

COMMUNICABLE DISEASE INFORMATION BULLETIN

*Offered by the Communicable Disease Control and Management
Team - FNIHB-QC Indigenous Services Canada*

This edition's information →

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Contextual setting

In Canada, the 2023 forest fire season was unprecedented. In total, 18.5 million hectares have been engulfed in flames (Radio-Canada, 2023). The province of Quebec was not spared.

According to the Société de protection des forêts contre le feu (SOPFEU), with a record-breaking 4.5 million hectares of land burned, operational capacities were exceeded by the end of May. Fortunately, no human lives were lost and no principal residence or essential infrastructure destroyed. In total, 27,000 Quebecers were evacuated from their homes due to the fires or smoke (Arsenault, Radio-Canada, 2023).

According to our latest data, more than 8,000 members of First Nations communities in Quebec were evacuated during the 2023 forest fire season. A total of 12 communities issued evacuation notices (total or partial) to their members and sometimes more than once. Three communities (Mashteuiatsh, Pikogan and Pessamit) provided hosting to evacuees.

This special edition of the bulletin is a compilation of forest fire-related recommendations and documents produced during this emergency situation.

Most of the information is adapted with permission from Manitoba Health- [Exposure from Wildland Fires : Interim Guidelines for Protecting Community Health and Wellbeing](#) (PDF).

The information in the Wearing a mask section (p. 21) is adapted from the BC Centre for Disease Control - [Respiratory Protection for Wildfire Smoke](#) (PDF).



Wildfire smoke and health hazards

Smoke from wildfires can cause discomfort and adverse health effects. Some people are at greater risk of short- and long-term smoke-induced problems. Reducing exposure to smoke is the best way to limit health impacts.

To find out more on this subject, please consult:

- Health Canada - [Wildfire smoke 101: Wildfire smoke and your health](#)
- Health Canada - [Wildfire smoke 101: Combined wildfire smoke and heat](#)
- Health Canada - [Wildfire smoke and health: Information kit for partners and stakeholders](#) (PDF)
- CCOHS - [Forest Fires and Wildfire smoke](#)
- Observatoire de la prévention - [The impact of forest fires on human health](#)
- CISSS Mauricie-Centre-du-Québec - [Feux de forêt et fumée](#) (French only)



Preparation and planning

Here are a few points to consider when preparing for a potential evacuation. Preparation and planning activities must be approved by the Band council

Emergency Response Committee

- Ensure an emergency response committee is in place and each sector which may be involved in the handling of such situations are represented.
- Identify places that may be used as shelters to offer the cleanest air possible in the event of poor air quality conditions.
 - W8banaki in collaboration with the FNIHB Health Emergency Management can help you select these locations. Contact dgspniurgencesante-healthemergencyfnihb@sac-isc.gc.ca for further information on emergency management training and services.
- Draw up a contact list and decide who will be responsible for managing the evacuation.

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- Inform community members of the situation and provide them with a plan to follow in the event of relocation. Information that may be useful in drawing up a plan is presented in the following sections of the bulletin.
 - Identify experts in heating, ventilation and air conditioning systems.
 - Identify methods for monitoring indoor air quality and accessible supplies, such as air filters.
 - Put in place service agreements with municipalities or hotels, in case of evacuation.

Health centres

- Monitor air quality to support timely decisions to protect the health of the population.
 - Keep a contact list of nurses and other health care providers.
 - Check emergency supplies (e.g. first-aid kits, oxygen and oxygenation equipment, emergency kits).
 - Inform health center staff of the forest fire response plan.
 - Maintain an up-to-date list of vulnerable patients and priority at-risk individuals, including relevant clinical information and contact method, if applicable.
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Protective measures at home and in the community

In the presence of forest fires, certain steps can be taken to reduce the risk of smoke exposure inside the shelter.

List of items to consider

Here is a list of recommended measures for the public:

- Close all windows and doors
- Apply adhesive tape all around the door, except if the door is equipped with appropriate gaskets.
- Apply pre-cut plastic sheets on ventilation grids and windows if they are not perfectly sealed.
- Have a cell phone or portable phone for emergency communications.
- Turn on a radio or TV and listen for emergency information.

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- Do not operate exhaust fans, window air conditioners, clothes dryer vented outside or combustion heaters.
 - The air conditioner or central air conditioning system, if you have one, may be considered when necessary. If the air conditioner provides a fresh air option, keep the fresh-air intake closed to prevent smoke from getting inside. Make sure the filter is clean enough to allow good air flow indoors.
 - Monitor the carbon monoxide detector.
 - The size of the home, the number of occupants and the time spent in the room will impact the indoor air quality
 - If it is too hot to stay indoors with closed windows, or if you are very sensitive to smoke, find another shelter. Indoor temperatures should remain below 26°C ([Health Canada](#)).
 - Do not smoke inside.
 - Do not use wood or gas stoves and candles inside.
 - If you have an air purifier with HEPA filters, turn it on.
 - Keep in mind that many particles and other pollutants may enter even if you take all these precautions.
 - When air quality improves, even temporarily, residents should air out their homes. Clean by using a damp cloth or mop to pick up settled particles and vacuum preferably with a HEPA filter-equipped vacuum.
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To learn more about protection at home, you can consult :

- Intact Centre on Climate Adaptation – [Three step to a cost-effective firesmart home](#)
- MELFF - [Air Quality Index](#)



Supplies needed

- Rolls of duct tape
- Pre-cut plastic sheets
- Battery operated radio with spare batteries
- Flashlight with spare batteries
- Drinking water
- First aid kit
- Telephone (cell phone) for emergency instructions

Cleaner Air Centre in the Community

The term "cleaner air centre" (or "smoke-free space") refers to a temporary shelter in the community, identified and set up by ventilation specialists, offering better air quality than the home during forest fires.

- Check with your emergency response committee to find out if a smoke-free area has been set up in or near your community;
- Refer vulnerable people to smoke-free areas:
 - People with lung problems (COPD, asthma, etc.);
 - Elderly people;
 - Young children;
 - Pregnant women.

To learn more about cleaner air centre in the community, you can consult :

- EPHS – Cleaner Air Spaces (PDF with the email)
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What to do in case of evacuation

Preparing the house

Prepare the house for the possibility of an early departure, if it is safe to do so, by:

- Removing branches, leaves and other debris.
- Removing flammable items from around the house (barbecues, gas cans, etc.).
- Turn on all lights outside the house.
- Watering around the house if possible.
- Park your car so that it faces the road.

To learn more about evacuation preparations, you can consult :

- Ministère de la sécurité publique – [La trousse d'urgence](#) (French only)
- Government of Canada – [Emergency Kits](#)



List of items

Here's a list of items every household should have available in case of a possible evacuation:

- easy-to-carry shoulder bag
 - photocopies of important documents
 - ID with photo
 - medical card
 - medication list
 - insurance documents
 - financial documents
 - contact information for family and friends
 - medication for at least 72 hours
 - small flashlight and spare batteries or rechargeable flashlight
 - portable radio
 - change of clothes for each person
 - basic first-aid supplies
 - various bandages
 - antiseptic
 - tweezers
 - scissors
 - basic toiletries
 - toothbrush
 - toothpaste
 - hand towels
 - soap
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- wellness accessories
 - toys
 - card games
 - books
- amount of drinking water per person
 - optimal average consumption per person per day = 2-3L
- healthy food/snacks per person
 - sufficient to satisfy everyone's appetite
- baby items
 - infant formula
 - baby food
 - diapers
- spare glasses and contact lenses
- some cash, debit and credit cards
- pocketknife and can opener
- pet supplies
- other items may be considered according to family needs.

Evacuation order

When the evacuation order is given, you must leave your home.

- If the smoke is thick and you have to go outside, you can breathe through a wet cloth.
- Don't panic. Take the planned route or follow the authorities' instructions.

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- Move away from the danger zone. Never head towards the danger. Use the recommended evacuation route.
 - Drive carefully, with headlights on. Watch for pedestrians and emergency vehicles.
 - Report to the authorities on arrival at a temporary shelter facility and wait for their instructions.
 - If you have to leave the premises, it's important to inform the authorities.
 - Do not return home without permission from the authorities.

Pets

For [pets](#):

- If you can bring them with you to the temporary shelter, do so.
 - If not, take them to a windowless, well ventilated and easy-to-clean room in the house
 - Separate small animals from large ones.
 - Hang a sign outside indicating how many animals are inside and what type of animals they are.
 - Leave enough food and water for at least 72 hours.
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Returning home after a wildfire

Before entering the home or camp

Even if an initial assessment of the damage has been carried out, returning home or to camp is not without danger.

- Return home or to camp in daylight to get a better view of the hazards.
- Walk around the property looking for problem areas.
- Visually assess that the trees are stable.
- Look for signs of structural problems (for example: weakened roof, leaning walls, cracks and sagging floors, door that won't close).
- Document the damage by taking pictures or videos.
- Keep your pets under supervision and follow any new public health guidelines.



Safety

When in doubt about the structural integrity, do not enter and talk to an expert.

Take appropriate safety measures:

- Use personal protective equipment (PPE) appropriate to the situation (for example: gloves, gown, safety shoes, mask, goggles, etc.).
- Use a carbon monoxide detector with audible and visual alarms during high-risk work.
- If it is impossible to re-enter the property, secure the premises, lock doors, barricade windows and cover damaged areas to keep out trespassers.

Risks and hazards

Upon your arrival it's important to pay particular attention to potential hazards. To do so :

- Do not enter the house if any damages are found.
 - Pay particular attention to the fine particles contained in smoke, ashes, soot and dust that may have settled outside or inside the house.
 - Call in specialized companies in disaster clean-up if necessary
 - Check the area around the house for nails, wood splinters, glass shards, pieces of metal or concrete.
 - Don't step on damaged structures, debris or ashes (ashes can hide ash pits in which hidden coals can be found).
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- Stay away from damaged power lines or wires, and call the authorities if you see any.
 - Watch for water or environmental advisories following a disaster (for potential environmental contamination).
 - Visually inspect any hazardous household materials that may have been damaged or leaking (cleaners, paint, batteries, gas tanks, etc.).

Improving air quality at home or at camp

Many precautions can be taken, outside or inside, to help improve air quality within the home or camp.

- Wet down fire debris.
 - Remove ashes and soot as much as possible, and place in a container to prevent them from being handled (for example: garbage can liners).
 - Rinse the outside of air intakes and air conditioners.
 - Avoid using an air hose or leaf blower, as these may cause even more particles to enter inside.
 - Inspect and clean ventilation, air conditioning and heating systems and their ducts.
 - Replace filters as soon as possible upon your return.
 - Use a humidifier/dehumidifier to maintain humidity levels between 30 and 50% to reduce the presence of particles in the air.
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- Clean affected areas using white vinegar (eliminates odors and smoke residues), mild detergent or other appropriate solutions. Rinse thoroughly afterwards.
 - Remove any excess water that may have accumulated to prevent mold.

DO NOT USE BLEACH AS IT MAY INTERACT WITH FLAME RETARDANTS

When outdoor air quality is good:

- Get the indoor air circulating by using a fan, opening windows and running the range hood.
- Choose high-efficiency particulate air (HEPA) ventilation systems when possible

When outdoor air quality is affected (notice of poor air quality or demolition work in the area) :

- Avoid outdoor activities
 - Close doors and windows
 - Limit the use of the range hood to reduce air intake
 - Set ventilation systems and air exchanger to "air recirculation" mode whenever possible
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Water

- Check drinking water status
 - safe to drink or boil water advisory
- Open taps for 5 minutes to remove stagnant water from pipes
- In case of doubt or sudden change in color, odor or taste:
 - do not consume the water
 - contact the community-based water monitoring advisor or your band council
- If chemical contamination is suspected:
 - do not consume or boil water
 - contact the community-based water monitoring advisor or your band council
 - use bottled water.

Food

- Check the quality and expiration date of perishable foods to avoid food poisoning.
 - Any food exposed to heat, smoke or soot can be altered.
 - This includes even dry, unopened or jarred products, as the heat of the fire can compromise the safety seal.
 - For medication, contact your health centre.
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Food - If a power failure has occurred or is suspected for

More than 6 hours

- Refrigerated food:
 - ensure it's still safe for consumption
 - must remain at 4 °C or cooler
- Frozen foods can generally be kept:
 - 24h in a half-full freezer
 - 48h in a full freezer

An extended period of time

- Sort all refrigerated and frozen foods
 - Refrigerator: Spoiled milk is usually a good indicator
 - Freezer: Ice cream which appears to have been thawed and refrozen is a good indicator
- Clean and disinfect refrigerators and freezers

[Keeping or throwing away food after a power outage or flood](#)

Food - land resources



Plants

Exposed to fire retardant

 **WARNING: DO NOT CONSUME**

Exposed to ash and soot

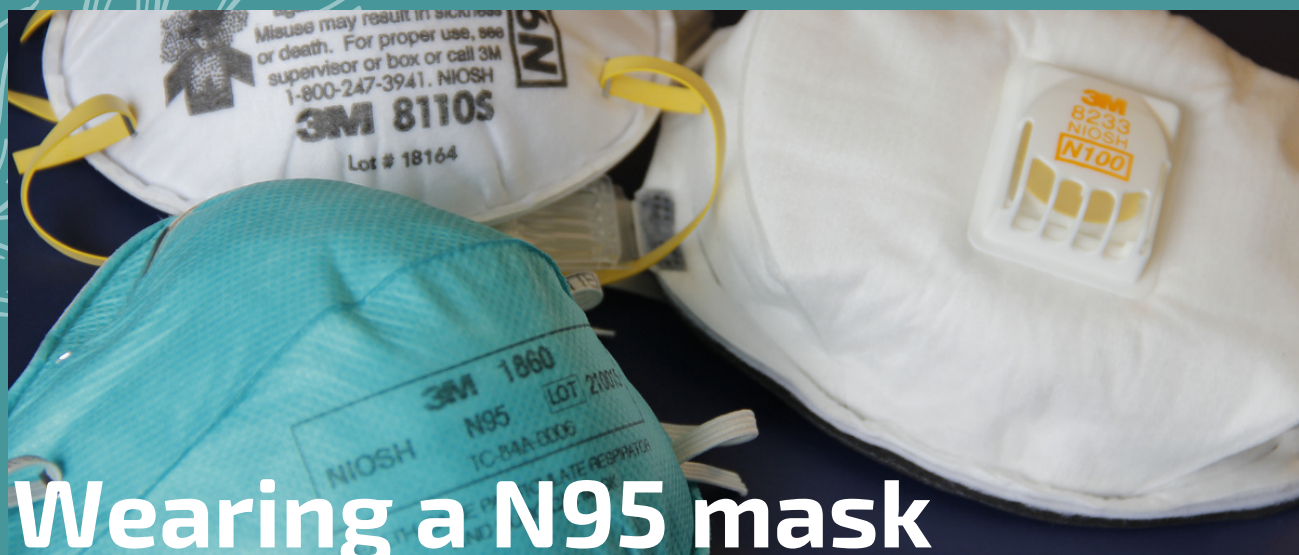
Wash with fresh running water to remove all dirt and particles before consumption



Lakes

 **CAUTION: RISK OF CONTAMINATION**

In the absence of current, small lakes can contain high concentrations of pollutants and debris



Wearing a N95 mask

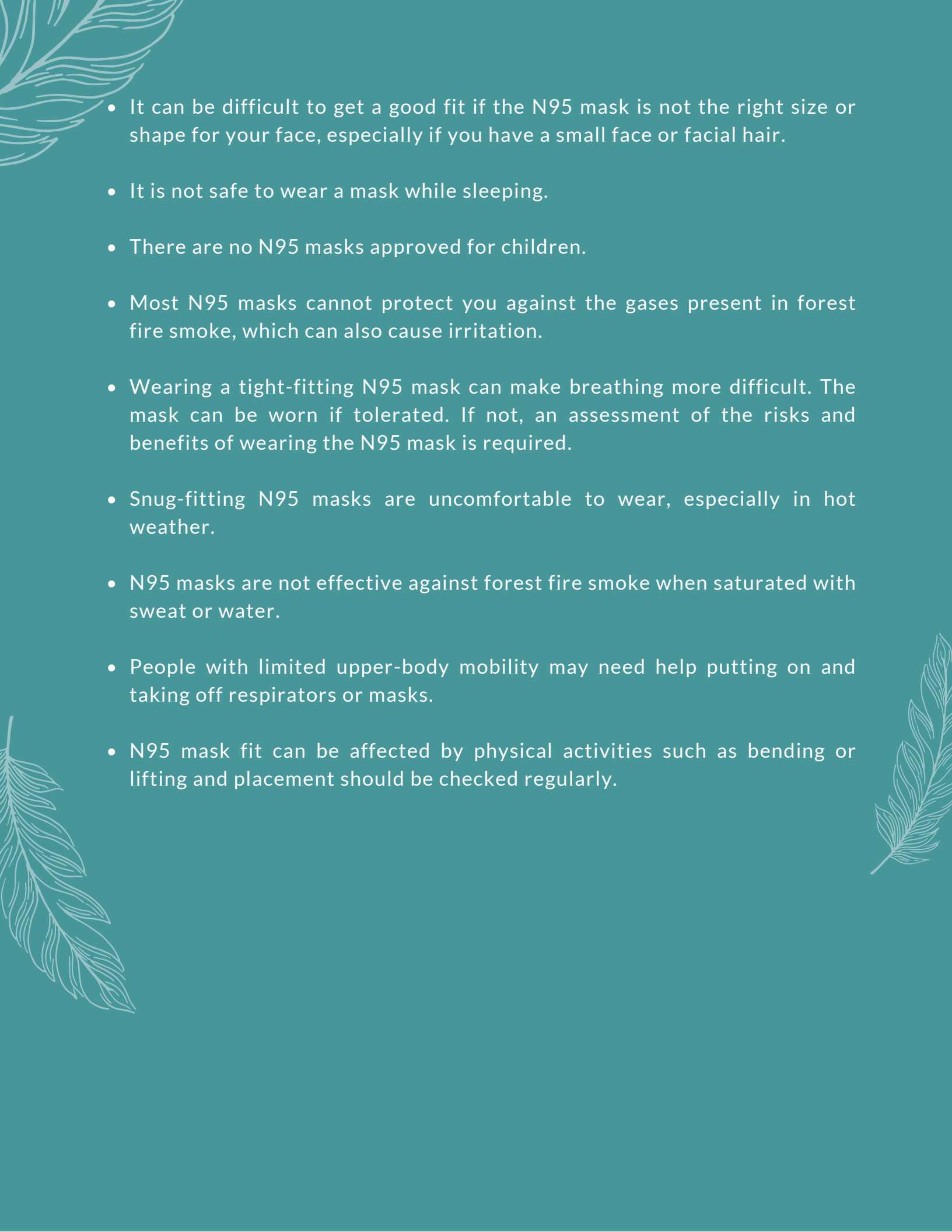
The best way to protect your health from forest fire smoke is to seek cleaner air.

If you can't access cleaner air, certain masks can reduce your exposure to forest fire smoke. Wearing a N95 mask should be **considered a last resort**, when it is impossible to avoid working outdoors, for example.

Limits of N95 respirators

If you decide to wear a N95 mask, **you need to be aware of limitations and potential risks.**

- Masks are marked with a combinations of letters and numbers, such as N95, KN95 and KF94. These products are very similar, but the markings indicate that the standards used to test them are different.
- A good fit is the most important element in filtering fine particles from the air. Inhaled air must pass through the mask, not around it.
- A well-fitted N95 mask filters the majority of wildfire smoke's fine particles.

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- It can be difficult to get a good fit if the N95 mask is not the right size or shape for your face, especially if you have a small face or facial hair.
 - It is not safe to wear a mask while sleeping.
 - There are no N95 masks approved for children.
 - Most N95 masks cannot protect you against the gases present in forest fire smoke, which can also cause irritation.
 - Wearing a tight-fitting N95 mask can make breathing more difficult. The mask can be worn if tolerated. If not, an assessment of the risks and benefits of wearing the N95 mask is required.
 - Snug-fitting N95 masks are uncomfortable to wear, especially in hot weather.
 - N95 masks are not effective against forest fire smoke when saturated with sweat or water.
 - People with limited upper-body mobility may need help putting on and taking off respirators or masks.
 - N95 mask fit can be affected by physical activities such as bending or lifting and placement should be checked regularly.

Steps to put on the N95 respirator



Wash your hands



Inspect the N95 respirator



Separate the straps if needed



Put the N95 respirator without touching the inside



Steps to put on the N95 respirator



Put the upper strap and then the lower strap



Ensure that glasses, hair, fabric, straps and jewelry do not compromise the seal



Adjust nose clip with both hands



Verify the seal with positive and negative pressure test



Type N95 respirator leak check

Negative pressure test

1. Place both hand on the mask, at nose level
2. Inhale deeply
3. The face piece should collapse towards the face.



Positive pressure test

1. Place both hand on the mask, at nose level
2. Gently blow
3. Check that there are no air leaks
4. The face piece should bulge out a little.



Steps to remove an N95 respirator

Wash your hands

Over the garbage can, slightly lean forward

Remove the lower strap from the back, then do the same with the upper strap.

Do not touch the outside of the mask

Throw out the mask

Wash your hands