Are COVID-19 vaccines safe for people living with HIV?

The COVID-19 vaccines authorized by regulators significantly reduce the risk of severe disease and death and are believed to be safe for most people, including people living with HIV.

Before vaccines are licensed for scale-up, global and national regulatory authorities review the data and ensure that they are safe. No safety or efficacy data have emerged to cause worry that people living with HIV are at any greater risk from COVID-19 vaccines than anyone else.

The vaccines include some of the genetic material from SARS-CoV-2 (the virus that causes COVID-19), which stimulates our immune systems to make antibodies against the spike protein that SARS-CoV-2 uses to bind to human cells during infection. None of the vaccine approaches under development or approved by regulators use live vaccines and so they should be just as safe in people with compromised immune systems, such as some people living with HIV who are not virally suppressed. In addition, no pharmacological interactions have been reported between COVID-19 vaccines and antiretroviral medicines, which people living with HIV should continue to take after vaccination in order to maintain health.

Some of the trials for the vaccines included participants from countries where HIV is more common, such as South Africa, and so will have included a number of people living with HIV. However, some trials excluded people living with HIV as a precautionary measure.

As with most vaccines, mild symptoms in the days after a COVID-19 vaccination, typically a sore arm, but sometimes also a more generalized malaise or a mild fever, have been experienced by some people. A very small number of people have had a serious allergic reaction, which can be safely managed by keeping people under observation for 15 to 30 minutes after they receive the vaccine. There is no reason to expect that the mild or more severe reactions occur at higher levels among people living with HIV.

Serious side-effects of a vaccine may occur so rarely that they cannot be detected among the first people to be vaccinated. However, surveillance systems are in place to ensure that rare but serious adverse events are reported to the public health authorities and to the manufacturers of the vaccines.

The AstraZeneca COVID-19 vaccine

Vaccination against COVID-19 will not reduce illness or deaths from other causes. In extensive vaccination campaigns, it is routine for countries to signal potential adverse events following immunization. Regulatory authorities are in regular contact with vaccine manufacturers regarding the latest information on COVID-19 vaccine safety. Regarding the AstraZeneca vaccine, data show that the benefits of the AstraZeneca vaccine outweigh its risks and it is recommended that vaccinations continue.

Should people living with HIV be vaccinated against COVID-19 and should they be prioritized?

For people living with HIV, COVID-19 vaccines bring the same benefits as they bring to all individuals and communities—prevention of severe disease due to SARS-CoV-2 and potentially reduced transmission of the SARS-CoV-2 virus.

Advocacy is needed so that no one is left behind and that national vaccination programmes do not exclude people from key populations, who may have limited access to health services. Based on recent data that show that people living with HIV, regardless of their CD4 count, appear to be at an increased risk of severe outcomes and death due to COVID-19 compared to other people, people living with HIV should be a recognized priority group in national COVID-19 vaccination policies.

Until levels of the virus have fallen to very low levels in the population, people should continue to take preventive measures against the SARS-CoV-2 virus (physical distancing, regular hand washing, wearing face coverings), even after vaccination.

People living with HIV should take effective antiretroviral therapy, which not only keeps people healthy but also prevents ongoing transmission of HIV.