

Annex 3

Immunization of population groups at high risk of infection and severe complications of COVID-19

Guidance issued as of 14 May 2020

Based on currently available COVID-19 outbreaks investigation data, the population groups that are emerging as high risk for severe complications of COVID-19 and death are **older adults**,¹ **persons who live in a nursing home or long-term care facility** and **persons of all ages with specific pre-existing medical conditions** (including hypertension, diabetes, chronic respiratory system disease, and cardiovascular disease).^{2,3} In addition, **health-care workers** (such as those in contact with COVID-19 patients) are at a high risk of infection.

Many national immunization programmes recognize the importance of prioritizing these groups to protect them and prevent transmission of vaccine-preventable diseases (VPDs) by recommending vaccines also in specific epidemiological situations and emergencies.

If deemed feasible, after a careful assessment of the COVID-19 outbreak situation, national immunization authorities should maintain immunization of these high-risk groups or any other identified high-risk groups according to their current national recommendations. Preventing respiratory illness and hospitalization from pneumococcus, influenza, and pertussis through vaccination will allow respiratory medical equipment, medications, and health care workers to be more available to support patients with COVID-19. While there is currently limited information on whether COVID-19 is associated with an increased risk of pneumococcal infection, pneumococcal vaccination can prevent both primary and secondary bacterial infections and the unnecessary use of antibacterial medications (antibiotics).⁴ Countries should ensure that while every effort is made to maintain immunization activities these should not jeopardize the implemented public health interventions to mitigate the impact of COVID-19.

The vaccines listed below are recommended by WHO for groups considered at high risk of complications from these vaccine preventable diseases. These groups are also at high risk for infection or severe complications of COVID-19.

*Influenza*⁵

Health-care workers (HCWs) are an important priority group for influenza vaccination, as it not only helps to protect the individual and maintain health-care services during influenza epidemics, but also reduces spread of influenza to patients who are at higher risk of severe influenza.^{6,7}

Older adults (≥65 years of age) and **persons with specific chronic diseases** (such as, chronic respiratory system disease, and cardiovascular disease) are at increased risk for developing serious complications from influenza infection and most influenza deaths occurs in persons 65 years and older. Where feasible, it is therefore recommended to vaccinate older adults and persons with specific chronic diseases before the 2020/2021 influenza season.⁸

*Measles*⁹

In recent years, many counties in the Region have been experiencing outbreaks of measles with health service related transmission involving **health-care workers**.^{10,11} Because of the known risk of spreading measles from **health-care workers** to patients or from patients to HCWs, all HCWs and any staff who are

in contact with patients should be immune to measles. Verification of vaccination and/ or history of measles should be integrated into standard infection control guidelines, occupational health and safety guidelines for health-care workers or other standards of care for health-care workers.

Pneumococcal disease¹²

Older adults are at an increased risk of pneumococcal diseases. Countries should follow national guidelines for use of pneumococcal vaccines in such high-risk groups whether with 13-valent pneumococcal conjugate vaccine or 23-valent pneumococcal polysaccharide vaccine or sequential vaccination with both vaccines.

Pertussis¹³

Health-care workers should be prioritized as a group to receive pertussis vaccine. It has been shown that HCWs are at increased risk of pertussis, and that transmission in health-care settings poses substantial risk of infection for infants and immunocompromised individuals. In many countries, vaccination of HCWs with acellular pertussis-containing vaccines is recommended for all HCWs or special groups of HCWs who are likely to have a more intensive contact with pregnant women, neonates and infants.

Further considerations for recommending vaccination for high-risk groups:

- The current COVID-19 situation has highlighted that employers and managers of health facilities should assume overall **responsibility to ensure that all necessary preventive and protective measures, including immunizations, are in place to minimize occupational health risks among health care workers.**^{14,15}
- Countries should consider prioritizing within each specific group those who are at a highest risk and should be vaccinated first. For example, in the case of HCWs, staff working in intensive care units and emergency department teams should be vaccinated first.
- Countries may consider reinforcing and scaling-up vaccination of these high-risk groups when COVID-19 pandemic is under control. This will help to reduce risk of overburdening the health care system during the next seasonal increase of vaccine preventable infectious respiratory diseases such as influenza, measles, pneumococcal disease and pertussis. Preventing occurrence of these VPDs also helps reduce the health system burden during any potential future COVID-19 transmission scenarios that may occur.
- A potential increase in demand for vaccines in the population may result in shortages of vaccines requiring re-prioritization of vaccination of other groups.
- In the event that routine immunization of any high-risk group is postponed or cancelled due to the ongoing COVID-19 outbreak, it should be resumed according to national recommendations as soon as deemed feasible following an assessment of the COVID-19 situation.

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