

***Statistics are people with
the tears wiped away:***

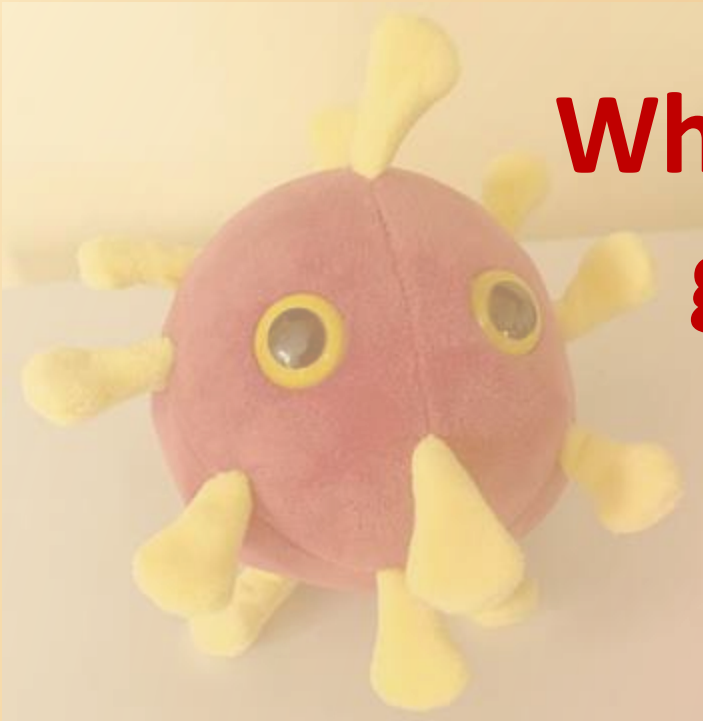
**Why have so many workers
got sick or died in this
pandemic?**

Dorothy Wigmore
(Occupational health specialist)

Presented at

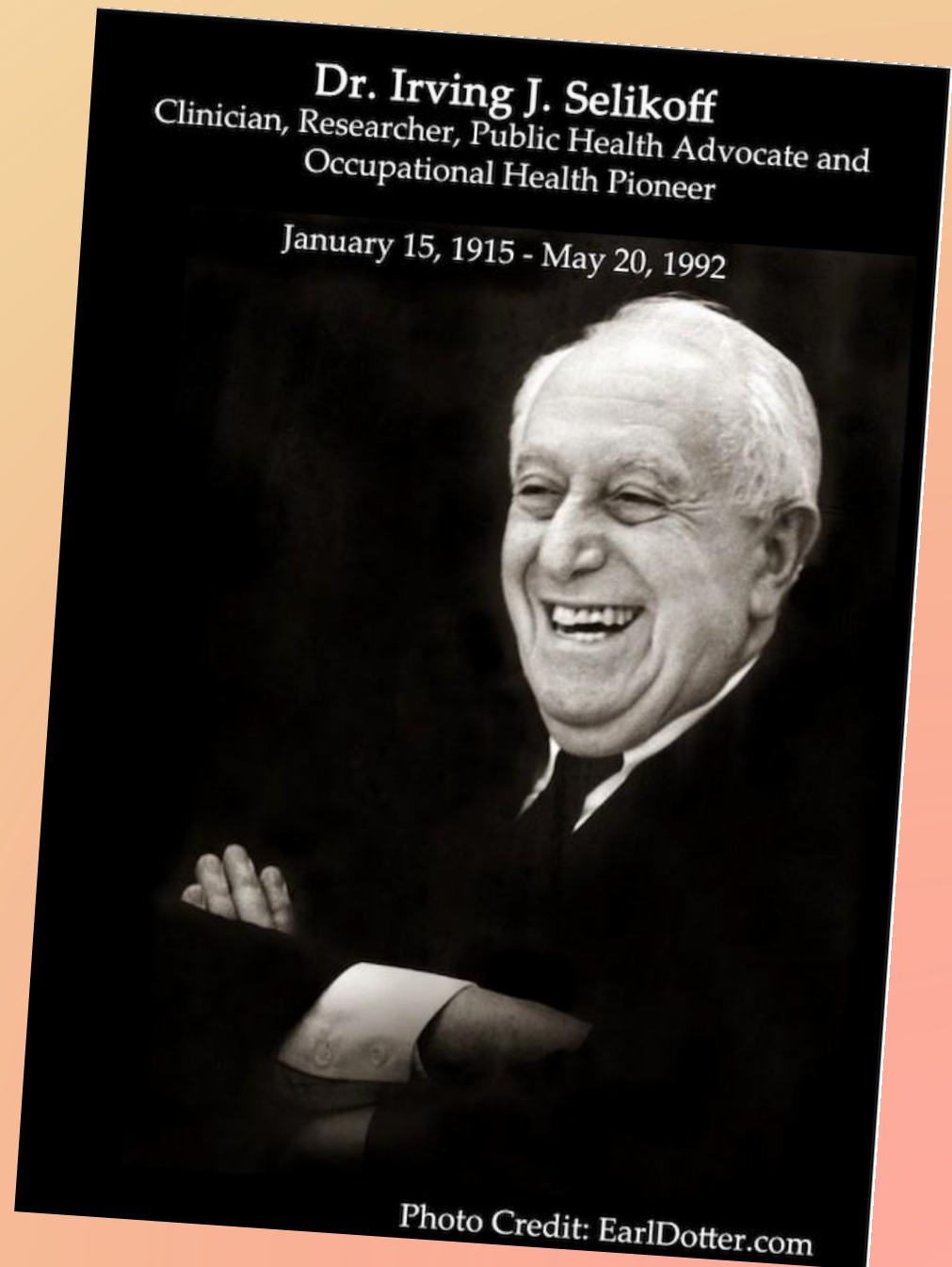
Workers' Health and Return to Work in a Changing World of Work

Ottawa, June 11, 2024



I often reference his quote "Statistics are people with the tears wiped away." Selikoff's groundbreaking survey of 17,800 asbestos insulation workers showed "people who worked with asbestos for less than a week had scarred lungs 30 years later."

<https://www.asbestosdiseaseawareness.org/newsroom/blogs/dr-irving-selikoff-clinician-researcher-public-health-advocate-and-occupational-health-pioneer-1915-2015/>



Start where it matters: *transmission truth*

FACT CHECK: COVID-19 is NOT airborne

The virus that causes COVID-19 is mainly transmitted through droplets generated when an infected person coughs, sneezes, or speaks. **These droplets are too heavy to hang in the air. They quickly fall on floors or surfaces.**

You can be infected by breathing in the virus if you are within 1 metre of a person who has COVID-19, or by touching a contaminated surface and then touching your eyes, nose or mouth before washing your hands.

To protect yourself, keep at least 1 metre distance from others and disinfect surfaces that are touched frequently. Regularly clean your hands thoroughly and avoid touching your eyes, mouth, and nose.



This message spreading on social media is incorrect. Help stop misinformation. Verify the facts before sharing.



March 28 2020

#Coronavirus #COVID19



If it IS in the air, you need to clean it, not your hands and surfaces. Would you take chances?

Yet, a week earlier, a key WHO official said:



Dr. Michael J. Ryan, Executive Director,
WHO Health Emergencies Programme.
March 20, 2020 press briefing about the
pandemic, reflecting on lessons from the
Ebola crisis.

*If you need to be right before you
move, you will never win...*

*Everyone is afraid of making a
mistake. Everyone is afraid of the
consequence of error, but the
greatest error is not to move, the
greatest error is to be paralyzed
by the fear of failure.*

= Precautionary principle



WHO rejects 239 specialists call about airborne transmission

*It is understood that there is not as yet universal acceptance of **airborne transmission** of SARS-CoV2; but in our collective assessment there is **more than enough supporting evidence so that the precautionary principle should apply.***

**“239 Experts With One Big Claim:
The Coronavirus Is Airborne”**

NY Times, July 4/20



*"These are fields of research that are really growing and for which there is some **evidence emerging but is not definitive,**" Dr. Benedetta Allegranzi, WHO's technical lead for infection prevention and control, said during a briefing in Geneva Tuesday.*

*"The **possibility of airborne transmission in public settings** — especially in very specific conditions: crowded, closed, poorly ventilated settings that have been described — **cannot be ruled out.** However, **the evidence needs to be gathered and interpreted.**"*

“Why the WHO won't say the coronavirus is airborne and driving the pandemic”, CBC News, July 8/20,

<https://tinyurl.com/4n4rmj4m>

*“An **aerosol** is a **particle in the air**,” said Lidia **Morawska**, an engineer and the director of the International Laboratory for Air Quality and Health at Queensland University of Technology. “A **droplet** is a **liquid aerosol**.” To her, the distinction between droplets and aerosols doesn’t make any sense. To her, **they are all aerosols**.*



Vox, Oct 5, 2020

<https://www.vox.com/science-and-health/2020/7/13/21315879/covid-19-airborne-who-aerosol-droplet-transmission-cdc>



Opposition from other key public health figures

It's a tempest in a teapot, to foment a bit of controversy.

Dr. Bonnie Henry, July 6/20



*We have **always said** there is a **continuum of droplets**, and they are spread **through the air**. What we are **not seeing** is **traditional airborne transmission**, which is – colloquially we say – transmission **around corners or through ventilation systems**, and that is not the main way. We do not see that with COVID-19. (a brief pause)*

***Except in rare circumstances**, as you say, **where people are indoors**, where there's very **poor ventilation**, there's large numbers of **people**, where there can be lots of **aerosols generated**.*

*So it is really, um, opportunistic, I guess, for these aerosols to be in sufficient quantity with sufficient virus that it will be transmitted. That is not the usual way. **We know that**. We know that from how we see outbreaks happening, transmission events between people.*

Bonnie Henry, May 6/21

<https://tinyurl.com/yc5uk5k2>



Although ideas about droplet size and range of spread are seemingly well accepted, their foundation is muddled and misleading, and is not consistent with physics.

The **science/evidence** says we inhale this virus easily because it's in the air. Small particles carrying the virus can be near us (**aerosols**) or further away (**airborne**).



<https://www.wired.com/story/the-teeny-tiny-scientific-screwup-that-helped-covid-kill/>

<https://royalsocietypublishing.org/doi/full/10.1098/rsfs.2021.0049>



When did public health agencies get to some form of transmission truth?



by late 2021, the Public Health Agency of Canada (PHAC), Centre for Disease Control and Prevention (CDC), Public Health Ontario, etc.

✓ April, 2024, the WHO (explicitly)

<https://www.publichealthontario.ca/en/about/blog/2021/covid-19-transmission>

<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html>

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



Who paid the price?



Darwin Doloque, 35, worked at the **Olymel** meat packing plant in Red Deer, Alberta. Died of COVID-19 January 28/21.

www.cbc.ca/news/canada/calgary/red-deer-olymel-outbreak-1.591413



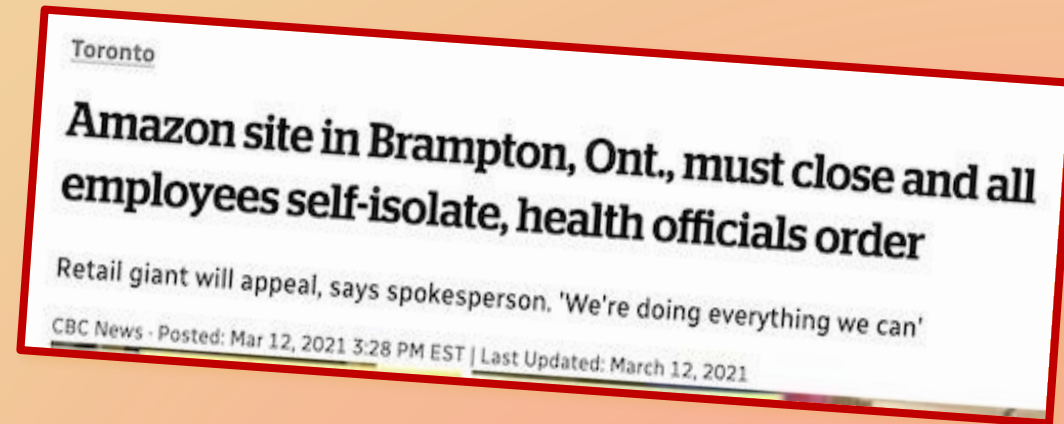
Diana Law with her children, Sydney and Alexander. First known British Columbia **nurse** to die of COVID-19. The 57-year-old patient-care co-ordinator at Peace Arch Hospital in White Rock was in hospital for months before her death April 14, 2021. One of 84,000 HCWs infected by that time.

<https://www.cbc.ca/news/canada/british-columbia/covid-nurse-death-bc-diana-law-1.6002090>



Karam Singh Punian, 59, was one of at least 10 **limo drivers** at Toronto's Pearson airport who died by May 2020.

https://www.thestar.com/news/gta/10-pearson-taxi-and-limo-drivers-have-died-in-covid-19-pandemic-union-says/article_4624bc20-8df2-5b64-908b-19224d696286.html



*There have been more than 600 cases in total (at the Brampton **Amazon warehouse**), with 240 identified in recent weeks, Loh told CBC News, reflecting "significant" growth.*

<https://www.cbc.ca/news/canada/toronto/amazon-site-closed-brampton-covid19-1.5947898>

Outbreaks – January – July 31, 2021 compared to all 2020

- ❑ farm outbreaks: 223 vs 59
- ❑ farm-based COVID-19 cases:
3,112 vs 1,803

Deaths to June, 2021

Since mid-March, **five** temporary foreign agricultural workers **died** in Ontario, seven in Canada

- ❑ four were in quarantine (plus another outside Ontario)
- ❑ one died of COVID-19, other causes unknown so far
- ❑ ages 23-57 (average 42)



Rogelio Muñoz Santos, 24, died June 5, 2020



Bonifacio Eugenio-Romero, 31, died May 30, 2020





How to Measure Canada's COVID-19 Performance?

CANADA

More than 21,000
HCWs infected

Represent over 19%
of all COVID-19
infections

Almost double the
international rate
(10 per cent) for
HCW infections

At least 16 HCWs
have died

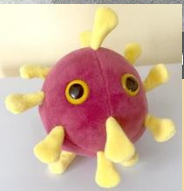
ASIA

HCWs represent 4.4%
of China's COVID-19
infections.

Hong Kong: 5 HCW
infections

Taiwan: 3 HCWs
infected

(Most before
airborne
precautions)



ina Morning Post

Facebook

As of July, 2020

<https://www.atimeoffear.com/>, October, 2020

Sector	Allowed	Specifics (claims made)	Total
	18,127		22,645
Service (Health care and social services)	10,898	LTC: 5,998	12,506
Service (Education)	2,688	Public: 3,098	3,155
Self-insured employers	807		1,097
Public administration	800		944
Service (Other subsectors, including business, professional and other services)	563	Cleaning: 205 Day/child care: 152	913
Trade (Retail)	435	Supermarket: 473	803
Service (Tourism and hospitality)	349		562
Construction	324		520
Transportation and related services	285		495
Agriculture	337		383
Manufacturing (Food and beverage products)	157		219
Manufacturing (Metal and non-metallic mineral products)	138		199
Manufacturing (Wood and paper products)	59		113
Trade (Wholesale)	55		104

Workplace and community outbreaks, Toronto – to Aug. 30/22

“Community”
often is
“workplace”

Category	Cumulative number of outbreaks (ongoing + closed)
Other recreation/Events/ Social gatherings	311
Medical/Health service (Non-institutional)	208
Restaurant/Food service/Bar	176
Workplace - Construction	124
Food retail/Grocery	66
Retail/Malls	64
Workplace - Office setting	61
Personal Service Settings (Tattoo, Nail salons, Aesthetics)	57
Workplace - Other	55



Who are these workers?

Journal of Racial and Ethnic Health Disparities
<https://doi.org/10.1007/s40615-021-01110-8>

Racial Disparity in Potential Occupational Exposure to COVID-19

Abay Asfaw¹ 

2021 / Revised: 22 June 2021 / Accepted: 7 July 2021

RESEARCH ARTICLE

SARS-CoV-2 seroprevalence and risk factors among meat packing, produce processing, and farm workers

www.cbc.ca/radio/sundaymagazine

Why Canada's low-paid, precariously employed essential workers need a better deal

Brandie Weikle : : 7/10/2021

The Sunday Magazine



International Journal of
Environmental Research
and Public Health

Review

COVID-19 and Essential Workers: A Narrative Review of Health Outcomes and Moral Injury

Joanna Gaitens , Marian Condon *, Eseosa Fernandes and Melissa McDiarmid 

Study after study, and media report after media report, made it clear:

- ✓ "essential workers" are racialised
- ✓ they're working in crowded spaces (e.g., meatpacking, post offices, warehouses)
- ✓ they couldn't work from home
- ✓ they had to travel by public transit or with others to and from work
- ✓ they're in crappy jobs (in terms of income, health and safety, autonomy, etc.) and often invisible





Racialized and immigrant workers are more likely to be in low-wage, front-line, “essential” jobs:

- ✓ racialized groups/immigrants much more likely work in **precarious jobs**, earn **lot lower wages**, racialized **women** most likely in lowest-paying jobs
- ✓ **hospital/long-term care home** front-line workers likely to be immigrants, women, from racialized groups (particularly Black, Filipino)
- ✓ **health care and social assistance**: 23.6% of employed **Filipino** Canadians, 20.3% of employed **Black** Canadians
- ✓ **accommodation and food services** : highest Korean (19.1%), Filipino (14.2%) and Southeast Asian (14.0%) Canadians



More in Toronto Public Health’s *More information about inequities in COVID-19*, (May 27/21), <https://tinyurl.com/bdejcs7>; CPHO, *The Impact of COVID-19 on Racialized Communities*, <https://tinyurl.com/wvyuhak2>.

■ Share of COVID-19 cases
■ Share of Toronto population

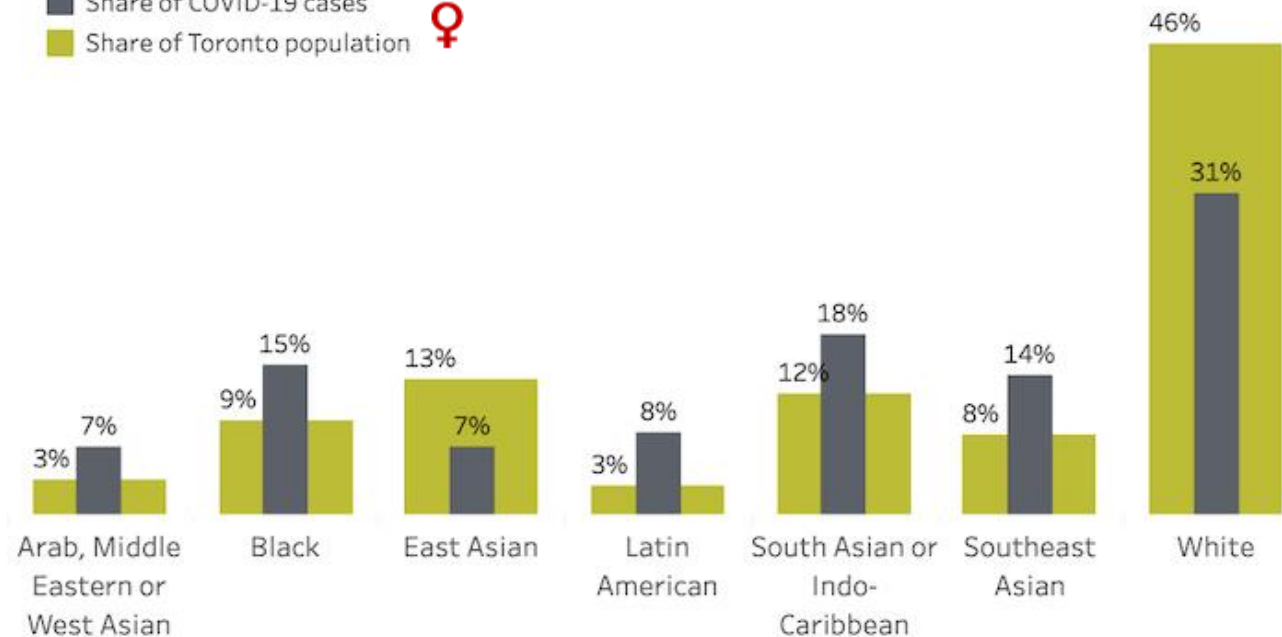


Share of COVID-19 cases among racialised groups compared to share of people living in Toronto, valid data to Dec. 31/21 (N=70,074 women, 68,921 men)

Toronto Public Health,
<https://tinyurl.com/3v7j3mm6>



■ Share of COVID-19 cases
■ Share of Toronto population





The situations are a result of long-standing inequities related to ..

- ✓ class or social position
- ✓ racism
- ✓ low wages (and inadequate minimum wage laws/basic income) plus no or inadequate sick pay
- ✓ precarious jobs
- ✓ immigration status
- ✓ health and safety and employment laws that reflect management rights and power
- ✓ hazardous jobs that wear out many after which employers toss them away
- ✓ poor health and workers' compensation coverage/access
- ✓ invisible conditions behind closed doors of workplaces
- ✓ lack of voice, including unions
- ✓ right-wing influence on pandemic/public policy



Public health rules



- ✓ Consistently, "public health" made decisions and OHS law/regulations were ignored
- ✓ they sidelined or ignored occupational hygienists (trained to protect workers), ventilation engineers, respiratory protection specialists and others in the multi-disciplinary field of OHS
- ✓ CSA Z94.4 standard about using respirators was ignored, despite being in many OHS laws/guidance
- ✓ Part 5 of the B.C. Emergency Powers of the *Public Health Act*: Section 53 is an override clause which provides that Part 5 applies "despite any provision of this or any other enactment"
- ✓ when did you ever hear from someone in a OHS agency, as opposed to a "public health official"?



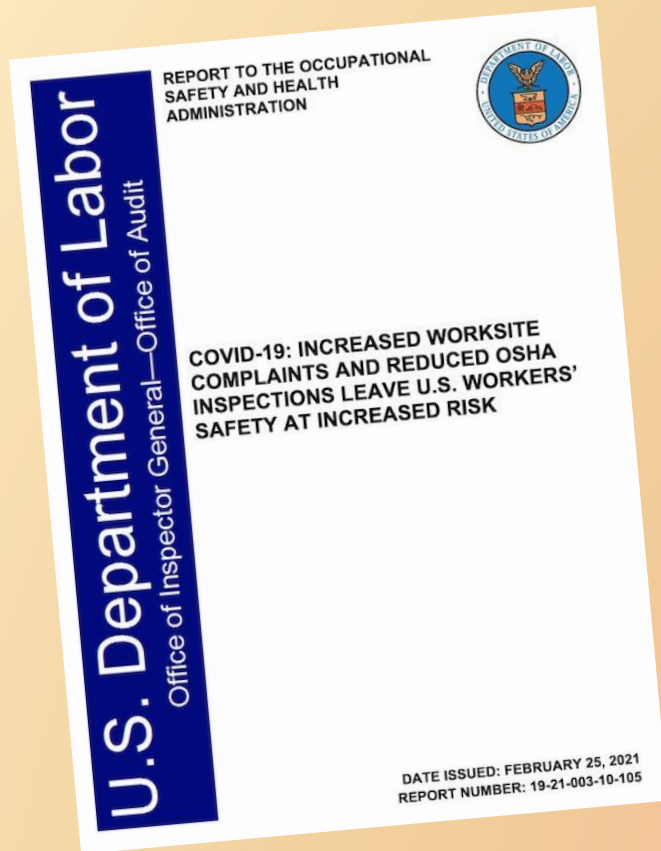
OHS laws weren't enforced, comp hard to get

- ✓ many health and safety **rights violated** in many workplaces
- ✓ workers not given or lacked access to **adequate protective equipment**
- ✓ **not** consistently **told** about the **hazards** (including if colleagues or patients had COVID-19)
- ✓ Ontario Ministry of Labour inspectors' union president said "**inspectors** are being told to send their reports and orders to lawyers and managers within the Ministry" and "are telling us they **can't do their jobs**"
- ✓ none of over 200 Ontario workers' **refusals** to do dangerous work were upheld
- ✓ Ontario private LTC homes not covered by workers' comp
- ✓ proving COVID-19 job-related often difficult (and travelling to work isn't covered) for workers' comp

Katherine Lippel, "Occupational Health and Safety and COVID-19: Whose Rights Come First in a Pandemic?", *Vulnerable. The Law, Policy and Ethics of COVID-19*, 2020



Forget OHS law, workers' rights



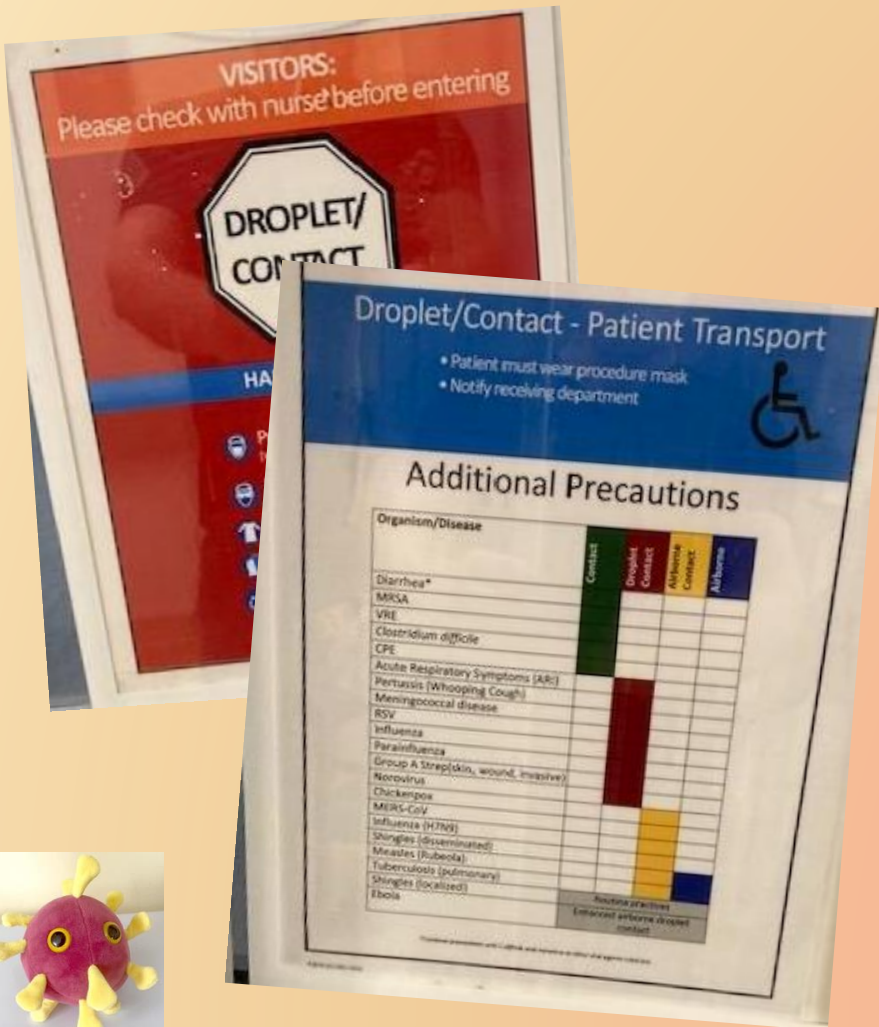
<https://tinyurl.com/47f8a2te>

- ❑ Ontario inspectors felt the Ministry was sidelined in the pandemic, like SARS, “a crucial failing” of the 2003 epidemic” (Campbell Commission).
- ❑ one felt worker protection responsibility was “abdicated.”
- ❑ another said response was too reactive, focused on keeping businesses open, not penalizing repeated non-compliance.
- ❑ some inspectors sounded the alarm about ventilation, possible airborne transmission, yet the guidance remained centred on droplet contact.

“How a COVID-19 ‘blind spot’ put Ontario’s essential workplaces at risk”, *Toronto Star*, <https://tinyurl.com/ya438p9a>.



The advice (still is, too often): clean surfaces/hands, not the air



Amongst other things, **authorities** providing direction and guidance **failed to:**

- ☐ understand or learn basic **principles of respiratory protection** (e.g., fit matters)
- ☐ **consult** with those with expertise (e.g., hygienists, respiratory protection specialists, manufacturers, CSA)



A consequence: COVID-19 is NOT the flu, and it's still here

2022/23



FLU

COVID-19

2200

5900

2.7x



120

970

8x

2023/24

so far



3100

4500

1.5x



170

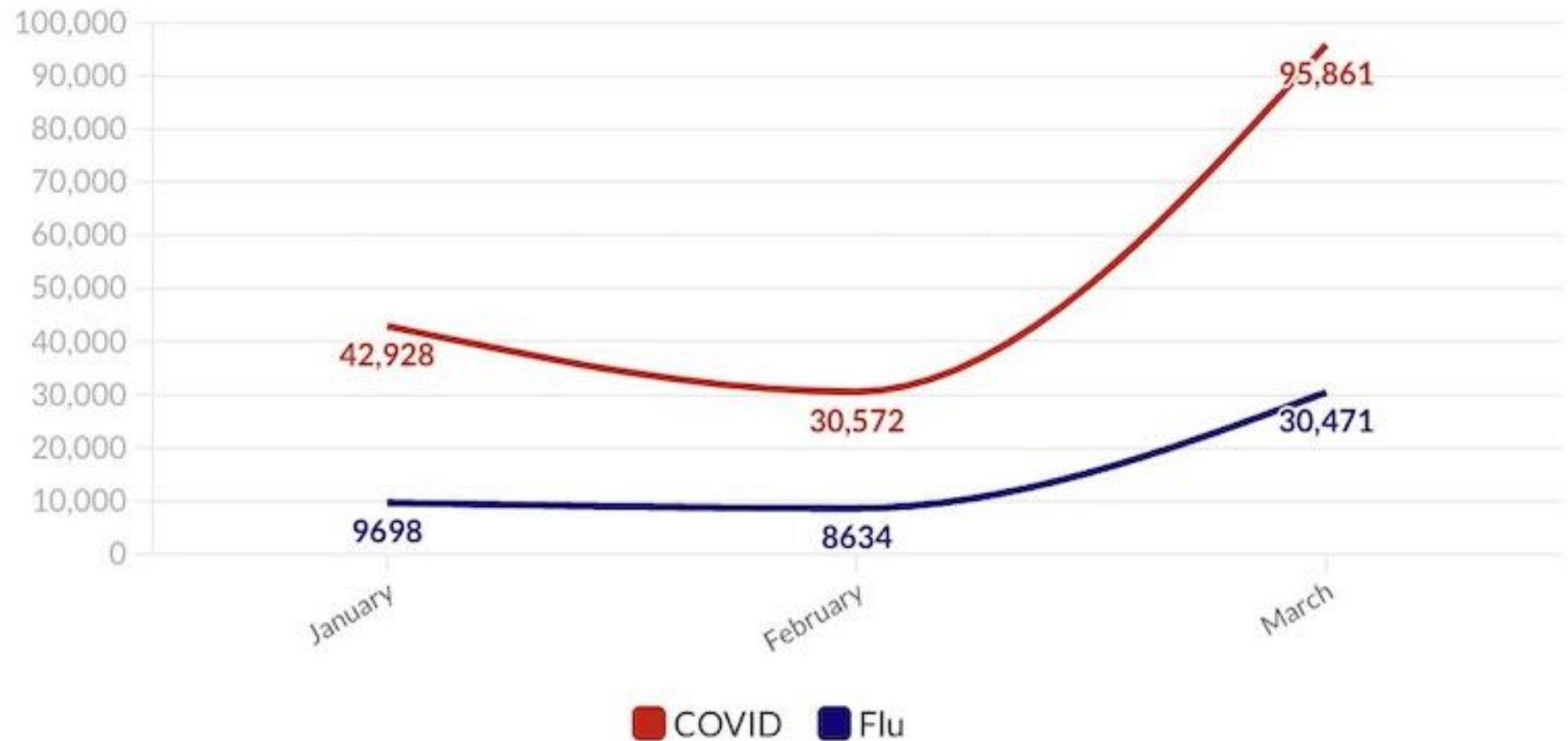
550

3x



Alberta Health Respiratory Virus Dashboard,
<https://tinyurl.com/ycxpxyew>; thanks to Gosia Gasperowicz

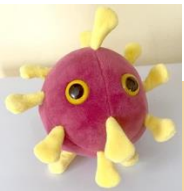
Covid-19 and flu, Australia — 2024



Source: National Notifiable Disease Surveillance System, Australian Government
Department of Health and Aged Care

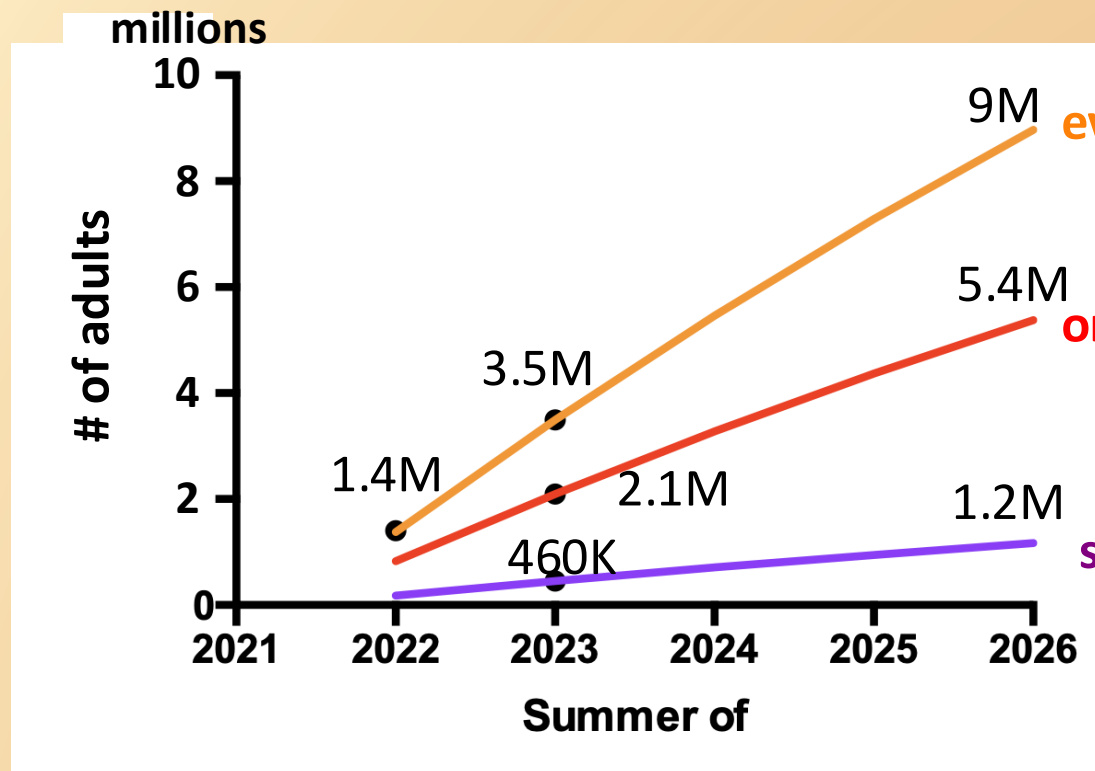
THE **NEW DAILY**

 A Flourish chart



From tweet by Dr. David Berger, retrieved June 4/24

Long Covid projections for Canadian adults



29%

ongoing

18%

severe*

4% -- 1 in 25

● StatsCan data Canadian adult population: **30.7 M**

*Often or always limiting daily activities

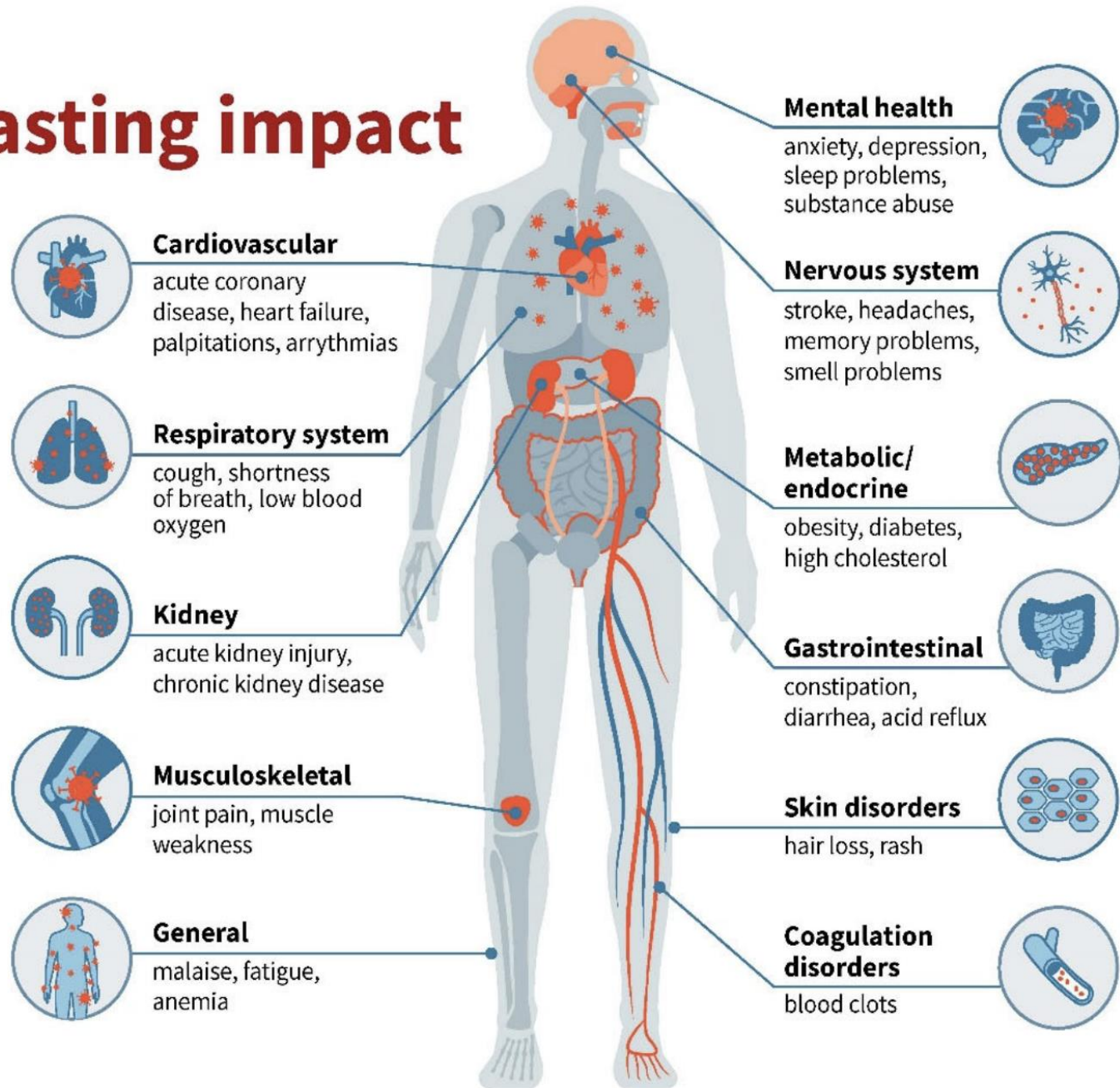
Black Canadians were most likely to report multiple infections compared to other racialized groups

Projection by Gosia Gasperowicz using current re-infection rate (38% of those with 3 infections get Long COVID). Statistics Canada reports' data: Dec. 8/23, <https://tinyurl.com/frx7b52y>; Oct. 17/22, <https://tinyurl.com/frx7b52y>



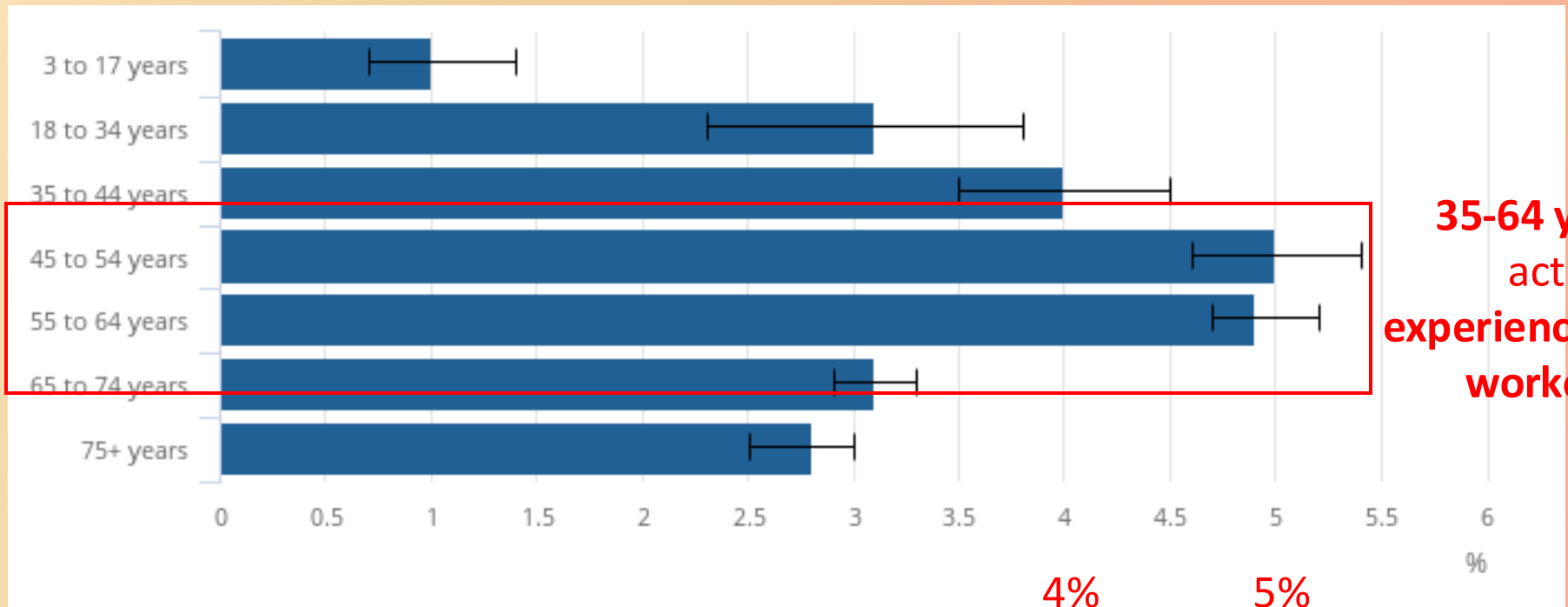
COVID-19: Lasting impact

WashU researchers link many diseases with COVID-19, signaling long-term complications for patients and a massive health burden for years to come.



Long COVID affects people in the prime working age the most

Estimated **percentage** of people living in private households with **self-reported long COVID** of any duration by age, England and Scotland, **four-week period ending March 7/24**



4% is 1 in 25 5% is 1 in 20

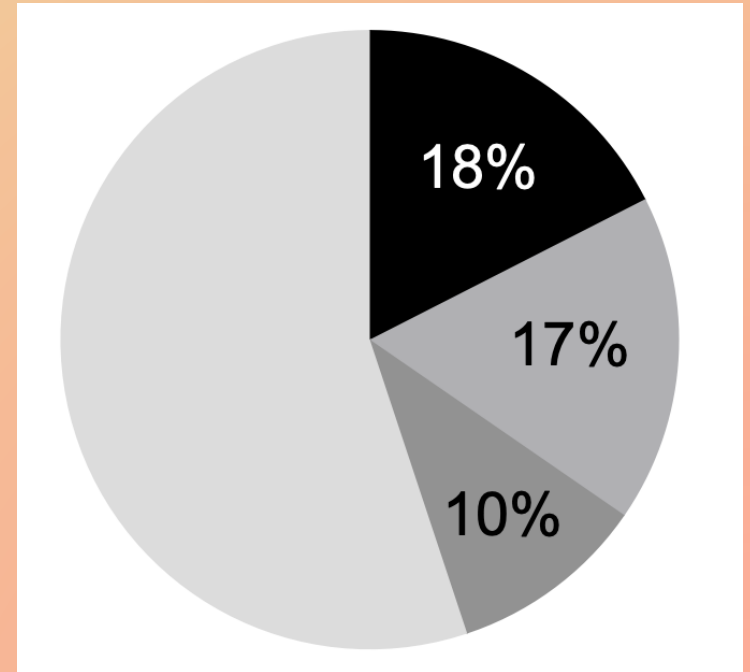
Thanks to Gosia Gasperowicz, using UK Office of National Statistics report April/24, <https://tinyurl.com/btv2fm4d>



Canadian sectors most affected by Long COVID

- Healthcare & Social Assistance
- Scientific & Teaching Services
- Education Services

- ❑ As of June 2023, about 100,000 Canadian adults have been unable to return to work or school because of Long COVID symptoms
- ❑ 600,000 Canadians missed time from work or school
- ❑ cumulative total of about 14.5 million missed days of work or school due to long-term symptoms



Long-term sickness reaches record level in UK

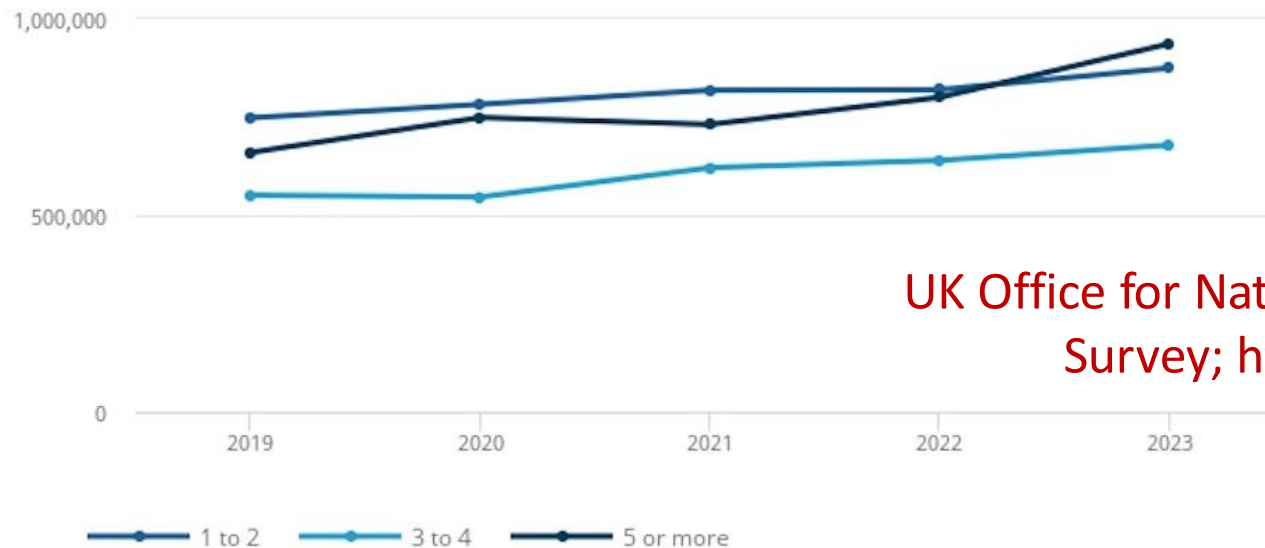
The Observer Economic recovery

Record long-term sickness bodes ill for UK economic growth

Years of austerity, followed by Covid, have left Britain with unhealthy workers and businesses struggling to recruit, but the road to recovery, of all kinds, will be long

Figure 3: The number of people inactive because of long-term sickness reporting five or more health conditions has been increasing since the pandemic

Number of health conditions of people aged 16 to 64 years who are economically inactive because of long-term sickness, UK, January to March 2019 to January to March 2023

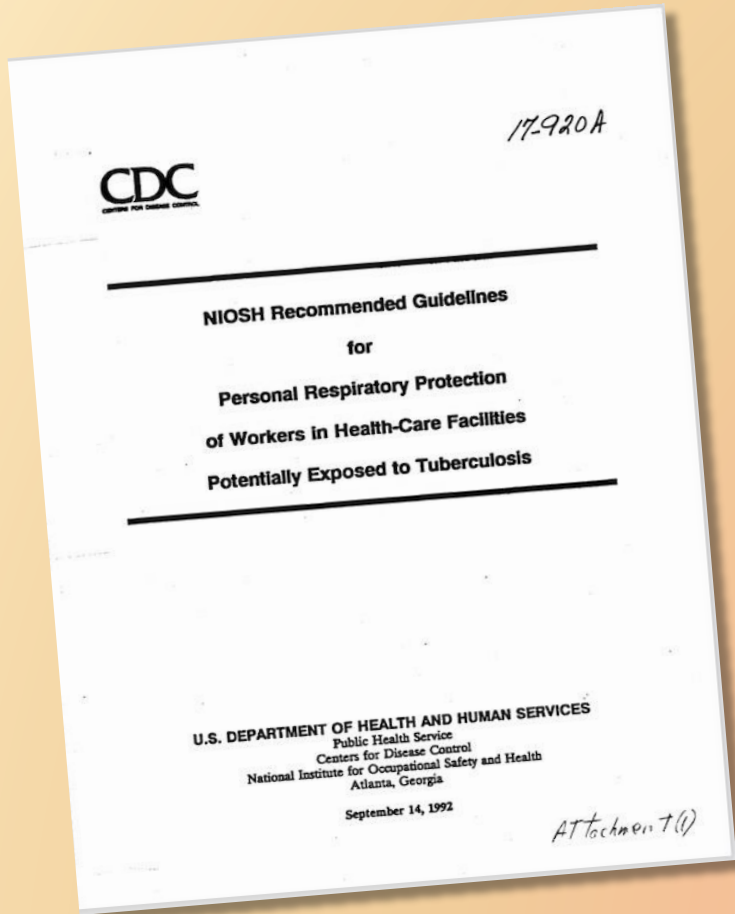


<https://tinyurl.com/at2zrkbz>

*What about Canada?
We don't know, yet.*

UK Office for National Statistics, Labour Force Survey; <https://tinyurl.com/5aeu3nb2>

What is to be done? *Start with "public health prudence" ..*



- “the principle of public health prudence”
- “when **faced with uncertainty**, it is **better to err in favor of human life and health** than in favor of any competing value”
- restated as an informal NIOSH operating policy: “faced with scientific uncertainty, if we must err, it will **always be on the side of too much protection for the worker rather than too little.**”
- supported in a 1980 court decision that OSHA and the courts “**cannot let workers suffer while it awaits the Godot of scientific certainty**”

NIOSH Recommended Guidelines for Personal Respiratory Protection of Workers in Health Care Facilities Potentially Exposed to Tuberculosis, 1992.

<https://stacks.cdc.gov/view/cdc/86071>

.. as the SARS-1 Commission recommended

The Precautionary Principle



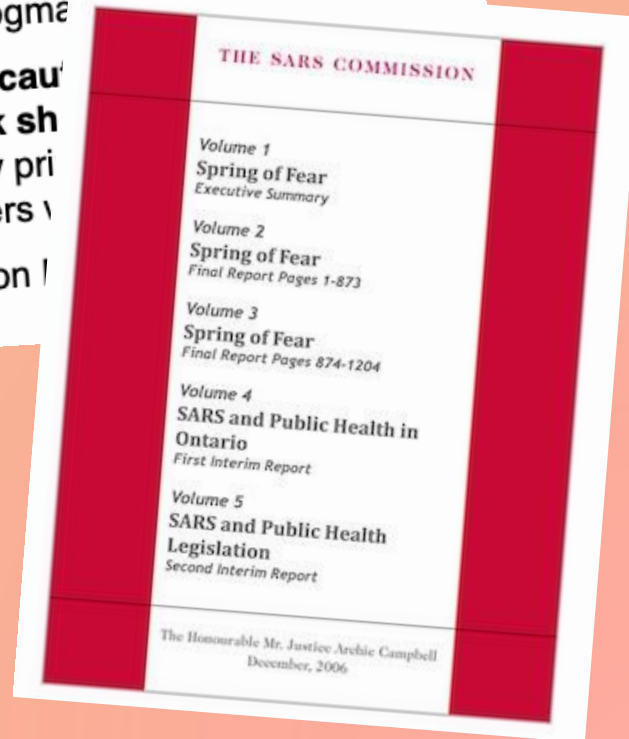
Mr. Justice Archie Campbell

“The point is not who is right and who is wrong about airborne transmission. **The point is not science, but safety.**

Scientific knowledge changes constantly. Yesterday's scientific dogma is today's discarded fable. When it comes to worker safety ... we should not be driven by the scientific dogma of yesterday or even the scientific dogma

We should be driven by the precautionary principle: reasonable steps to reduce risk should be taken in the face of uncertainty. Until this precautionary principle is mandated and enforced ... workers

(SARS Commission)

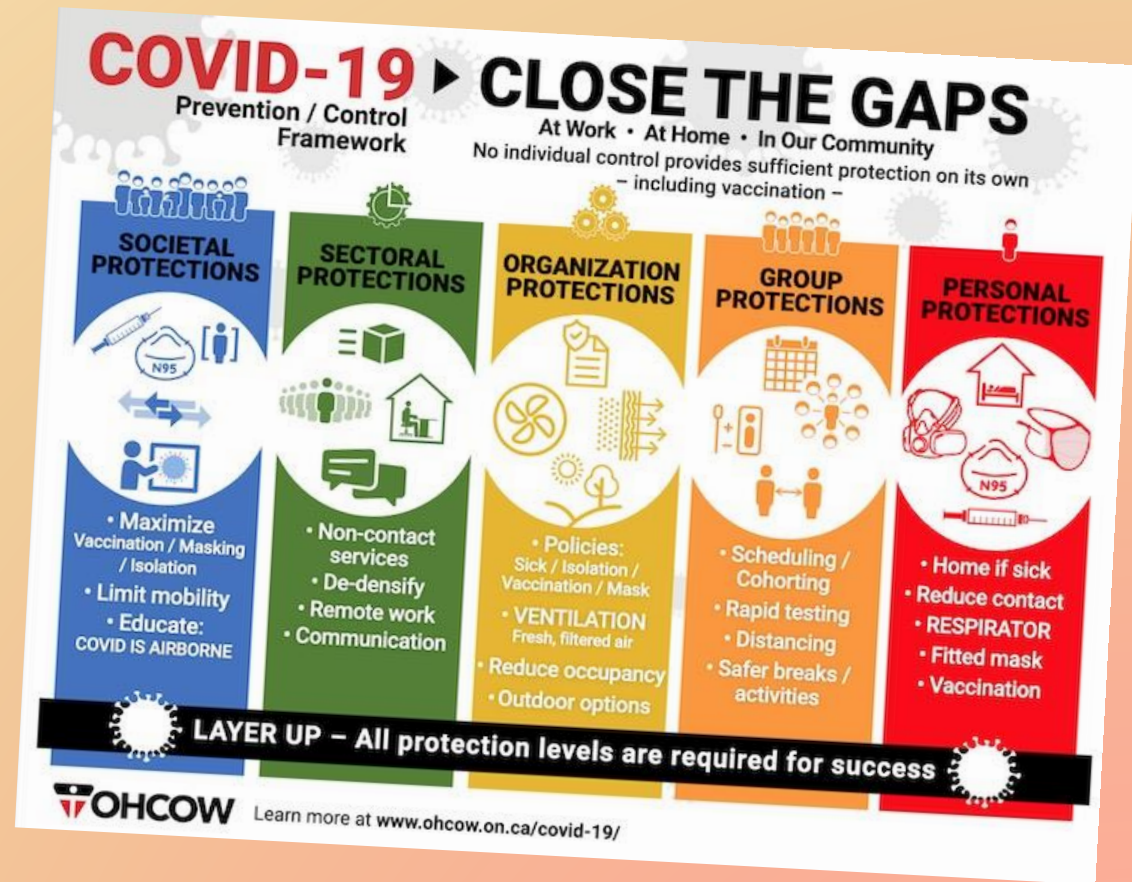


https://www.archives.gov.on.ca/en/e_records/sars/report/index.html



**Layered solutions --
Vaccines are
necessary, but not
sufficient**

**.. and layered solutions --
especially in complex
health-related situations --
require many voices and
skills** such as occupational
hygiene, ventilation
engineering, physics, aerosol
science, evolutionary biology,
respiratory protection
specialists, and more



- ☐ social
- ☐ group
- ☐ sectoral
- ☐ personal
- ☐ organisation

https://www.ohcow.on.ca/wp-content/uploads/2022/01/close_the_gaps.pdf

Unhealthy indoor air is the “new poop”

- ✓ prevent/reduce airborne disease transmission (target ACH)
- ✓ ventilation (fresh air, can be filtered)
- ✓ filters if not in ventilation
- ✓ ultraviolet anti-germ light
- ✓ avoid ionisers
- ✓ transparency and education



CORE RECOMMENDATIONS FOR SAFER INDOOR AIR

Mitigation of Airborne Disease Transmission

Target a minimum of six air changes per hour in occupied indoor spaces using any combination of ventilation, filtration, and ultraviolet germicidal irradiation systems.

Ventilation

Bring buildings into compliance with current ventilation standards established by ASHRAE (American Society of Heating, Refrigeration and Air-Conditioning Engineers) and the Canadian Standards Association (CSA) confirmed through CO₂ monitoring.

Filtration

Upgrade filters in air handling units to MERV-13 or higher where possible, or use a portable HEPA filter or DIY CR box in each occupied space when air pollution is a concern.

Ultraviolet Germicidal Irradiation (UVGI)

Use upper room UVGI systems installed by qualified professionals in health care settings and congregate living settings. Consider its use in high-risk settings and places with high occupant density.

Avoid Additive Air Cleaning and Alternative Methods

Do not use additive air cleaning methods or similar products, such as ionization, until there is a standardized way to ensure their safety and effectiveness.

Transparency and Public Education

Share information about your facility's air quality with occupants including sharing the strategies you are using to ensure safe indoor air and install CO₂ monitors with readable displays.



For more information, view the complete report: Core Recommendations for Safer Indoor Air.
ospe.on.ca/indoor-air-quality

https://ospe.on.ca/wp-content/uploads/2022/11/IAQ_Checklist-copy.pdf



- ❑ acknowledge existence of, and use, **CSA Z94.4** (*Selection, use and care of respirators*) and Z94.4.1 (certification of respiratory protection)
- ❑ allow **enforcement of workplace regulations** for respirator selection and use, basic knowledge and practiced without hesitation outside healthcare, as well as **ventilation and hazards**

Respiratory protective equipment

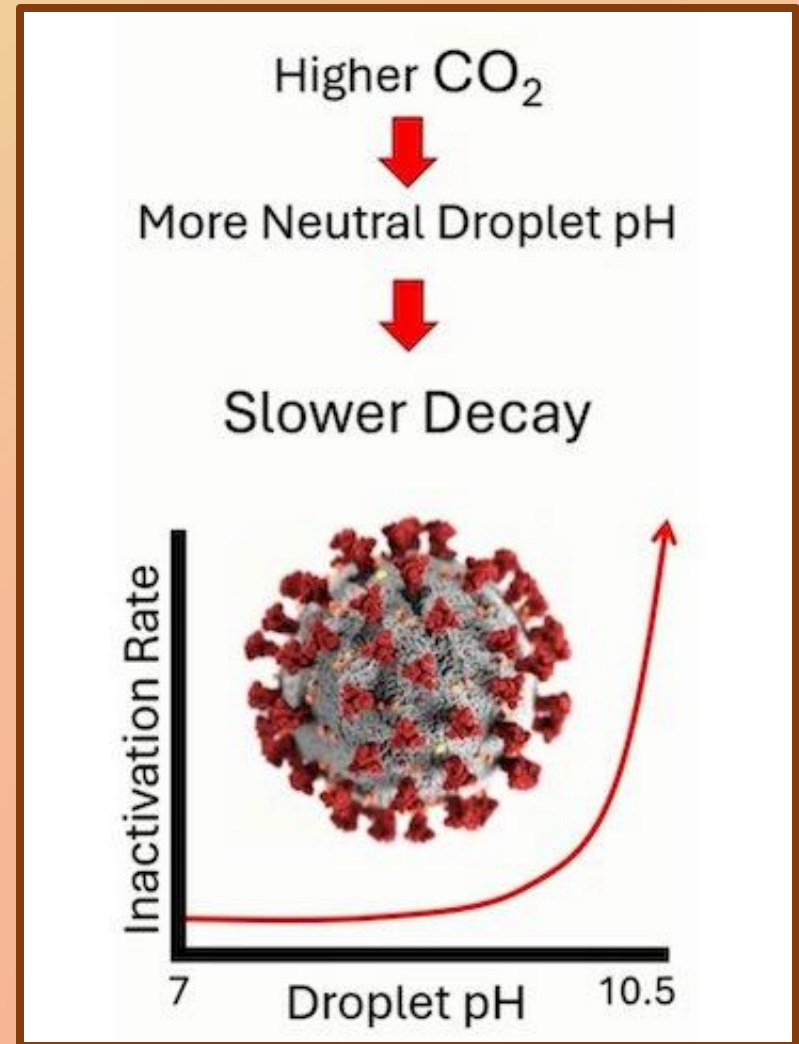
6.15(1) An employer must ensure that respiratory protective equipment provided to a worker is selected, used and maintained in accordance with CAN/CSA-Z94.4-11, *Selection, Use, and Care of Respirators*.



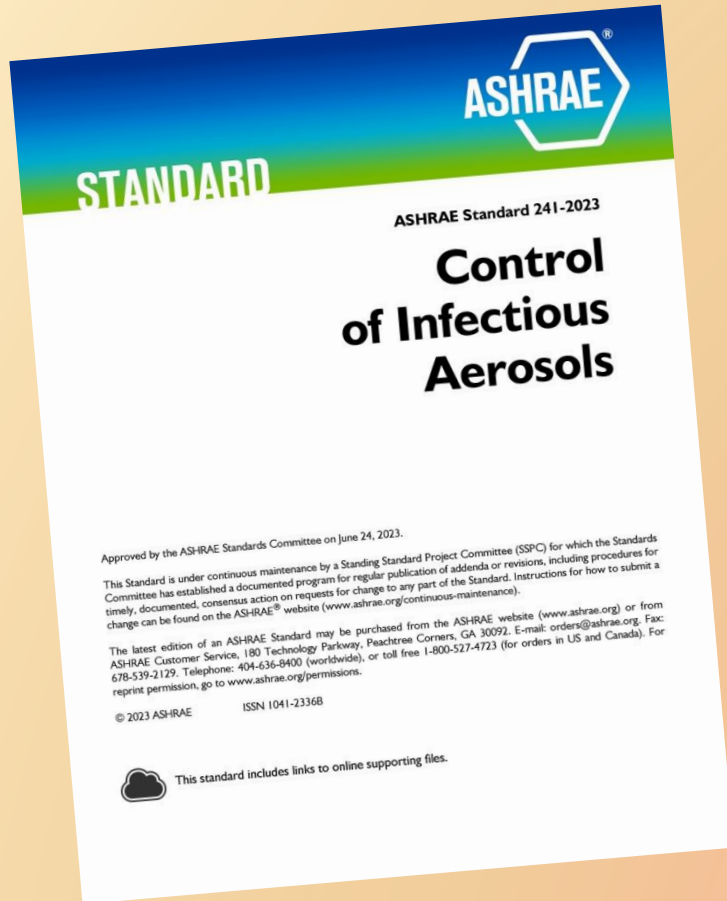
Pay attention to CO2 levels



- ✓ fresh air indicator – recommendations for concern are 600 – 1000 ppm
- ✓ recent study shows higher CO2 levels also reduce virus decay rate



Use standards, tools



Classroom Ventilation Posting

1a. type of ventilation system
☒ HVAC constant flow ☐ unit ventilator ☐ natural ventilation/hot water/steam radiators

1b. room dimensions
 35 length (in feet) 23 width (in feet) 9 height (in feet)
 area (in square feet (ft²)): 805 volume (in cubic feet (ft³)): 7245

1c. room occupancy
 35 room maximum capacity 20 room typical capacity 2 select which capacity (1=max, 2=typical)
 805 HVAC design flow rate (in cfm) **below ASHRAE 62.1 std** 6' distancing achievable
 20% proportion outdoor air supply (in %) 8.1 cfm OA/person ☐ HVAC measured flow rate (in cfm)
 6.7 total air turnovers per hour
1.3 outdoor air changes per hour (OA ach)

3. filters
 11 MERV rating date filter was last changed: can't remember
3.7 equivalent clean air ach

4. supplementary portable air filters
 231 CADR @ top speed (in cfm of cleaned air) **65** dB noise @ top speed
 51 CADR @ lowest speed (in cfm of cleaned air) **40** dB noise @ low speed
 119 CADR @ typical speed (in cfm of cleaned air) **55** dB noise @ typical speed
 1 number of units **3** select speed (1=max, 2=min, 3=typical)
1.0 equivalent clean air ach **background noise somewhat exceeds ASHRAE recommendations**

5. supplementary fans
 1000 flow rate (in cfm)
 RIA outdoor air (OA) or recirculating indoor air (RIA)
 25% typical % time fan is on when room occupied
0.0 equivalent clean air ach

TOTAL equivalent ACH:
6.1

CO₂ ventilation performance indicator (enter measurement)
 peak carbon dioxide (CO₂) concentration (in ppm):

target: >6 to 12 ach	no problem: <600 ppm CO ₂
good: 5-6 ach	possible problem: 600-800 ppm CO ₂
fair: 4-5 ach	probable problem: 800-1000 ppm CO ₂
bare minimum: 3-4 ach	more outdoor air needed: 1000+ ppm CO ₂
poor: <3 ach	

<https://www.ashrae.org/about/news/2023/ashrae-publishes-standard-241-control-of-infectious-aerosols>

<https://www.ohcow.on.ca/occupational-illness/covid-19/ventilation-calculation-tool/>



Collect data that informs decision-makers and the public



- ✓ all types of outbreaks (especially workplaces)
- ✓ who's affected (cultural community, community, neighbourhood, job, etc.)
- ✓ cases (need on-going tracing), especially amongst the vulnerable
- ✓ effectiveness of workplace, public health, other plans
- ✓ sick pay implementation and use
- ✓ other prevention/reduction measures
- ✓ surveillance (e.g., wastewater)

<https://tinyurl.com/yu5vsu9d>

Check out COVID-19 Resources Canada



We need prevention-focused public health goals and strategies that:

- ✓ are based on the **precautionary principle**
- ✓ recognise the **importance of aerosol and airborne transmission** of viruses and other hazards, and "clean the air" solutions
- ✓ use multiple **sciences** ("evidence" > RCTs) and existing OHS/comp/other laws
- ✓ are **transdisciplinary** (multiple voices, skills, sciences, solutions/layers, groups included)
- ✓ deal with the **needs of all workers** and others who are **vulnerable** (e.g., enforce OHS, human rights Convention)
- ✓ are **flexible**, respond to variants/situations
- ✓ are developed with, and implemented and evaluated by, **multiple voices, skills, experiences, training, those affected, etc.**

