



# SAFER SEPTEMBER AND BEYOND

The 2022-2023 school year in New Brunswick was the first full school year without any pandemic protections. It was also the first school year after most kids had been infected with COVID-19 during the spring, after the political decision to remove all protections on March 14, 2022.

The fall & winter of 2022-2023 brought unprecedented child hospitalizations, illnesses, and medication shortages. We've also seen illnesses and severe outcomes that were rare happen more and more frequently.

This was **predicted and preventable**, if our political and public health leaders listened to science.

Please use this toolkit to inform yourself on how to lower the chances of getting sick. If you or someone in your household gets sick, hopefully the information will help to keep the others in your household from catching whatever illness it is.

We hope this information will empower you to protect yourself and your family as we go into another school year and cold & flu season with the constant presence of COVID-19, no protections, and even less information than last year.

# QUESTIONS FOR SCHOOL DISTRICTS, ADMINS & TEACHERS

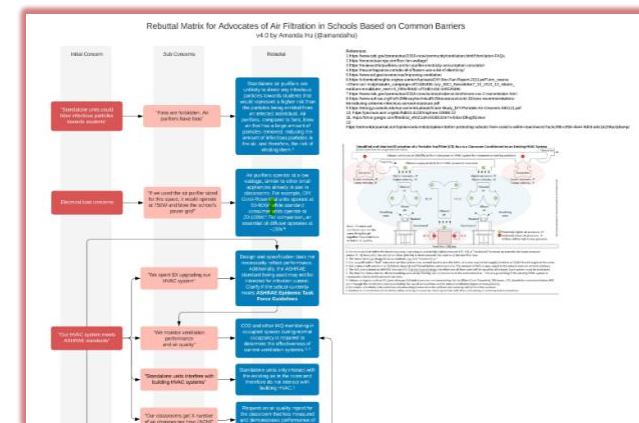


1. What are you doing to keep track of SARS-CoV-2 infections in schools and classrooms?
2. How are you planning to protect the children in your care?
3. What do you understand about how SARS-CoV-2 is transmitted?
4. How can we work together to protect my child/ren?
5. What resources do you need from me?
6. Will you allow parents to donate additional HEPA filters or air filtration units?
7. Can I donate KN95 masks?
8. Can my child bring a CO2 monitor to class?

9. Will teachers keep windows and doors open as much as possible?
10. Will you provide a safe, well ventilated lunch space for students who want to use it?

## REBUTTALS

Amanda Hu from PoP Alberta created a guide for responding to administrators and teachers who are resistant to any protections in school. Please visit the interactive guide below.



PLEASE VISIT

<https://newbrunswickschools.wordpress.com>



TO REPORT CASES  
Report a Case of COVID-19



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School Name (required)

Date of Positive Test (required)

Last Day of School Attended

Send



# WHAT IS COVID-19?

COVID-19 is a contagious disease caused by the Severe Acute Respiratory Syndrome coronavirus 2 (SARS-CoV-2 ). It:

- spreads through the air when you breathe, cough, talk, sing, or sneeze
- causes cold or flu-like symptoms at first
- damages your immune system
- causes brain, heart, blood, and organ damage, even in mild or asymptomatic cases
- can re-infect you in a matter of weeks

Despite what New Brunswick Public Health says, COVID-19 is **NOT**:

- a cold
- spread mostly on surfaces or through droplets
- influenza/ the flu
- mild
- inevitable
- one and done
- seasonal

# WHAT IS LONG COVID/POST-COVID CONDITION



After having COVID-19, some people will have symptoms for more than 3 months. This is called Post-COVID Condition, more commonly known as Long COVID. Long COVID:

- happens in roughly 1 out of every 10 infections
- can appear weeks or months after first getting sick
- occurs even in mild & asymptomatic cases
- symptoms are most commonly fatigue, brain fog/damage, and issues with heart rate and blood clots
- can get worse with any exertion
- symptoms may disappear and reappear
- has no cure and no effective treatment



# WHAT IS RSV?

Last winter, RSV caused a major surge of child hospitalizations across Canada. RSV is a contagious disease caused by the respiratory syncytial virus. It:

- spreads through the air when you breathe, cough, talk, sing, or sneeze, as well as on surfaces
- causes cold or flu-like symptoms
- is incredibly common
- can cause pneumonia and/or bronchiolitis
- can re-infect you quickly

RSV is typically only severe for infants, older adults, and those with compromised immune systems.

However, with widespread COVID-19 infections and the immune system damage caused by those infections, it's becoming more common to see those who wouldn't normally be considered "high risk" having severe problems, including hospitalization and death.

This was **NOT THE NORM** before the pandemic.

# WHAT IS STREP THROAT



**Strep throat is an infectious illness caused by several bacteria in the group A Streptococcus family (group A Strep). Strep throat:**

- **spreads through the air when you breathe, talk, cough, or sneeze, and on surfaces**
- **causes a severe sore throat, with red, swollen tonsils making it painful to swallow**
- **may cause white patches or streaks at the back of the throat**
- **does NOT cause a runny nose or cough**
- **can be diagnosed with a rapid strep test or throat culture**
- **is treated with antibiotics**
- **can cause scarlet fever, which used to be a significant cause of childhood mortality**

**Since the discovery of antibiotics, the severe risks of strep throat and scarlet fever, like amputation and death, have dropped. However, the fall of 2022 saw high rates of severe illness and death in children and adults. Severe illness and death has continued into 2023 and is under investigation in many countries.**

**This was NOT THE NORM prior to the pandemic.**



# PROTECTING YOURSELF

While wearing a mask is one of the best ways to protect yourself, there are other ways to lower the chances of getting sick.

Some studies show Cetylpyridinium Chloride (CPC), an ingredient in some mouthwashes, is effective at reducing viruses.

Nasal sprays and rinses, especially those containing carrageenan, nitric oxide, and/or xylitol, have also been shown to reduce viruses in the nose.

Daily mouth and nasal rinses may help protect against SARS-CoV-2, RSV, and other viruses circulating in schools and other places where people are.



# PoPNB SCHOOL SUPPLY LIST



Last year, there were significant medication shortages. Children's fever and pain medication was almost impossible to find. To avoid the panic and stress of finding medicine once your child is sick, here are some things you will want to have on hand, and in enough quantity to last the full length of an illness:

- acetaminophen, appropriate dosage for your child
- ibuprofen, appropriate dosage for your child
- age-appropriate cough & cold medicine (be careful not to overdose as many of these already contain ibuprofen or acetaminophen)
- Benadryl or other allergy medications
- Gravol or other anti-nauseants
- CPC mouthwash like Listerine Smart Rinse
- nasal spray/rinse like Betadine Cold Defence Nasal Spray
- disinfectant cleaners, like Lysol or 1:10 ratio of disinfecting bleach:water
- thermometer
- anything your child will eat or drink when sick – popsicles, puddings, yogurt, juice, Gatorade, toast, bananas, Pedialyte, breast milk or formula for infants
- respirator masks
- air purifiers & CR boxes
- COVID-19 rapid tests
- oximeter for measuring blood oxygen levels
- contact information for your school, doctor, 811, or anyone else you may need to inform



# WHAT TO DO IF SOMEONE GETS SICK

Despite our best efforts and intentions, sometimes we still get sick. Here are some tips on what to do if you or your child get sick this school year:

- **test for COVID-19 using a rapid test every other day – tests often don't show positive the first day of symptoms**
- **isolate the sick person if possible**
- **wear a respirator when around the sick person, and have the sick person mask if able**
- **have an air purifier or CR box running – if you only have one, put it in the room with the sick person**
- **open windows as weather permits, even 10-20 minutes of fresh air can help**
- **use nasal spray and CPC mouthwash, with a separate spray for the sick person**
- **keep the sick person hydrated**
- **monitor the sick person's temperature, keep note of times of medication is given to avoid accidental overdose**

# WHAT TO DO IF SOMEONE GETS REALLY SICK



There are some signs that someone is very, very sick. If these symptoms are present, you should immediately call 811, your doctor or hospital to get proper medical advice and care:

- blue-tinged fingernails
- laboured breathing
- fever that doesn't break with medication
- high fever
- lethargy
- yellow-tinged eyes

Dehydration, especially in young children, can be very dangerous. Some signs of dehydration:

- skin doesn't bounce back when pinched
- sunken eyes
- pale skin
- no longer peeing

**DO NOT ignore your gut. If you think something is wrong, call 811 or your doctor.**

**IF THE SICK PERSON BECOMES UNRESPONSIVE, CALL 911**  
**SEEK MEDICAL CARE IMMEDIATELY**



# PROTECT YOURSELF AND OTHERS

Wearing a **good, tight-fitting mask (N95 or better)** is an effective way to reduce the chance of becoming infected or infecting others.

Two-way masking (everybody wearing masks) is much more effective than one-way masking (only one person wearing a mask).

Without masks, Omicron can infect a person in under 2 minutes.

## TIME REQUIRED TO REACH INFECTIOUS DOSE INHALED BY NON-INFECTED PERSON

NON-INFECTED PERSON IS WEARING

	NOTHING	CLOTH	SM	SM, FIT	N95	N95, FIT
NOTHING	1.7 MIN	2.4 MIN	3.2 MIN	8 MIN	16.4 MIN	2.7 HRS
CLOTH	2.8 MIN	4 MIN	5.2 MIN	13.6 MIN	27.2 MIN	4.4 HRS
SM	3.2 MIN	4.8 MIN	6.4 MIN	16.4 MIN	32.4 MIN	5.6 HRS
SM, FIT	8 MIN	11.6 MIN	16.4 MIN	40.8 MIN	81.6 MIN	13.6 HRS
N95	16 MIN	23.2 MIN	32.4 MIN	81.6 MIN	2.7 HRS	27.2 HRS
N95, FIT	2.2 HRS	4 HRS	5.6 HRS	32.6 HRS	27.2 HRS	267 HRS

BASED ON THEOMICRON STRAIN

SM: Surgical Mask; SM,FIT: Surgical Mask with fit enhancing brace  
N95: N95 or similar respirator; N95,FIT: fit tested N95 respirator



# PROTECTION DURING DIY PUBLIC HEALTH

While masks aren't required in most places, masking is still the best way you can protect yourself when in a place where you don't know the ventilation, filtration, or if there are contagious people. A respirator offers the best level of protection, above and beyond surgical or cloth masks. While any mask is better than no mask, we do not recommend either surgical or cloth masks, unless there is no other choice.

Three options for excellent protection are:

- **Elastomeric respirators.** These are reusable, and you've likely seen or used them for things like sanding drywall or spraying paints and chemicals.
- **N95+ respirators.** These are disposable and have straps that go around your head.
- **KN95/KF94/CA-N95 respirators.** These are respirators that work very well and have loops that go around your ears to secure them.

# MASKS AND COVID

Masks are one of the best ways to protect yourself from SARS-CoV-2 by filtering the air you breathe

MASK	TYPE	FIT	COST	WHERE TO BUY
ENVO MASK	ELASTOMERIC RESPIRATOR	VARIOUS SIZES AVAILABLE	\$\$\$\$\$	<a href="http://envomask.com">envomask.com</a>
FLO MASK PRO	ELASTOMERIC RESPIRATOR	ADULT	\$\$\$\$\$	<a href="http://flomask.com">flomask.com</a>
FLO MASK KIDS	ELASTOMERIC RESPIRATOR	UNDER 10	\$\$\$\$	<a href="http://donatemask.ca">donatemask.ca</a>
VITACORE N99	DISPOSABLE RESPIRATOR	ADULT & CHILD SIZES	\$\$\$	<a href="http://canadastrong.ca">canadastrong.ca</a>
3M AURA	DISPOSABLE RESPIRATOR	ADULT	\$\$\$	<a href="http://canadiantire.ca">canadiantire.ca</a>
BREATHETEQ	DISPOSABLE RESPIRATOR	VARIOUS SIZES AVAILABLE	\$\$\$	<a href="http://canadastrong.ca">canadastrong.ca</a>
CANADAMASQ Q100	DISPOSABLE RESPIRATOR	VARIOUS SIZES AVAILABLE	\$\$	<a href="http://canadastrong.ca">canadastrong.ca</a>
SURGICAL W/ BRACE	DISPOSABLE MEDICAL MASK	ADULT & CHILD SIZES	\$\$	<a href="http://www.fixthemask.com">www.fixthemask.com</a>

# A WORD ON FIT

How your mask fits your face is the biggest factor in how much protection you get.

Proper fit testing, like what they do in hospitals, is difficult and expensive to do at home. You can do an at-home fit assessment using a nebulizer and bitrex solution. If you taste the solution, your mask has air leaks.

Doing a seal check can help quickly assess how well your mask fits. We recommend doing a seal check every time you put your mask on.



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**The most expensive, highest quality respirator won't offer you good protection if it doesn't fit your face well.**

# HOW TO DO A SEAL CHECK

A high quality, fitted mask provides good protection against getting and spreading Covid-19.

Doing an at-home seal check can help you get a good seal, lowering the unfiltered air you breathe.

To check your mask's seal:

- Form nose wire to the nose and cheeks
- Place hands on top, bottom and both sides, and breathe out. If you feel airflow, adjust the straps and nose wire snugly, and try again



You should feel no or very little air escaping from your mask when you breathe out



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**PoPNB knows respirators are expensive in an already expensive world. So, we did a Back-to-School mask fundraiser.**

**If you need respirators or rapid tests, please reach out to the PoPNB team at**

**[popnb@protectnb.ca](mailto:popnb@protectnb.ca)**

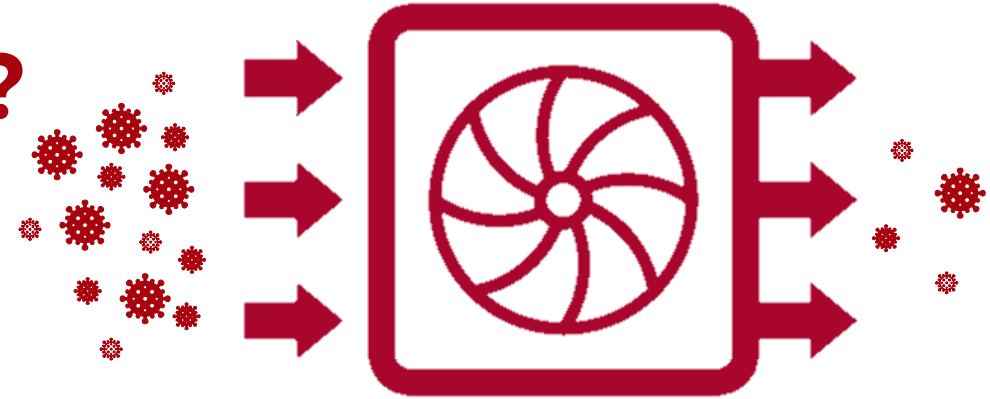
# WHAT ARE HEPA FILTERS?

**COVID-19** spreads through infected air people breathe out. The virus can hang in the air for hours indoors, even after the infected person leaves.

**HEPA filters** are high efficiency filters that can remove dust, pollen, mold, bacteria and viruses.

Filtering air through a **HEPA** unit can reduce the amount of virus in the air we breathe.

**Personal HEPA filters**, like the PureZone mini and NOMA Personal air purifier, may be used as an additional layer of protection, with masks and increased ventilation overall. However, they should not be used as the **ONLY** protection because the science isn't clear on how effective they are.

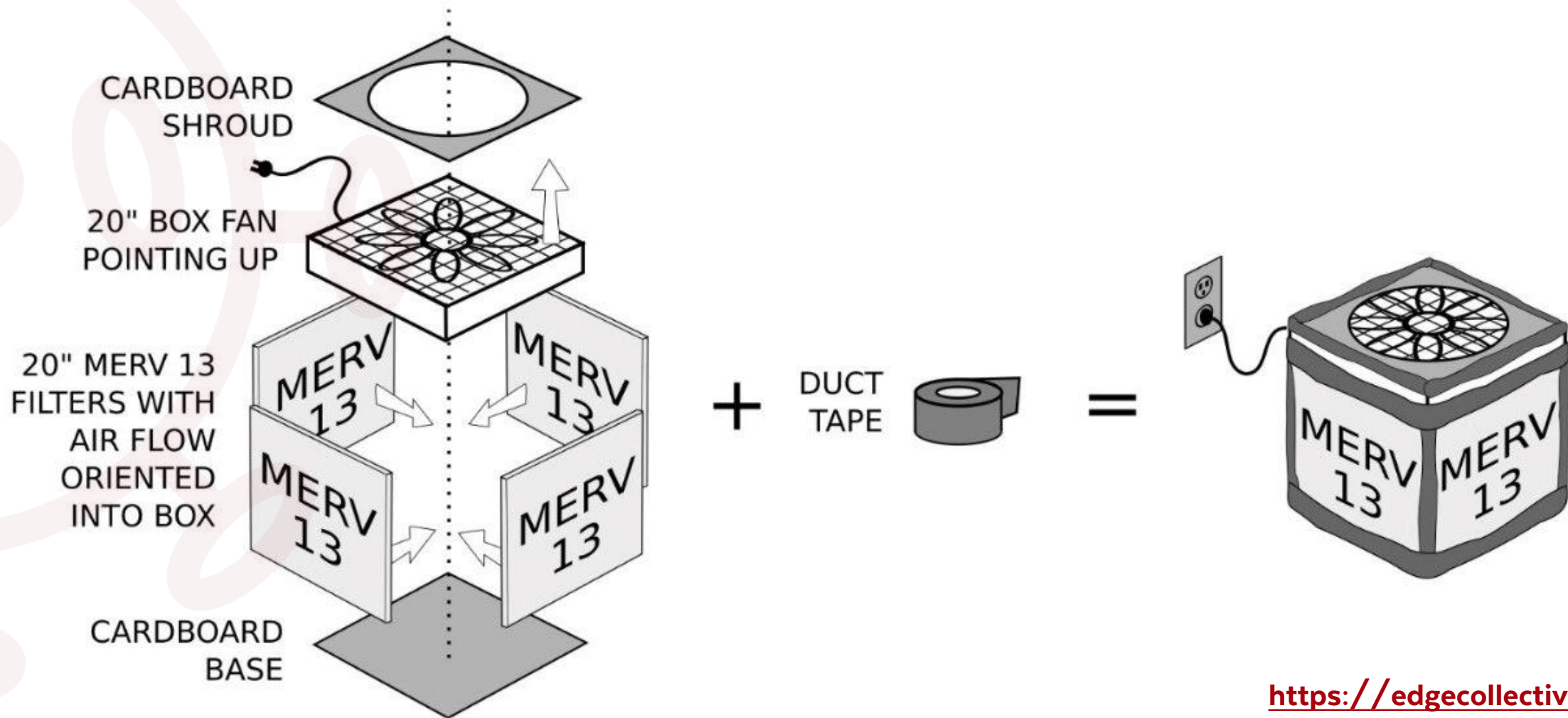


HEPA UNIT	RELIABILITY	PRICE	WHERE TO BUY
Honeywell HPA300	★ ★ ★ ★	\$\$\$ \$	Stores and online
Levoit Core 300	★ ★ ★	\$\$\$	<a href="https://www.amazon.ca">Amazon.ca</a>
Smart Air Sqair	★ ★ ★	\$\$\$	<a href="https://www.smarterhepa.com">Smarterhepa.com</a>
PureZone Mini Personal Air Purifier	★ ★	\$\$	<a href="https://www.amazon.ca">amazon.ca</a>
NOMA Personal Air Purifier	★ ★	\$\$	<a href="https://www.canadiantire.ca">Canadian Tire</a>

# HOW TO BUILD A CORSI-ROSENTHAL BOX



A **CORSI-ROSENTHAL BOX** is a home-made air purifier. It's a simple device, made using a box fan, furnace filters, cardboard and duct tape.



<https://edgecollective.io/airbo>

x

# HOW TO USE A CO2 MONITOR

Covid-19 spreads through infected air people breathe out.

A CO2 monitor measures the level of carbon dioxide in the air. This tells us how much air we're breathing that has come from other people, people who may be infectious.

It can give you an idea of how risky an indoor place is. The higher the amount of CO2, the more of other people's air we're breathing.

You want to have a CO2 level as close to 400ppm as possible. This is considered equal to being outside and means the ventilation is good. While this may mean the risk is lower, it's still not zero.



CO2 MONITOR	RELIABILITY	PRICE	WHERE TO BUY
Aranet	★★★★★	\$\$\$	<a href="http://aranet.com">http://aranet.com</a>
co2.click	★★★★☆	\$\$	<a href="http://co2.click">http://co2.click</a>
Vitalight	★★★	\$	<a href="https://donatema.sk.ca/store">https://donatema.sk.ca/store</a>
Inkbird	★★★	\$	<a href="https://www.amazon.ca">https://www.amazon.ca</a>

# HELP REDUCE THE SPREAD OF COVID-19



**Stay up to date with  
COVID-19 vaccinations**



**Wear a well-constructed  
well-fitting mask**



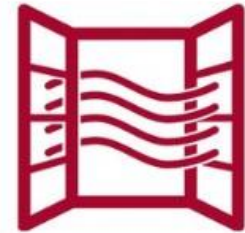
**Utilize rapid tests as  
often as you are able**



**Stay home if you  
are sick or experiencing  
symptoms, even if mild**



**Stay informed about  
COVID-19 impacts, data,  
and the risks of activities  
and make informed decisions**



**Improve indoor ventilation  
and filter indoor air**

# PREVENT HOUSEHOLD TRANSMISSION



When someone in your house catches COVID-19, RSV, Influenza, or any other illness, it IS possible to keep it from spreading

- ISOLATE the infected person
- VENTILATE and FILTER the air in the room with infected and the home
- MASK when the infected person leaves isolation



**ISOLATE**  
INFECTED PEOPLE



**VENTILATE**  
INDOOR SPACES



**FILTER**  
INDOOR AIR



**MASK**  
(KN95 OR BETTER)



# HOW TO PROTECT YOURSELF FROM SICKNESS

Fresh air reduces the accumulation of contagious disease particles.

HEPA and MERV 13 filters remove contagious particles from the air.

Sanitization and hand hygiene can remove contagious particles from skin and surfaces.



**SANITIZE**  
SURFACES



**WASH**  
HANDS



**VENTILATE**  
INDOOR SPACES



**FILTER**  
INDOOR AIR



**MASK**  
(KN95 OR BETTER)

# WHAT YOU CAN DO TO MAKE THINGS BETTER



In June 2023, the New Brunswick Legislature passed a motion to update and modernize the Clean Air Act. As the school year approaches, there is still so much work to be done. The Act itself has not been updated.

Many of New Brunswick schools lack mechanical ventilation and have been outfitted with HEPA air purifiers that are substandard, despite their exorbitant cost. Parents and volunteers are not allowed to donate CR boxes or better HEPA air purifiers. There's no transparency on air quality in our schools.

The best thing you can do is reach out to the Department of Education, the super-intendent of your school district, your MLA, and the Minister of Education to demand clean air and healthy schools for students.

[Contact Minister Hogan here](#)

[Find your MLA here](#)

[Find your Anglophone superintendent here](#)

[Find your Francophone superintendent here](#)



# RESOURCES



PoP NB

- [ASHRAE 241P](#)
- [Long COVID RTI](#)
- [It's Airborne site](#)
- [WATCH graphics](#)
- [CR box graphic in French](#)
- [Engineers Canada statement on ventilation](#)
- [NB Clean Air Act motion](#)
- [Chief Science Advisor report](#)
- [White House Clean Indoor Air Summit](#)
- [Canadian National Collaborating Centre for Environmental Health report on CR boxes](#)
- [John Snow Project](#)
- [Ontario School Safety resources](#)
- [Vaccine booking site](#)
- [RAT booking site](#)
- [Ontario Society of Professional Engineers Indoor Air Quality](#)
- [Occupational Health Clinics for Ontario Workers Back to School Safety Session](#)
- [Protect Our Province BC open letter to BC government for safe schools](#)

# REFERENCES



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## AIRBORNE TRANSMISSION:

- <https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/sars-cov-2-transmission.html>
- <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/main-modes-transmission.html>
- <https://www.who.int/news-room/questions-and-answers/item/coronavirus-disease-covid-19-how-is-it-transmitted>
- <https://pubmed.ncbi.nlm.nih.gov/15825024/> (SARS)
- <https://pubmed.ncbi.nlm.nih.gov/32294574/>
- <https://pubmed.ncbi.nlm.nih.gov/32356927/>
- <https://pubmed.ncbi.nlm.nih.gov/30704406/>
- <http://urgencyofequity.org>
- <https://www.whitehouse.gov/ostp/news-updates/2022/03/23/lets-clear-the-air-on-covid/>
- <https://www.covidisairborne.org/>
- <https://cleanaircrew.org/>
- <https://academic.oup.com/cid/article/76/10/1854/7034152>

## MASKS:

- <https://bettermasks.its-airborne.org/>
- [https://ospe.on.ca/wp-content/uploads/2023/03/Face\\_Covering\\_Guidance\\_Mar15.pdf](https://ospe.on.ca/wp-content/uploads/2023/03/Face_Covering_Guidance_Mar15.pdf)
- <https://pingthread.com/thread/1652394034055323648>

## FILTRATION:

- <https://www.medrxiv.org/content/10.1101/2021.09.16.21263684v1>

- <https://pubmed.ncbi.nlm.nih.gov/32845618/>

- <https://corsirosesthalfoundation.org>

## POST-COVID CONDITION/LONG COVID

- <https://www.medrxiv.org/content/10.1101/2022.03.10.22272237v1>
- [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(22\)01214-4/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)01214-4/fulltext)

## REBUTTALS TO ADMINISTRATORS

- <https://drive.google.com/file/d/12Pk8fpwXH8gzGldddZqI1pU2ZRZVn3jH/view?usp=sharing>

## NASAL SPRAYS & MOUTHWASHES

- <https://pubmed.ncbi.nlm.nih.gov/34282982/>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8493111/>

## RSV

- <https://www.cdc.gov/rsv/index.html>

## STREP THROAT

- <https://asm.org/Articles/2023/January/Scarlet-Fever-A-Deadly-History-and-How-it-Prevails>
- [cdc.gov/groupastrep/diseases-public/strep-throat.html#how-strep-throat-spreads](https://www.cdc.gov/groupastrep/diseases-public/strep-throat.html#how-strep-throat-spreads)
- <https://www.cbc.ca/radio/whitecoat/group-a-strep-infections-1.6687216>

## SEEKING HELP

- <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/symptoms.html>