

# COVID-19 Practical Solutions Based on Public Health Fundamentals for Homes and Workplaces

## IT'S IN THE AIR *What can you do to avoid the virus?*

Vaccines are necessary, but not enough to protect us, our loved ones and our communities from the virus behind COVID-19  
In addition to vaccines, we need **clean respirable air**.



### CLEAR THE AIR

Meet others outdoors if you can.

Get lots of fresh air inside:

- Keep work ventilation and furnace fans **ON** to bring in outside air.
- Open windows if they can really add fresh air.

Change air with fresh, cleaned air at least six times /hour (6 ACH\*) in workplaces, schools, gyms, other places people gather. Maximize in homes as able.

Evaluate and improve ventilation:

- Clean air with better filters (MERV-13 if possible).
- Supplement with portable HEPA-filter units, sized to the space. Avoid ozone.
- Make DIY filter + fan boxes for homes, neighbours, community groups.

\*Air changes per hour



### MASK SMART

Masks are **NOT** all the same.

Good **fit, filter and function** are essential to protect you *and* others.

- Fit:**
- No gaps on the sides or top.
  - A good seal at all the edges.
  - Metal nose pieces are essential.

**Filter:** Cloth does **not** filter out the small virus-laden particles. Only specially-designed melt-blown materials do.

**Function:**

- Respirators protect the user and those around them.
- Loose-fitting and/or fabric masks generally only protect others from you.

**In most occupied spaces, you need a respirator, especially with Omicron.**

Choose one that fits well and is easy to breathe through.



### CLOSE THE GAPS

Fewer people inside for less time – everywhere – based on the space/size.

Limit the people you see – be cautious of the risk they bring.

Distance matters inside and out.

**Remember – You can share the virus without symptoms!**

Use Rapid Antigen Tests (RATs) right before meeting others. If even faintly positive: isolate, inform contacts, follow guidelines and get a PCR test asap.

Don't meet others if you have cold or flu symptoms, even if the RAT result is negative.

**STOP:**

- Blocking air circulation with plexiglass, unless direct face-to-face risk.
- Disinfecting (rarely needed and toxic).  
Clean with soap, water and microfibre.

### CHECK FRESH AIR WITH CO<sub>2</sub> MONITORS

- 600 ppm: okay
- 800 ppm: caution
- >1,000 ppm: action needed

### AIM FOR CERTIFIED CA-N95 OR N95 RESPIRATORS OR BETTER.

Improve how other masks fit with headstrap tighteners and/or a brace.

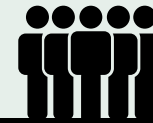
### JOIN / SUPPORT GROUPS

pushing for the best protection for all of us (e.g. Zero Covid, Protect our Province\*, Masks4Canada)

\*Alberta | British Columbia | Quebec

See [Masks4Canada](#) for more information.

# COVID-19 PREVENTION



**WE CANNOT DO THIS ALONE**

## We Need Government Leadership and Support

World-wide, there is growing acceptance that COVID-19 spreads in the air that we breathe.

Yet, huge gaps remain between the knowledge and official policies/guidance about what protects us from airborne viruses.

There are too many confusing and oblique messages about “improved ventilation” and “high quality masks”. Unclear guidance also frightens some about the costs of what to do in public buildings, and workplaces (including hospitals).

There are **practical solutions** that need to be clarified in coordinated government policies that are implemented consistently across all jurisdictions.

Only then can professionals like **occupational hygienists, ventilation engineers, respirator specialists** and **aerosol scientists** join **public health practitioners** to protect us all effectively.

Together, they provide a layered approach that clears the air and closes the gaps in the short and long-term.

Therefore, as individuals and organizations, we **call on governments** to work immediately with those professionals to **provide clear, detailed, scientifically-supported information**, in multiple languages, about:

- how the virus transmits through the air and solutions required for specific settings
- the need for reduced contacts, and fewer people inside for less time
- the fine points of improved ventilation, including:
  - targets for air changes / hour or volume / person
  - carbon dioxide (CO<sub>2</sub>) monitoring
  - filter quality, inspection and maintenance for workplaces, homes, and other spaces.
- temporary measures like the DIY filter and fan boxes or commercial air filtering units, especially for spaces with inadequate or no ventilation
- basics about face covering fit, filtration and function, and why we all need Canadian- or US-certified N95 respirators or better (see CAPPEM)

- mandatory certified respirators for all enclosed workplaces (including health care facilities, schools, construction sites) and other places where people gather, using the CSA Z94.4 respirator standard for bioaerosols (like SARS-Co-V2)
- supply free certified N95 respirators as other countries do

### We also call on them to:

- ensure national consistency
- provide financial resources for these efforts
- provide a kit at vaccination sites with certified respirators, rapid tests, and instructions about how to use them
- enforce and update health and safety laws and regulations to protect workers
- set new indoor air quality standards for all workplaces and gathering spaces to protect occupants from infectious bioaerosols and other airborne hazards

A message from the  
**Canadian Aerosol  
Transmission Coalition**,  
supported by:

