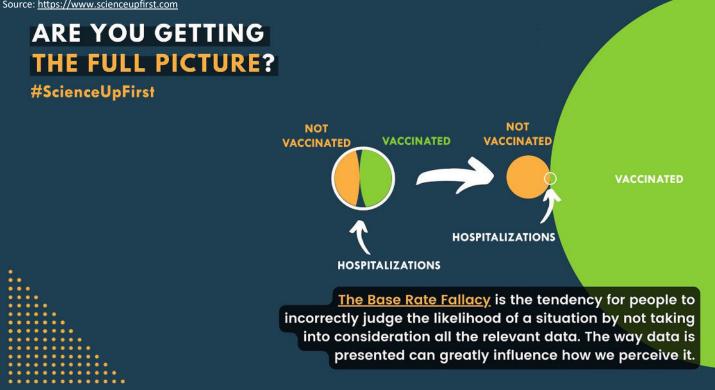


Source: https://www.scienceupfirst.com



THE BASE RATE FALLACY: When comparing hospitalization rates due to COVID-19, focusing only on the percentage of people who were vaccinated vs. unvaccinated without considering the vaccinated proportion of the total population provides an illusion that vaccines are ineffective, which is false.

OMICRON, COVID-19 VACCINES, AND RAPID ANTIGEN TESTS: FACT VS. FICTION

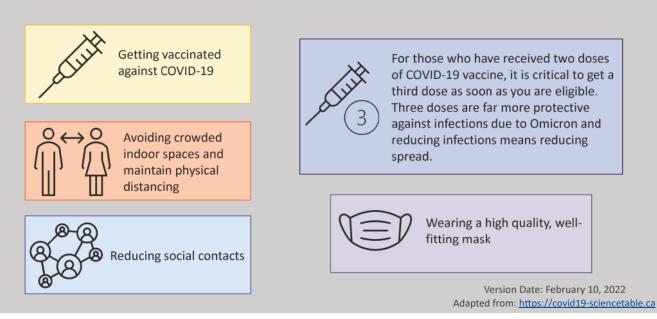
MYTH: "Vaccines do not work in preventing symptomatic Omicron infection."	FACT : COVID-19 vaccines do provide protection against symptomatic infection by Omicron, with effectiveness of 37% after two doses and around 61% seven days after receiving the third dose. Vaccine effectiveness against severe outcomes remains high and is up to 95%. ¹
MYTH: "Omicron is mild and is just like the flu."	FACT : Omicron is less severe than Delta variant but is not mild, and can still cause severe illness, hospitalization and death, especially in immunocompromised, unvaccinated, or individuals with multiple underlying comorbidities.
MYTH: "New emerging variants will only get milder with time."	FACT : New variants can emerge because the SARS-CoV-2 virus constantly changes through ongoing process of mutation. As the virus spreads, it has more opportunities to change and the random mutations could result in <i>less or more</i> virulent variants going forward.



MYTH "Rapid antigen tests (RATs) do not work well in detecting Omicron."	FACT : RATs are less sensitive for Omicron compared to the Delta variant in nasal samples, especially in the first 1-2 days after infection. However, the sensitivity increases to around 83% on Day 3 and 100% between Day 4 and 7, and need to be performed frequently to be effective. ²
MYTH: "COVID-19 vaccines can alter my DNA."	FACT: The genetic material delivered by mRNA vaccines never enters the nucleus of the cell, which is where DNA is located. Instead, it remains in the cytoplasm after cell entry until it eventually get broken down. Genetic material from viral vector COVID-19 vaccines <i>does</i> enter the nucleus, but the machinery needed to integrate it to our DNA is absent and cannot alter our DNA. ³
MYTH: "Herd immunity will end the coronavirus pandemic, so vaccinations are not necessary."	FACT : For COVID-19, letting the virus "rip" has and will continue to result in many people getting severely ill, suffering lasting organ damage and even death before herd immunity could occur. Also, there could be long-term effects of getting the disease, known as long COVID. Vaccination remains the safest way to develop longer lasting immunity and reduces the opportunity for the virus to mutate (change) that could result in emergence of new variants of concern. ⁴

2. Source: <u>https://covid19-sciencetable.ca</u> | 3. Source: <u>https://www.cdc.gov</u> | 4. Source: <u>https://www.hopkinsmedicine.org</u>

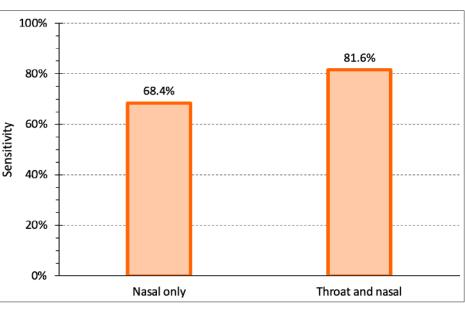
COVID-19 outbreaks in Congregate Living Settings are related to how many cases there are in the community. Everyone can help reduce COVID-19 spread.



IMPROVING SENSITIVITY OF RAPID ANTIGEN TESTS

The Ontario COVID-19 Science Advisory Table published a science brief on February 10, 2022 on the use of rapid antigen tests (RAT) for the Omicron wave. One of the studies highlighted in the document compared the sensitivity of the Abbott Panbio RAT for the Omicron variant using a nasal sample versus a combined throat and nasal sample. The sample size was 520 individuals, 38 of whom were confirmed positive by PCR.

The study found that **combining** nasal and throat sample provided a higher sensitivity in detecting the Omicron variant compared to nasal samples alone. The sensitivity of nasal sample alone was 68.4%, while the sensitivity of the combined oral and nasal sample was 81.6%. The combined sample may thus improve the sensitivity of RAT and can be collected by first swabbing both cheeks and the back of the tongue or throat, before swabbing both nostrils using the same swab.



Source: https://covid19-sciencetable.ca

COVID-19 Rapid Antigen Tests: How to Collect a Sample

To collect a sample for a rapid antigen test (RATs), users should follow the instructions described in the kit insert.

In addition to the collection method option approved by Health Canada (as described in the kit insert), users may choose to perform combined oral and nasal sampling as it may increase test sensitivity.

The following highlights general steps for collecting a sample using either the combined oral and nasal method or the nasal method.

If swabbing your mouth and nose (combined oral and nasal method) Steps 1. Do NOT eat, drink, chew gum, smoke, or vape for at least 30 minutes before collecting the sample. 4 - 5 2. If you have access to a facial tissue, blow your nose before the test. and / o 3. Wash your hands and only hold the end of the swab opposite the soft swab tip 4. Insert the soft swab tip between both inner cheeks and lower gums and turn the swab a few times. 5. Then, rub the soft swab tip on your tongue as far back in your throat as you feel comfortable. · Optional: Instead of swabbing your inner cheeks and tongue, you may choose to swab the back of your throat and tonsils. You can use a mirror to help see where to rub your swab. 6. Tilt your head back and fully insert the soft swab tip straight back (not up) into your nose until you Step 6 Anterior naris hit resistance (up to 2.5 cm). Make sure the soft swab tip is fully inside the nose. Mid-inferior 7. Rotate the swab several times against the wall of the nose and let it sit for a few seconds to absorb portion of inferior nasal secretions. turbinate 8. Remove the swab from your nose and using the same swab, repeat for the other nostril. Posterior pharyn: 9. Immediately place the swab into the test tube following the kit instructions. Ontario The information in this document is current as of February 9, 2022 Ontario 🕅 © Queen's Printer for Ontario, 2022 Health

Watch video on how to collect RAT sample for Omicron

Source: https://www.ontariohealth.ca