Over 1 million lives saved across Europe by COVID-19 vaccines since the end of 2020

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COVID-19 vaccination directly saved at least 1,004,927 lives across Europe between December 2020 and March 2023, according to new research being presented at this year's European Congress of Clinical

Microbiology & Infectious Diseases (ECCMID) in Copenhagen, Denmark (15-18 April).

The new estimates by WHO/Europe and presented at the conference by Dr. Margaux Meslé, Epidemiologist at WHO/Europe highlight the striking impact of COVID-19 vaccine programs and also underscore the urgent need for countries with low vaccination coverage to fully vaccinate their older adults.

Since the emergence and subsequent spread of SARS-CoV-2 in early 2020, over 2 million COVID-19 laboratory-confirmed deaths have been officially recorded by WHO/Europe.

Countries in the WHO European Region (which includes all countries in the European Union and European Economic Area) have introduced COVID-19 vaccine programs to protect vulnerable groups from severe disease with several waves of variants of concern (VOC).

The authors used weekly reported deaths and vaccination doses by 26 countries and areas to WHO/Europe and the European Centre for Disease prevention and Control between December 2020 and March 2023, to calculate the number of lives saved by vaccination dose, VOC period, age group (25 to 49 years, 50 to 59 years and 60 years or older) and country.

Vaccine effectiveness was considered in the context of each dominant VOC period.

The new estimates suggest that the majority (96%) of the lives saved were in people aged 60 years and older.

In this older age group, the first booster saved the most lives, accounting for almost two-thirds (64%) of lives saved.

Overall, across all age groups and countries, vaccines are estimated to have saved the largest number of lives during the Omicron wave, with at least 568,064 deaths prevented. This represents over half (57%) of the lives saved.

This research did not consider the indirect effects of vaccinations, differing healthcare capacities between countries and non-pharmaceutical interventions.

"We see from our research, the large numbers of lives saved by COVID-19 vaccines across Europe during the pandemic. However, too many people in vulnerable groups across the WHO European Region remain unvaccinated or partially vaccinated. We urge people who are eligible and who have not yet taken the vaccine to do so," says Dr. Richard Pebody, Head of the High Threat Pathogen Team at WHO/Europe.

More information: Estimated number of deaths directly averted as a result of COVID-19 vaccination, European Congress of Clinical Microbiology & Infectious Diseases, 2023.

Provided by European Society of Clinical Microbiology and Infectious Diseases