

## Three doses is 'immunological sweet spot' for residents under 60: Public Health

As wastewater signals indicate a continued decline of COVID-19 in the community, new research has shown that three doses of a COVID-19 vaccine is the 'sweet spot' for your immune system, according to Dr. Barry Pakes, York Region's Medical Officer of Health.

In his weekly update on the local COVID-19 situation on Monday, Dr. Pakes said wastewater signals are trending in the right direction and although hospital admissions are not yet low, they're stable and 'down about half from the peak several weeks ago.'

'These are good signs as we progress toward the possibility of lower transmission over the summer months,' said Dr. Pakes. Omicron is present though at high levels in the community so those who are immunocompromised or at risk still need to use some caution. For most others, our high vaccination rates in York Region have been so impactful in decreasing severe illness from contracting the virus.

'New evidence and analysis from studies worldwide and most importantly new results from new analysis of our Ontario data that make it very clear that the COVID-19 vaccine is a three-dose vaccine. The fourth dose is certainly important for older individuals and those at higher risk but for everyone else, whether or not you have had COVID, the evidence shows the third dose is an immunological sweet spot, where the immune system is stimulated to respond to COVID by the first two doses and then stimulated again to produce a sustained and long-lasting response that protects from infection and most importantly provides excellent protection from severe outcomes such as hospitalization and deaths. It has the added bonus of keeping viral loads low if you get COVID and decreasing the likelihood that you will pass it on.

'In communities where everyone has a third dose, this contributes to decreased overall prevalence in the community. So, what does this mean to you? It means if you're an adult aged 18+ or a teen 12 ? 17 and have not received your third dose, if you were waiting for the science on safety or the science on the need for a third dose or if otherwise healthy, had COVID and don't feel you need it, now we have the evidence and it clearly demonstrates the safety, the effectiveness and the need for everyone twelve and up to have a third dose. It is not too late. In fact, the extended interval between doses provides adequate protection, so now is a great time.'

Many York Region residents between the ages of 12 and 60, however, have not yet had a third dose. Over 60 per cent of residents between the ages of five and 11 have received one dose of a vaccine, but many received them early on, said Dr. Pakes. Less than half have had two doses.

'Evidence from Ontario data, including for the dramatic first Omicron wave that predominantly affected children, shows that one dose offers really only modest protection at 15 per cent but a second dose bumps that up to 60 per cent protection against infection, even if you have already had COVID. Most importantly, the protection against severe illness goes from 66 per cent after one dose to 87 per cent after two doses. This is great news. Any parents with 5 ? 11-year-old children who are waiting for their first or second dose, or were waiting for the evidence on safety or efficacy, please do now come in. Now is the time.'

Third doses, he added, are not yet recommended for the five to 11 population, but many hope this will change. Dr. Pakes said it is 'reasonable to assume' this approval will come before the start of the new school year in September.

'While COVID illness is generally mild in children 5 ? 11, many have become very ill and require hospitalization. Some have had long COVID symptoms despite a mild initial illness. This vaccine really looks like a three-dose vaccine for everyone. Teens and adults for now, and children likely in the future. Please do come in and get your shot. The fourth dose remains available for those 60 and up and for those who are immunocompromised.

'Will you need another dose in the fall? It's possible. It's also possible we will have a new bivalence of the Moderna vaccine in the fall that offers protection from Omicron. However, this is still unknown. York Region Public Health Clinics now have the capacity to fit you in as soon as possible. For anyone, children or adults, who still need their first, second or third dose, you can still walk in

and book and receive your vaccine.?

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