



Paramedic Chiefs
of Canada

Chefs Paramédics
du Canada

Paramedic Services Week

May 24-30, 2020

Pandemic: Paramedics on the Front Line **Personal Protective Equipment (PPE); WHAT and WHY?**

What is PPE?

It's an acronym that you've likely heard a lot in the past few weeks. It stands for Personal Protective Equipment, and it's one crucial way to both stop the spread of COVID-19 and keep healthcare workers (paramedics, doctors, nurses, other caregivers) currently on the pandemic's frontlines safe.

PPE works as a barrier between an individual's skin, mouth, nose, or eyes and viral and bacterial infections.



While there is a large diversity of PPE types that provide varying degrees of protection, they all have one thing in common, they are designed to offer a level of protection depending on the environment they may be used in.

Understanding what, when, how and why to wear any level of PPE is important to ensure misuse of it as well as protecting yourself when putting it on and off.

Why Do Paramedics (and other healthcare professionals) Need It?

Humans produce droplets in various ways (e.g. sneezing, coughing, and even talking) and these droplets vary in size. Large droplets ($> 5 \mu\text{m}$) comprise most of the volume of expelled respiratory droplets and they tend to fall rapidly to the ground (usually less than 2 meters). Droplets smaller than $5 \mu\text{m}$ are referred to as droplet nuclei and may remain suspended in the air for significant periods of time and move with air currents. Respiratory viruses, including COVID-19 viruses are usually transported in large particle droplets.

These droplets may be loaded with infectious particles and can infect another person if the bacteria/viruses contact their eyes, nose or mouth. They may also fall on surfaces and then be transferred onto someone's hand who then rubs their eyes, nose or mouth.

Airborne transmission occurs when bacteria or viruses travel in droplet nuclei that become aerosolized. Healthy people can inhale the infectious droplet nuclei into their lungs.

COVID-19 cases and clusters demonstrate that droplet/contact transmission are the routes of transmission. The majority of cases are linked to person-to-person transmission through **CLOSE** contact. There is **NO** current evidence that COVID-19 is transmitted through airborne transmission.

How long coronaviruses -- the family of viruses that includes the one that causes COVID-19 -- can live on some of the surfaces you probably touch on a daily basis can vary from hours to days on surfaces like countertops and doorknobs. How long it survives depends on the material the surface is made from.

Keep in mind that researchers still have a lot to learn about the new coronavirus that causes COVID-19. For example, they don't know whether exposure to heat, cold, or sunlight affects how long it lives on surfaces. They also don't know how much of the virus it takes to cause an infection. But remember, you're probably more likely to catch it from being around someone who has it than from touching a contaminated surface.

Within 3hrs

- This is the most amount of time known the coronavirus can survive and remain infectious in airborne droplets.

Up to 24 Hours

- This is the amount of time it took for many researchers to find no more viable traces of the virus on cardboard and many other porous surfaces like paper and fabric.

Up to 72 Hours

- This is the amount of time coronavirus can stay active on hard, shiny surfaces like glass, countertops, plastics, play equipment, door and public transport surfaces, your phone.
- The virus does degrade over time, but you should avoid touching these surfaces in shared spaces, and if that is not possible, avoid touching your face until you can clean your hands.

How to protect yourself against this type of transmission?

- Wash your hands often, with soap and water for at least 20 seconds, especially after using the washroom or blowing your nose, coughing or sneezing; before preparing food; or after you have been in a public place. You can use hand sanitizer with at least 60 per cent alcohol if soap and water aren't available.
- Avoid touching your eyes, nose and mouth with unwashed hands.
- Clean and disinfect frequently touched surfaces daily. The surfaces that the Public Health Agency of Canada recommends cleaning most often are: toys, toilets, phones, electronics, door handles, bedside tables and television remotes. The CDC also recommends cleaning tables, light switches, countertops, desks, faucets and sinks.
- In public places, you should avoid touching surfaces. If you have to touch something, you can use disinfectant wipes to wipe off surfaces that are touched frequently by other people.

