

Criteria: Policies		
Indicators	Description	Status
Immunization ¹ for older adults is included in national aged care strategies.	The Turkey Healthy Aging Action Plan and Implementation Program 2015-2020 includes discussion of adult immunization. ¹	
<p>The National Immunization Programme/Plan (NIP) specifies older adults in vaccination schedules.</p> <ul style="list-style-type: none"> ✓ COVID-19 (Age: 65+) ✗ Influenza (Age: 65+) ✗ DTap (Age: 18+) ✓ Pneumococcal pneumonia (Age: 18+) ✗ Respiratory syncytial virus (RSV) (Age: N/A) ✓ Shingles (Age: 65) 	<p>Turkey's NIP, the Expanded Program on Immunization, is primarily dedicated to childhood vaccinations. Most adult vaccinations are generally recommended for 19+, not specifying sub-populations of adults or older adults.^{2,3}</p> <p>2 or more doses of the COVID-19 vaccine are recommended annually for people 65+.</p> <p>1 dose of the influenza vaccine is recommended annually for people 19+.</p> <p>1 dose of DTap is recommended annually for people between 19 and 49, with no recommendation for people 50+.</p> <p>Depending on the indication, 1-2 doses of pneumococcal vaccine are recommended for adults with additional factors or another indication. 1 dose is recommended for adults 65+.</p> <p>2 doses of the shingles vaccine are recommended for people 50+.</p>	
National advisory committees on immunization (e.g., NITAGs) include expertise on ageing, geriatrics, internal medicine and/or adult vaccination, and a life course approach to immunization is included within decision-making processes and recommendations, with reference to key performance indicators and immunization rate targets specific to older adults.	Turkey's NITAG does not appear to have an ageing expert on their committee. Still, it is important to note that Dr. Niyazi Çakmak from WHO EURO is involved in research concerning life-course approaches to vaccination. ^{4,5}	

¹Within scope, inclusion criteria for vaccine-preventable diseases as part of the knowledge repository of the GAAV include funding, under the NIP and across all provinces, territories, and states, for all of the following vaccines: influenza, pneumococcal pneumonia, COVID-19, respiratory syncytial virus (RSV), pertussis, and shingles.

Criteria: Funding		
Indicators	Description	Status
Vaccination is funded under the NIP and administered through the government program for at-risk populations, including older adults and people with chronic conditions.	Vaccinations are given free of charge to all age groups and reimbursed for high risk at family medicine centers by appointment.	
National strategies prioritize the need for continuous monitoring of allocated budgets related to the funding and reimbursement of vaccines and public health efforts for older adults.	According to a 2020 report by the WHO, Turkey's vaccine expenditures account for 2.48% of health expenditures. ⁶⁻⁸ Implementation of immunization and effective screening intended for the elderly is prioritized under item 1.4 of the Turkey Healthy Aging Action Plan and Implementation Program 2015-2020. ¹ It does not appear that this program has been updated.	

Criteria: Program		
Indicators	Description	Status
Easily accessible information (web pages, brochures, television/radio ads, social media) on adult immunization and health communication campaigns are targeted at older and at-risk adults to support a life course approach to immunization.	While vaccine schedules are easily accessible, public health campaigns are not easily identified outside of the COVID-19 context. The Turkish Infectious Diseases and Clinical Microbiology Specialist Association Adult Immunisation Guide Working Group released an adult vaccination guide in lieu of a formal adult vaccination schedule/plan for physicians. The guide discusses the burden of disease, vaccine storage, and administration protocol, and emphasizes the importance of adult vaccinations. ³	
<p>Vaccination administrators are expanded to include other healthcare workers and professionals, such as pharmacists, nurses and support workers through easily accessed sites.</p> <ul style="list-style-type: none"> ✗ Community health workers ❓ Medical/Pharmacy and/or nursing students *with supervision ✓ Midwives ✓ Nurses ✗ Paramedics ✓ Physicians ✓ Physician assistants ✗ Pharmacists ✗ Pharmacy technicians ✗ Support workers 	It is difficult to discern what professionals are eligible to administer vaccinations in Turkey. Based on research available in English, it appears that physicians, nurses, physician assistants, and midwives (as of 2006) can administer vaccines. It is unclear whether vaccination protocols have been expanded to include other healthcare professionals. ^{3,9}	

Criteria: Program		
Indicators	Description	Status
Healthcare professionals are well-trained, informed, and upskilled on the benefits and administration of vaccines for older adults (e.g., specialized education on adult vaccination is included in medical curriculum, continuous education is available to healthcare professionals).	Information on adult vaccination education/protocol is largely not available. A study concerning Turkish nursing students' knowledge of childhood vaccinations, which are more established than older adult vaccinations, found that knowledge was sub-par. This indicates that healthcare professionals may also have insufficient access to upskilling for adult immunization. According to a 2021 study, while healthcare professionals and television provided the most information on vaccination, adult vaccines are not well-known or performed enough in Turkey. ^{2,10}	
Clear administrative guidelines, including eligibility criteria and protocols, are defined for each vaccine.	The Turkish Infectious Diseases and Clinical Microbiology Specialist Association Adult Immunisation Guide Working Group released an adult vaccination guide in the absence of an adult vaccination schedule/plan for physicians. The guide includes a discussion of burden of disease, vaccine storage, and administration protocol, and emphasizes the importance of adult vaccinations. ³	

Criteria: Performance		
Indicators	Description	Status
Goals and targets for reduction of VPD rates and adult immunization coverage are set out as part of the National Immunization Programme or Plan.	Adult immunizations are not apparent in the national immunization programme, which is dedicated to childhood vaccinations. ^{1,3,11}	
Coverage data for adult immunization is comprehensive, updated (2021 or earlier) and extends beyond coverage rates for influenza and COVID-19 through adult national immunization coverage data collection templates (e.g., aNICs).	Minimal coverage data is available for childhood vaccinations. Data concerning adult vaccination coverage is not easily accessible. ^{3,11}	
Collection and documentation of age-disaggregated data, including immunization and burden of disease rates, support evidence-informed decision-making and strategy development on vaccination.	Minimal coverage data is available for childhood vaccinations. Data concerning adult vaccination coverage is not easily accessible.	

Criteria: Equity		
Indicators	Description	Status
The NIP provides a specific focus on sub-groups of older adult populations at high risk of infectious diseases (e.g., cardiovascular diseases, diabetes, and other non-communicable diseases).	Neither the national immunization schedule nor the expanded immunization schedule focuses on subpopulations of older adults. It is unclear whether the schedules acknowledge children with complex needs/ those who are at high risk of infection. The Turkish Infectious Diseases and Clinical Microbiology Specialist Association Adult Immunisation Guide Working Group recognizes these groups, however, they are not acknowledged in the NIP. ^{12,13}	
Vaccine administrative pathways acknowledge and accommodate equity-based barriers, driven by the social determinants of health, to older adult sub-group populations, such as refugees, Indigenous populations, and older adults residing in rural settings.	UNICEF in Turkey is working with the Ministry of Health on vaccination campaigns targeted at refugee and migrant children under 5. There is a particular focus on areas with the largest refugee populations. Moreover, this work has expanded the refugee health response in Turkey to build the capacity of Syrian healthcare providers. This does not appear to apply to older adults. ¹⁴	

Criteria: Long-Term Care Settings		
Indicators	Description	Status
The NIP explicitly acknowledges older residents (65+) in long-term care settings as at-risk, or high-risk populations.	The long-term care system in Turkey is less developed. Most older adults rely on informal home care from friends or family members to provide support and care. The expanded immunization schedule does not acknowledge LTC residents at increased risk. ¹⁵	
Adult immunization is included in national long-term care strategies (if present).	There does not appear to be a national long-term care strategy in Turkey.	

Criteria: Civil Society Organizations

Indicators	Description	Status
Civil society organizations (e.g. community groups, NGOs, labour unions, patient organizations, professional organizations) provide evidence on immunization to help inform policy creation that is reflective of the needs of older adults across the country.	The Turkish Infectious Diseases and Clinical Microbiology Specialist Association Adult Immunisation Guide Working Group published several adult immunization guides, along with a consensus report on intraabdominal infections, an infectious disease book. However, the presence and influence of other CSOs in Turkey (that can be found in English) are minimal. ^{3,16}	Yellow
Civil society organizations provide educational resources to constituents on the importance of adult vaccination across the country.		Green
Civil society organizations advocate to raise political and governmental will to invest in preventative measures and strategies, including the prioritization of adult vaccination.		Yellow

Legend

Criteria is fully met	Green
Criteria is partially met	Yellow
Criteria is not met	Red
Insufficient/ inaccessible/unclear evidence.	Blue

References

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