.

Back Injury Concerns

- Paramedics are susceptible to back injuries due to emergency circumstances, unavoidable awkward lifting, excitement of crisis, lack of continued back training, and the size of ambulance compartments (Terribilini, 1989).

- National Association of Emergency Medical Technicians reports that 47% of Paramedics have significant rates of injury and permanent disability from back injuries while on the job.

Module 1: Understanding Your Back

- Purpose, goals and objectives of the program
- Importance of a back care program for EMS workers
- Situations where back injuries can occur
- General anatomy of the back
- General ergonomics
- Biomechanics of the back

Module 2: Preventing Injuries

- Understand how to assess a scene and plan for action.
- Understand the basic principles of lifting and how to lift to avoid injury.
- Learn the 7 P's to safe lifting and the importance of communication.
- Understand the importance of using and sharing experience to recognize hazards.

Emergency Response Training

E	Environment
M	Mechanism of Injury
C	Causality
A	Allied Resources
P	Personal Protective Equipment

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7 P's to Safer Lifting

Paramedics FIRST

Plan

Prepare

Prevent

Position

Posture

Protect

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Apply the SPINES Principle

S ituation

P repare

I nteract

N eutral

E xecute

S mooth

Module 3: Challenges to Lifts/Transfers

- Environment
- Patient transport and equipment use
- Paramedic specific emergency situations
- Urgency

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CUPE Canadian Union of Public Employees and its Local 4705
Providing Quality Municipal Services in Your Community and Across Canada

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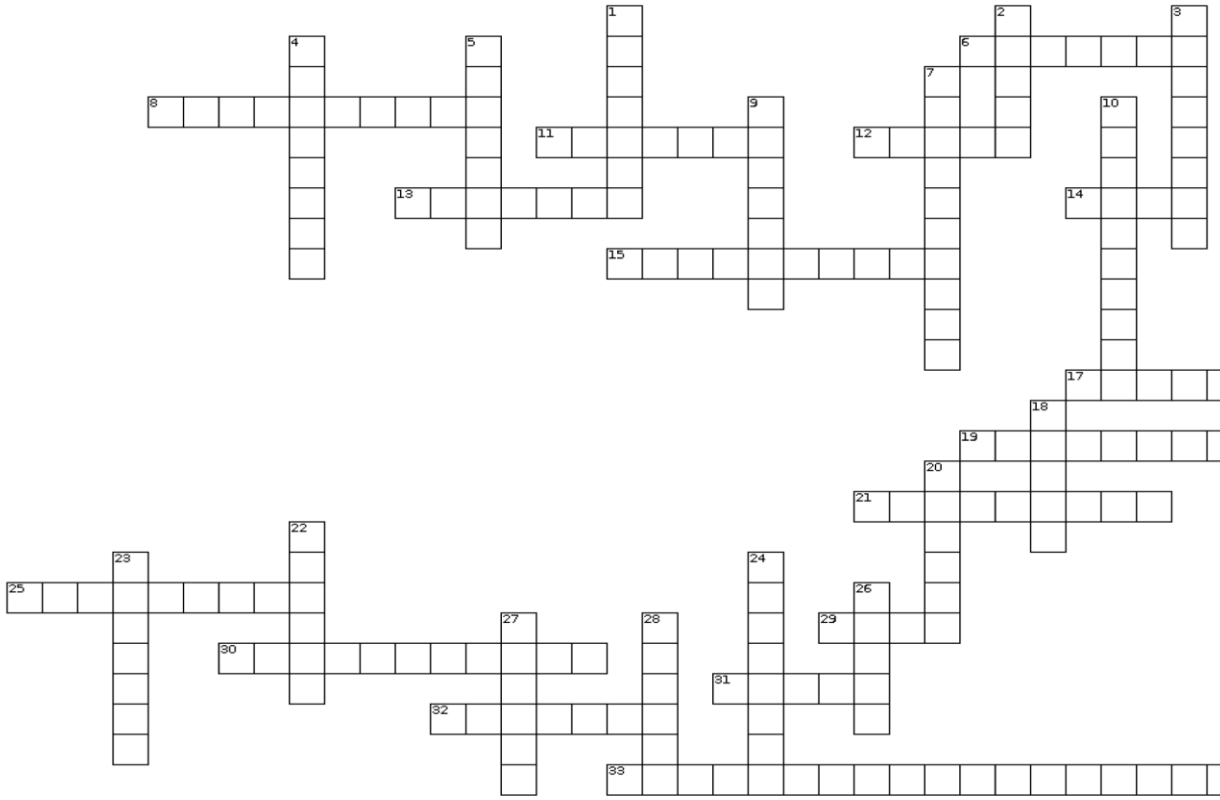
Summary Quiz



Across:

6. A ___ roll can be used for transferring in awkward locations
8. ___ Injuries develop over time
11. The 3rd "P" in the seven P's of safer lifting
12. The spine has ___ curves
13. ___ transfers
14. It is safer to ___ than pull
15. ___ ___ is a column of nerves that runs from the brain down the middle of the back
17. ___ the urgency of the situation is important in determining the emergency response
19. Openly ___ of the plan of action
21. Muscles of the back are under ___ control
25. Determine the ___ of injury and plan appropriate extrication
29. The shorter Paramedic should ideally be at the ___ of the patient
30. ___ should be used when transferring on stairs
31. Get as ___ to the patient as possible when outside a vehicle
32. The 7th "P" in the seven P's of safer lifting
33. ___ ___ acts as a shock absorber between vertebrae

Down:

1. The 2nd "P" in the seven P's of safer lifting
2. A ___ is an inclination of the ground
3. Keep your back ___ when lifting
4. Avoid using the ___ maneuver when lifting
5. The "E" in SPINES
7. The 1st "P" in the seven P's of safer lifting
9. The "N" in SPINES
10. The "C" in EMCAP
16. Avoid ___ when lifting
18. ___ the tub if a patient is in one
20. ___ resources can be utilized to assist with transfers
22. ___ vertebrae are the largest of the spinal column
23. Injuries have radiating pain for more than 6 weeks
24. Keep your feet ___ width apart when lifting
26. The human back operates as a ____
27. Stretchers should travel in line (___ degrees) with a slope
28. A unit of force measurement

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