



Media Lines

N95 Masks – Preliminary Research on Decontamination

Issues Statement: A University of Manitoba researcher who is also affiliated with the Health Sciences Centre (HSC) in Winnipeg came up with the idea to decontaminate N95 masks to enable their reuse. The researcher approached the National Microbiology Laboratory (NML) to conduct the laboratory research to challenge this idea. The NML tested four different approaches to decontaminating the masks, and all proved successful. They used VSV (not COVID-19 virus) to see whether the masks could be decontaminated in a way that would kill viruses without destroying their integrity. The lead researcher at the U of M published a pre-review paper in a scientific journal available at <https://www.medrxiv.org/> on March 31. The researcher may also do some social media.

These key messages will be used to respond to any media inquiries on the research.

Key Messages:

- N95 masks are single-use products. Scientists at the Public Health Agency of Canada's National Microbiology Laboratory along with collaborators at the University of Manitoba and Winnipeg Health Sciences Centre conducted important research to assess whether these masks could be decontaminated and potentially reused.
- In a laboratory setting, our scientists were able to successfully decontaminate N95 masks using four different approaches while maintaining the structural and protective properties of the masks.
- It is important to note that the virus used in the decontamination experiment was not the virus that causes COVID-19. Research studies are currently underway to assess this approach using the virus that causes COVID-19 and results are anticipated in the coming days. (As of April 2, 2020)
- This is promising preliminary research that, if proven successful against the COVID-19 virus, could help protect the diminishing supply of critical personal protective equipment.
- This is an example of important scientific work that draws on the ingenuity of talented scientists in finding solutions to the challenges presented by COVID-19.
- The Government of Canada encourages scientific research that enhances Canada's ability to fight COVID-19.

TECHNICAL DETAILS IF PRESSED:

- Four different N95 respirator masks were assessed using standard autoclaving, ethylene oxide gassing, ionized hydrogen peroxide fogging, and vaporized hydrogen peroxide treatment.

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Key Messages on masks and protective personnel equipment (PPE)

- Based on needs identified by provinces and territories, collaborative federal, provincial and territorial (FPT) procurement efforts are focused on procurement of large quantities of N95 masks, surgical masks, face shields, nitrile gloves, gowns and other protective clothing, sanitizer, ventilators, and testing supplies.
- Small quantities of PPE supply are starting to arrive through the collaborative FPT procurement efforts and will be distributed to provinces and territories.
- To address immediate short-term needs, the Public Health Agency of Canada deploys PPE and ventilators to provinces and territories based on requests for assistance.
- Discussions are continuing within the Government of Canada (Innovation, Science and Economic Development Canada, Public Services and Procurement Canada, Health Canada and the Public Health Agency of Canada) to explore alternative PPE supply routes and to scale up domestic production.
- For example, the Public Health Agency of Canada is working with Public Services and Procurement Canada to finalize a long-term agreement with Medicom for the domestic production of masks. In the meantime, Medicom is shipping 8,500,000 surgical masks this week. Additional supply is anticipated next week.
- Canada Goose received its medical device establishment licence from Health Canada to proceed with the retooling of its manufacturing facility to enable it to make gowns.

Key Messages on Re-Use of Single-Use Medical Devices

- As with other hospital-based practices, the purchase and use of reprocessed devices by individual healthcare facilities falls under provincial and territorial jurisdiction.
- Given shortages of some critical medical devices due to COVID-19, Health Canada is working on [guidance for the cleaning and sterilization of single-use devices](#).
- Additional urgent measures have also been taken by the Government of Canada in the last few weeks to support access to [new COVID-19 diagnostic tests](#) and [hand sanitizers, disinfectants, personal protective equipment, and swabs for diagnosis](#).

Key Messages on Existing Guidance

- In May 2016, Health Canada published a [notice](#) to industry on re-use of single-use medical devices.
- Companies that reprocess and distribute medical devices originally authorized and labelled for single use to Canadian healthcare facilities will be held to the same Health Canada requirements as manufacturers of new devices.

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- This means they must meet requirements for licensing, quality system management, labelling, investigating and handling complaints, maintaining distribution records, conducting recalls, reporting incidents and informing Health Canada of any changes to the information in their licence application.
- Reprocessed devices should clearly identify the reprocessor and contain instructions for safe reuse, such as how or by whom the device should be reprocessed. In addition, the single-use symbol should be removed from the label.
- As with other hospital-based practices, the purchase and use of reprocessed devices by individual healthcare facilities falls under provincial and territorial jurisdiction.

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