

## NEW BIVALENT COVID-19 VACCINES

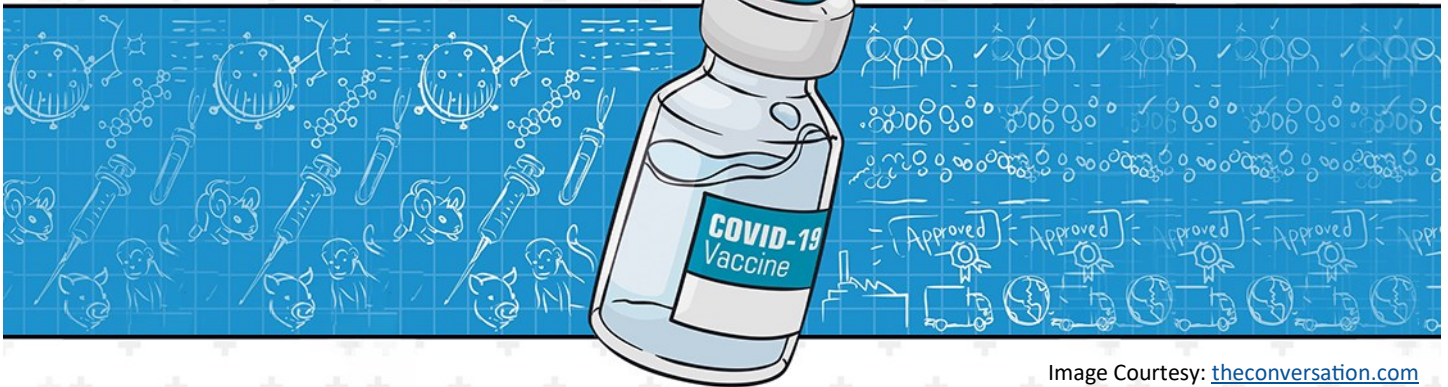
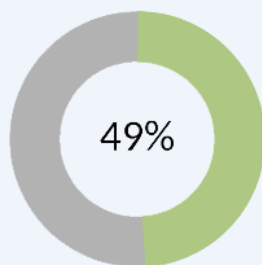


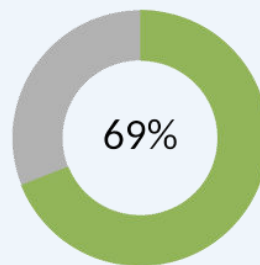
Image Courtesy: [theconversation.com](https://theconversation.com)

In mid-August, U.K. approved the first dual-strain or bivalent COVID-19 vaccine, made by Moderna, that incorporates protein from the original SARS-CoV-2 strain and the Omicron BA.1 sublineage. Approved for ages 18 and above, the booster dose has shown to trigger a strong immune response against both, the original 2020 strain and the Omicron BA.1 variant in a clinical trial. The novel vaccine was also found to produce a good immune response against the Omicron BA.4/BA.5 variants regardless of prior infection.

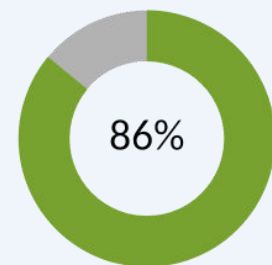
A [recent study](#) published in the scientific journal *The Lancet* estimated that the first covid-19 vaccine prevented up to 20 million deaths around the world in the first year of use. In Ontario, four doses of covid-19 mRNA vaccine among long term care residents *improved* protection and had high vaccine effectiveness (VE) against severe illness (**86%**) during the Omicron dominant period based on a [study](#) from July 2022.



VE (%) against infection



VE (%) against symptomatic infection



VE (%) against severe illness

Current recommended doses of mRNA COVID-19 vaccines continue to provide strong protection against hospitalization and severe illness. The novel bivalent vaccines may also provide improved protection against symptomatic infection, even if it's not specifically targeting the current circulating subvariant. Pfizer-BioNTech also has an Omicron-adapted bivalent vaccine candidate containing BA.1 subvariant and is intended for ages 12 and older. Both, Moderna and Pfizer's BA.1 bivalent vaccines, are currently under review at Health Canada and availability is expected starting in early Fall of 2022, if authorized.

Moderna & Pfizer have also recently submitted their applications to the US Food and Drug Administration (FDA) for their bivalent vaccines that target the BA.4/BA.5 subvariants with the original strain. Submission to Health Canada for approval may soon follow. However, since it's likely that the high-risk population will be prioritized first, availability to others could extend to end of 2022, subject to approval.

## CONTACT TIME OF A DISINFECTANT AND WHY IT MATTERS

Cleaning and disinfection are two crucial *and* separate components of environmental cleaning in a health care setting that reduce the amount of germs in the environment and decrease the risk of disease. Cleaning removes dirt, gunk and some germs that are on surfaces. Disinfection comes after cleaning and kills those germs.

One of the most important factors to consider when using a disinfectant is the contact time. Also known as “wet time”, contact time is the duration that a disinfectant needs to sit on a surface and stay wet *before* letting it air dry or wiping it away in order to effectively kill the germs. Unlike mixing Coke and Mentos, it actually takes time for a disinfectant to react with the germs before it can kill it. Depending on the type, the contact time of a disinfectant can range from as short as 15 seconds for common hand sanitizers, 10 minutes for bleach and some quats, to 30 minutes for chloride oxides usually used in laboratory settings. Hospital-grade disinfectants with a drug identification number (DIN) will always have the contact time specified on the label.

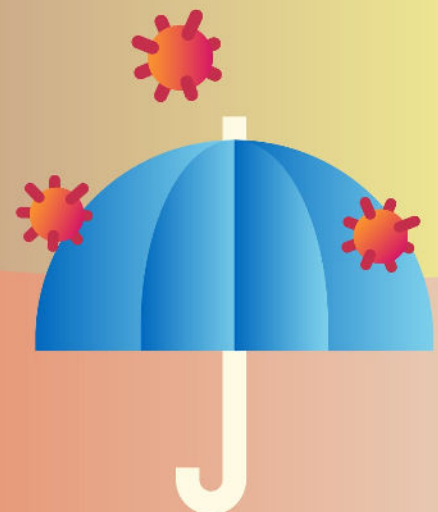
Products that require long contact time can evaporate and dry out before achieving proper disinfection, especially in environments with high temperatures and low humidity. That’s why it is recommended to use disinfectants that have short contact times, preferably no more than 1-3 minutes, to achieve proper disinfection of surfaces and equipment, and to avoid reapplication of disinfectants to keep the surface wet. If a product both cleans and disinfects, it is still going to have a contact time that you need to know. Accelerated hydrogen peroxide-based (0.5-1.4%) one-step disinfectant cleaner is one such example of a low-level disinfectant with contact time usually ranging from 1-3 mins and is effective against most fungi, bacteria and viruses, including SARS-CoV-2.

Source: [www.publichealthontario.ca](http://www.publichealthontario.ca)



## Getting vaccinated against COVID-19 helps protect you from serious illness, hospitalization and death

Being vaccinated does not fully remove the risk of infection, mild symptoms and infecting others, so continue to do everything you can to keep yourself and others healthy.

**World Health Organization**  
COVID-19 vaccine  
fact series

Source: [cdn.who.int](http://cdn.who.int)