

Ministry of Health

# COVID-19 Guidance: Information on the Use of N95 Filtering Facepiece respirators beyond the manufacturer-designated shelf life

Version 1 - March 27, 2020

This fact sheet provides information for health care workers about the use of N95 respirators beyond the manufacturer-designated shelf life. It is not intended to provide legal or medical advice.

## Highlights

- **Do not destroy N95 respirators that are beyond the manufacturer-designated shelf life**
- **N95 respirators beyond the manufacturer-designated shelf life can serve important purposes: Fit Testing, Training, and Droplet/Contact Precautions**

## Options for Uses of N95 respirators beyond the manufacturer-designated shelf life

The Ministry of Health is advising health care providers not to dispose of N95 respirators that are beyond the manufacturer-designated shelf life as these respirators can still serve an important purpose; especially during times of supply shortages.

In the context of the current COVID-19 pandemic and the increased demand and decreased supply of certain types of personal protective equipment, N95

respirators that are beyond the manufacturer-designated shelf life can be considered for the following uses:

**Fit Testing:**

N95 respirators beyond the manufacturer-designated shelf life can be used by health care workers for fit testing. Organizations that wish to consider using these respirators for fit testing need to determine whether this is appropriate for their organization and the selected respirators. In determining whether this is appropriate, several important considerations should be evaluated, including the following:

- Fit-testing should only ever be performed with N95 respirators that have been stored according to the storage conditions specified by the manufacturer.
- Before use in fit-testing, N95 respirators should be visually inspected to confirm the respirators are not distorted or damaged in any way. This includes respirator headbands, nose clip, nose foam, shell and all other components.

If an organization experiences lower-than-expected fit test pass rates while fit testing using N95 respirators beyond the manufacturer-designated shelf life, then the organization should consider discontinuing use of such respirators for fit testing and instead use respirators that are within their stated shelf life for their fit testing operations.

Organizations that choose to use N95 respirators beyond the manufacturer-designated shelf life for fit testing should ensure that such N95 respirators are kept separate from the organizations' inventory of respirators within the stated shelf life.

**Training:**

N95 respirators beyond the manufacturer-designated shelf life can be used by health care workers for training purposes and in simulation exercises. People should be trained using the same models (or similar models) to the model they are fit tested to.

If an organization has access to N95 respirators that are past their manufacturer-designated shelf life and are the same model as those used by health care workers,

it is preferred that N95s respirators past their manufacturer-designated shelf life be used for training and preserve those N95 respirators within their shelf life for use as respiratory protection.

### **Droplet and Contact Precautions:**

Where surgical masks are not available, N95 respirators beyond the manufacturer-designated shelf life may be used as a surgical mask for health care workers for Contact or Droplet Precautions.

Before using as a surgical mask, N95 respirators should be visually inspected to confirm the respirators are not distorted or damaged in any way. This includes respirator headbands, nose clip, nose foam, shell and all other components. Any model of N95 respirator can be used for droplet and contact precautions, it does not need to be the model that an individual has been fit-tested to.

N95 respirators beyond the manufacturer-designated shelf life should not be used as a surgical mask if the N95 respirator has been used for extended use/reuse or if the respirator is soiled or contaminated following splashes or sprays.

No N95 respirators should be used on patients since this type of respirators can cause breathing resistances, can be difficult for a coughing patient, and patients are not experienced in wearing this respirator.

### **Other considerations for use of N95 respirators that are beyond the manufacturer-designated shelf life: Health Canada**

N95 respirators that are past their designated shelf life are no longer NIOSH-approved, as all manufacturer-designated conditions of use must be met to maintain the NIOSH approval. However, in times of increased demand and decreased supply, consideration can be made to use these expired N95 respirators.

An expired N95 respirator can still be effective at protecting health care provider if:

- the straps are intact
- there are no visible signs of damage
- they can be fit-tested

Health care providers should inspect the respirator and perform a seal check.

There is no specific timeframe beyond the shelf life when N95 respirators would be considered unsuitable for use.

## Expiry of N95 Respirators

Many N95 respirators have a manufacturer-designated shelf life. For those N95 respirators that do not have a manufacturer-designated shelf life, please refer to the manufacturer's website for additional information on shelf life.

The straps, nose bridge, and nose foam materials may degrade over time, which can affect the quality of the fit and seal. Please consult the guidance documents provided by the Ministry of Health and Public Health Ontario for up-to-date advice on this issue.

## What is an N95 Respirator?

An N95 filtering facepiece respirator (N95 respirator) is a respiratory protective device that has been certified to certain test criteria by the National Institute of Occupational Safety and Health (NIOSH), based on the percentage of small particles it filters from the air when properly used.

The designation '95' refers to the filtering efficiency of a respirator; the "N" means it is not resistant to oil.

Individuals who are required to wear a tight-fitting respirator, such as an N95 filtering facepiece respirator must be fit tested to ensure a proper fit, as required by the manufacturer instructions and in accordance to standards such as current CSA standards.

N95 respirators are used to protect against airborne pathogens and for use in an AGMP. For information on the appropriate personal protective equipment for COVID-19, please consult the Ministry of Health's [guidance](#) for up-to-date advice on this issue. Please note that the ministry issues additional guidance, directives from the Chief Medical Officer of Health under the *Health Protection and Promotion Act* or the Cabinet may issue orders under the *Emergency Management and Civil Protection Act* during a declared emergency. These products will be issued via Situation Reports before being posted on the ministry's website.

## Other Resources

Other organizations have published information about the use of N95 respirators beyond the manufacturer-designated shelf-life. Health care organizations may choose to refer to these documents based on their clinical judgement and in consultation with their Infection Prevention and Control & Occupational Health and Safety representatives.

### Health Canada

- [Optimizing the use of masks and respirators during the COVID-19 outbreak](#)

### United States Centres for Disease Control and Prevention:

- [Strategies for Optimizing the Supply of N95 Respirators](#)
- [Release of Stockpiled N95 Filtering Facepiece Respirators Beyond the Manufacturer-Designated Shelf Life: Considerations for the COVID-19 Response](#)
- <https://www.cdc.gov/coronavirus/2019-ncov/hcp/checklist-n95-strategy-h.pdf>

### 3M:

- [Respirators Beyond Their Shelf Life – Considerations](#)