

Vaccination for Elderly: Easiest Way for Disease Prevention

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The health problems faced by the elderly are unique compared to other age groups. In elderly, immune function are decreased predisposing this population prone for infectious diseases. The co-morbid conditions including chronic lung diseases and diabetes etc. make the infections more severe. The recovery from infections is also slow and usually takes longer time in elderly. In India, preventive care for diseases is often ignored among elderly (specially for age above 65 years). Many infections and illnesses could be easily avoided by administration of the right vaccines and diagnostic health screenings. Sadly, we don't have a National Immunization Schedule for the elderly as we have for children. It is expected from the family members to take proactive steps to vaccinate their older adults in the family to keep family stay healthy. Following is a brief note about preventive vaccination for older adults.

Elderly are more susceptible to the pneumococcal disease, influenza, herpes zoster, tetanus and COVID-19.

Pneumonia and other pneumococcal related diseases and their related complications are more common and severe in elderly compared to younger ones. For these people, pneumococcal vaccine is of two types: the 23-valent pneumococcal polysaccharide vaccine (PPSV23), and the 13-valent pneumococcal conjugate vaccine (PCV13). The PCV13 is more immunogenic. PPSV23 is less immunogenic but covers 10 more strains than PCV13. For our seniors, the recommended schedule is 1 dose PCV13 if previously did not receive PCV13, followed by 1 dose PPSV23 at least 1 year after PCV13. If previously received PPSV23 but not PCV13 at age 65 years or older; 1 dose PCV13 at least 1 year after PPSV23 is recommended. PCV13 and PPSV23 should not be

administered during same visit. The recommended interval between PCV13 and PPSV23 is ≥ 1 year for immunocompetent elder. However, for those with immunocompromising or special conditions (chronic renal failure, nephrotic syndrome, blood cancer, generalized malignancy, solid organ transplant, multiple myeloma or splenectomy), the recommended time to wait is ≥ 8 weeks.

Influenza (flu) related morbidity and mortality is also higher in elderly. These people should receive 1 dose of inactivated influenza vaccine or a recombinant influenza vaccine annually preferably before the onset of influenza activity in the community, preferably in October before the flu season starts in India. Elderly should get a flu shot and not a nasal spray vaccine.

Herpes Zoster or Shingles, occurs when the chickenpox virus (dormant in almost all adults who had chickenpox in childhood); reactivates in later life. The condition often brings a blistering, painful rash. Post herpetic pain is more common and severe in elderly. There are 2 vaccines for shingles prevention. A live attenuated zoster vaccine (1-dose) and an adjuvant herpes zoster subunit vaccine (2 doses, administered 2 to 6 months apart, minimum 4 weeks interval). The adjuvanted herpes zoster subunit vaccine (2 dose vaccine) has higher efficacy. If the person had previously vaccinated with live attenuated zoster vaccine, then adjuvant herpes zoster subunit vaccine can be administered at least 2 months after. Live vaccines are contraindicated in severe immunocompromising conditions.

Diphtheria toxoid, tetanus toxoid and acellular pertussis-containing vaccines help in protecting against diphtheria, tetanus and pertussis, but they will not prevent

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all cases. Tdap (Tetanus and diphtheria toxoids and acellular pertussis vaccine), Td (Tetanus and diphtheria toxoids) and TT (Tetanus toxoid) are available. The elderly people should receive 1 dose Tdap, then Td or Tdap booster every 10 years. Previously TT was used as booster. COVID-19 (CORONA) related pneumonia occurs in more

severe form in elderly persons. Vaccination for COVID-19 is also available and recommended for our seniors.

Apart from these vaccines for elderly, there are several other vaccines available i.e. Hepatitis B vaccine, which can be given according to the individual risk of getting infections.

Recommendation of vaccination in persons aged ≥ 65 years

Pneumococcal vaccine	Not previously vaccinated	A dose of PCV13 followed by a dose of PPSV23, 1 year after
	Previously vaccinated with only PPSV23	A dose of PCV13, one year after vaccination with PPSV23
	PPSV23 received at age < 65 years	PCV13 at age ≥ 65 years and PPSV23 after 1 year (at least 5 years after previous dose of PPSV23)
Influenza (flu)		Every year
Herpes Zoster	Adjuvant herpes zoster subunit vaccine (RZV)	2 doses, 2 to 6 months apart, minimum 4 weeks interval
	A live attenuated zoster vaccine (ZVL)	1 dose
Tetanus Toxoid	Tdap (Tetanus and diphtheria toxoids and acellular pertussis vaccine), Td (Tetanus and diphtheria toxoids)	1 dose Tdap, then Td or Tdap booster every 10 years
COVID-19 (CORONA) vaccine	Available	