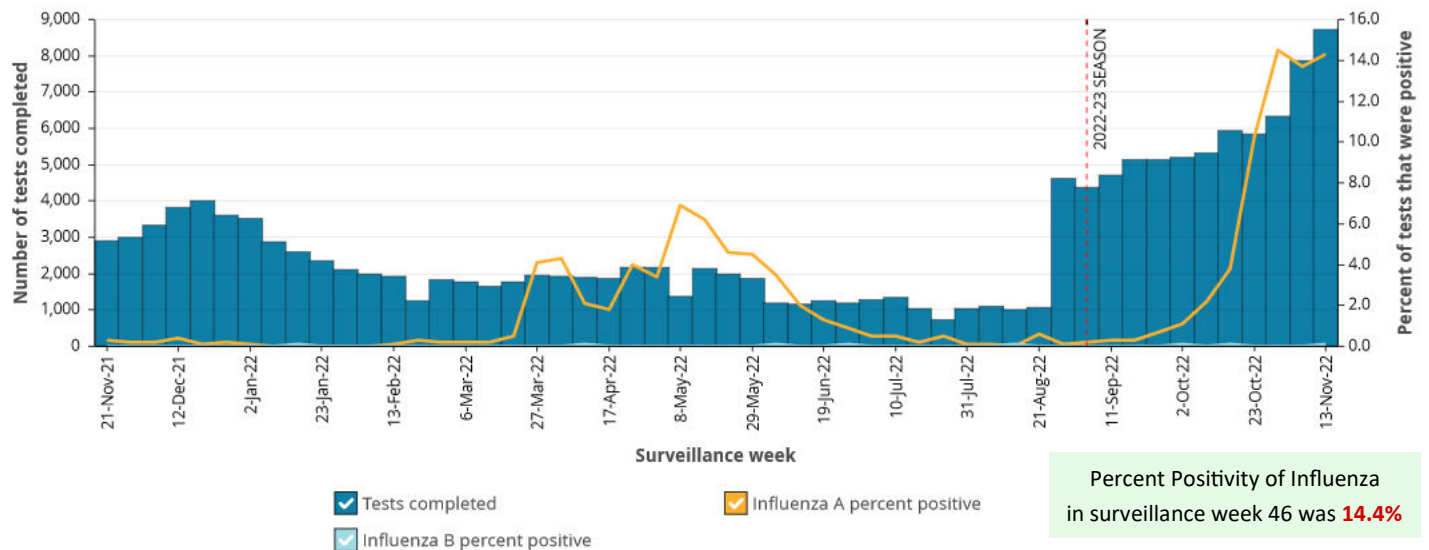


Number of influenza tests performed and percent positivity by surveillance week in Ontario

November 14, 2021 to November 19, 2022



RESPIRATORY VIRUS ACTIVITY IN ONTARIO

Percent positivity is the percentage of tests performed in a specific period of time that are actually positive. According to the latest data available from Public Health Ontario, the provincial percent positivity for COVID-19 in surveillance week 46 (from November 13 to November 19, 2022) was **10.9%**. Combined influenza percent positivity (for type A and type B) in week 46 was **14.4%**. Among the confirmed cases of influenza A with subtype information available, 98.2% of the cases were **H3N2** and 1.8% were **H1N1**. All the quadrivalent influenza vaccines (QIV) and adjuvanted trivalent vaccine (TIV-adj) approved for this season of 2022-2023 *do contain* the hemagglutinin antigen for the H3N2 and the H1N1 influenza A strains.

Apart from COVID-19 and influenza, another respiratory virus that is part of what has been described as the ‘triple threat’ respiratory illness season is the respiratory syncytial virus (RSV). The percent positivity for RSV in the province of Ontario is at **7.4%** as of November 19, 2022, and has been increasing since mid-September. The layers of protection that were effective against limiting the spread of COVID-19 are also highly effective for RSV and influenza, and should be continued with to prevent viral spread and protect the most vulnerable in our community. Layers of protection that are strongly recommended are:

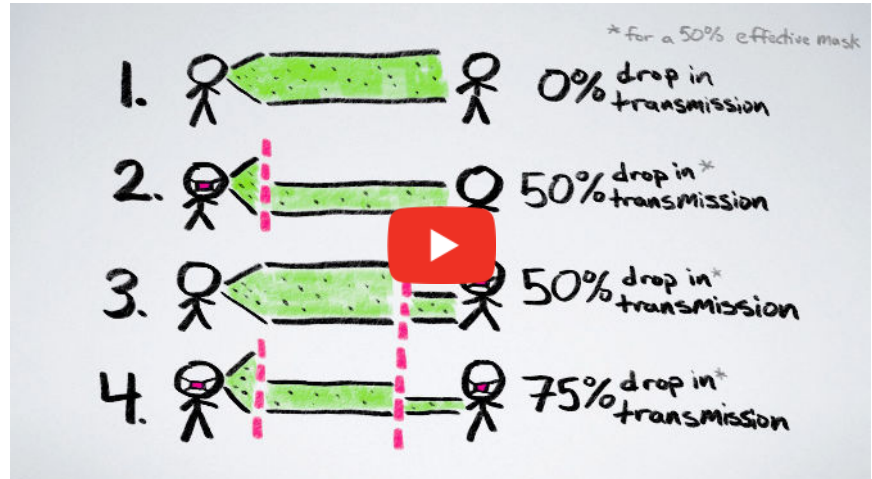
- Wearing a mask in all indoor public settings, especially if there is crowding or poor ventilation.
- Getting the annual flu shot and staying up to date with recommended doses of COVID-19 vaccinations.
- Staying home if you are ill and keeping children home from school or child care if they are ill.
- Screening yourself and children daily for any respiratory symptoms.
- Frequently washing and sanitizing hands and regularly cleaning high-touch surfaces.
- Limit your number of social contacts, especially when indoors.

Sources: www.publichealthontario.ca¹ | www.publichealthontario.ca² | www.simcoemuskokahealth.org

WHY MASKS WORK BETTER THAN YOU'D THINK..

This video is about how masks are counterintuitive and actually work much better epidemiologically than one might expect. Wearing a mask during high level of community transmission can help to limit the spread of respiratory viruses.

Source: [Minute Physics](#)



HOW WERE COVID-19 VACCINES DEVELOPED SO QUICKLY?

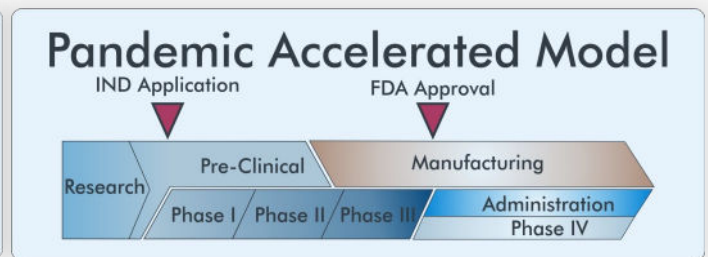
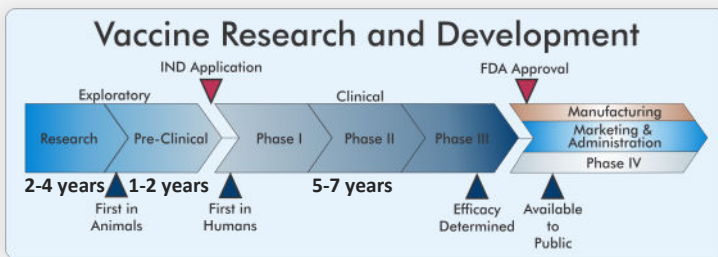


Image: www.vumc.org

The COVID-19 vaccine began rolling out less than a year into the pandemic, which is lightning fast compared to the traditional time it takes to develop a vaccine. However, the COVID-19 vaccines were held to the same safety standards as any other vaccine and no safety or efficacy trials were skipped or excluded. The development of COVID-19 vaccines was fast-tracked in multiple ways because of the pandemic that would not be possible otherwise. Here are some of the strategies used:

- **Process overlaps:** Normal vaccine development performs each step in sequence but to accelerate COVID-19 vaccine development, steps were done in *parallel* to gather data as quickly as possible. All usual safety and efficacy monitoring mechanisms remained in place.
- **Established research:** The technologies used to develop the COVID-19 vaccines have been in development for years to prepare for outbreaks and infectious viruses. Because of this, the manufacturing processes were ready very early in the COVID-19 pandemic.
- **Unprecedented funding:** Governments worldwide spared no expense responding to COVID-19. A lot of money and resources were made available to make the vaccine, so more could get done in less time.
- **High number of research volunteers:** Finding volunteers for clinical trials is usually hard but with the pandemic, people wanted to help. Researchers had a robust sample size almost immediately.
- **Front-end manufacturing:** Because of enormous funding available to cover manufacturing costs up-front, millions of potential vaccine doses were created before they were actually approved, ensuring that vaccines would be distributed significantly faster once approved.

Sources: www.nature.com¹ | www.frontiersin.org | healthy.kaiserpermanente.org | www.science.org | www.nature.com² | www.canada.ca