



Date: 20 October 2021
Document Code: 71-06
Version: 06

Guidelines

COVID-19 Vaccination AstraZeneca Vaccine Guidelines

Objective

To provide guidelines for the AstraZeneca vaccine storage, handling, administration, and safe disposal along with recommendations for vaccine recipients.

Rationale

Vaccines are important part of strategies to curtail the devastating Covid-19 pandemic. AstraZeneca vaccine needs special handling to maintain its effectiveness. Safe transportation, storage, administration, and disposal of vaccine waste must be ensured at all vaccination facilities.

Instructions

Vaccine Storage¹

- Storage and transportation in maximum shelf life is 6 months stored in a refrigerator between 2 to 8°C
- Once removed from the fridge, may be stored between 2 to 25°C and used within 6 hours
- **Do not freeze the vaccine** in any circumstance
- **Protect the vaccine from direct exposure to sunlight**
- During storage keep vials in outer carton to protect from light

Who should receive the Vaccine

- All adults aged 18 years and above, including pregnant and lactating women

¹ <https://www.sps.nhs.uk/articles/storage-requirements-for-each-covid-19-vaccine/>



- Eligible adults with diabetes, hypertension, heart disease and other stable chronic disorders
- Those with mild COVID-19 can receive the vaccine once the isolation period complete.
- Those with severe COVID-19 can receive the vaccine once they become stable
- Those **chronically immunosuppressed** may receive the vaccine, though efficacy may be lower
- Those post-transplantation may receive the vaccine 3 months after transplantation
- Those post chemotherapy may receive the vaccine 28 days after chemotherapy

Who should NOT receive Vaccine

- People with a history of severe allergic reaction to any component (e.g polysorbate) of the vaccine formulation.
- The vaccine is not recommended for persons younger than 18 years of age pending the results of further studies.
- People who developed clotting disorder with the first dose of AstraZeneca vaccine.
- Individuals having **fever at the time of coming for vaccination** (Can be rescheduled after the illness is settled)
- Individuals on **short-term immunosuppressive medication** should wait for 28 days after the medication ends.
- Those having active GI bleeding disorder or seizures.
- Those with history of heparin-induced thrombocytopenia and thrombosis (HITT or HIT type 2)
- Those with history of major blood clot occurring at the same time as having low levels of platelets after receiving any COVID-19 vaccine

Vaccine Administration

- Route of Administration: **Intra-muscular**
- Site of Administration: **Lateral Deltoid Muscle (Upper Arm), Non-dominant side**
- Regimen: **Two doses**
- Dose: **0.5ml/vial** (5×10^{10} viral particles)
- **Authorized Interval: 28 days**
- Nature of the antigen: Transmembrane spike protein
- Presentation: **Single dose vial**
- **No additional booster dose required**

Steps of Administration

1. Wear mask and observe COVID-19 SOPs
2. **Greet** the client
3. Complete **verification** process in the NIMS



4. Ensure **consent** by stating “that you are receiving this COVID-19 vaccine because you have registered yourself into the system”
5. Expose site (**deltoid** of non-dominant arm) for administration
6. **Explain the procedure and inform** that some pain on giving injection, discomfort at the site of injection or fever after the injection may happen
7. Swab the injection site with an alcohol swab for **30 seconds**, then let the area dry for another 30 seconds so that the alcohol doesn't enter the puncture and sting
8. Take vaccine vial out of the vaccine carrier
9. Open the vial by removing plastic cover/cap
10. Take out **22G-25G 0.5ml** syringe and remove needle cap
11. Discard the cap in safety box
12. Insert the syringe needle through the top rubber pad of vaccine vial
13. Draw **0.5ml** of the vaccine from the vial
14. Inject intra muscularly at the site of injection at an angle of 90° (right angle)
15. Dispose the syringe in the safety box
16. Complete entry in the **NIMS**
17. Send the client to observation area for **30 minutes**
18. After 30 minutes if no acute adverse event is experienced by the client, send the client home. Also, advise the client to **report to health facility /1166 helpline** if any adverse event is experienced.

Vaccine Waste Management

- Used vials and syringes must be **collected safely** by the vaccinator
- **Syringes must be disposed through environment friendly incinerators** where available.
- In case of non-availability of incinerators, follow the under mentioned link for proper disposal of the vaccine waste.
https://apps.who.int/iris/bitstream/handle/10665/43476/9241594284_eng.pdf?sequence=1&isAllowed=y
- The **vaccinator under supervision of the health facility in-charge** of the concerned health facility will ensure proper disposal of COVID-19 vaccination waste
- **Daily waste generation and disposal record** must be maintained by the vaccinator

During vaccination, Do NOT

- Touch the rubber pad of vaccine vial (causes contamination and can result in an AEFI)
- Recap needle of syringes (to prevent needle stick injuries)



Please refer to “Annex-A” checklist for covid-19 vaccine administration

Note: The above recommendations are being regularly reviewed by the Ministry of National Health Services, Regulations & Coordination and will be updated based on the international & national recommendations and best practices.

The Ministry acknowledges the contribution of Dr Ifrah Javaid, Dr Saira Kanwal, Dr Fyezah Jehan, Dr Faisal Mahmood, Dr Amjad Mahboob and Mr. Syed Shamim Raza, EPI Team and HSA/ HPSIU/ NIH team to compile these guidelines.

References:

1. https://www.who.int/news-room/feature-stories/detail/the-oxford-astrazeneca-covid-19-vaccine-what-you-need-to-know?gclid=CjwKCAjwj6SEBhAOEiwAvFRuK0mFFUp5ebXCGgQv7hUT7UfIy1XPsnxY3cFtND4g0nF7DN79UBOirRoCi3oQAvD_BwE
2. Interim recommendations for use of the ChAdOx1-S [recombinant] vaccine against COVID-19 (AstraZeneca COVID-19 vaccine AZD1222, SII Covishield, SK Bioscience)
3. <https://www.sps.nhs.uk/articles/storage-requirements-for-each-covid-19-vaccine/>
4. <https://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/storage-handling-toolkit.pdf>
5. <https://www.hse.ie/eng/services/news/newsfeatures/covid19-updates/covid-19-vaccine-materials/important-information-about-covid19-vaccine-astrazeneca.pdf>
6. <https://www.health.gov.au/initiatives-and-programs/covid-19-vaccines/learn-about-covid-19-vaccines/about-the-astrazeneca-covid-19-vaccine>



Annex-A

CHECKLIST FOR COVID-19 VACCINE ADMINISTRATION	
Client Name:	Age:
ID Card:	Gender:
Address:	
Staff name/Signatures	
1. Greet the Client	<input type="checkbox"/>
2. Make sure that you and client are wearing face mask	<input type="checkbox"/>
3. Complete the 2-step verification of client	<input type="checkbox"/>
4. Ensure consent by stating that "you are receiving this COVID-19 vaccine because you registered yourself in the system"	<input type="checkbox"/>
5. Prepare dose	<input type="checkbox"/>
6. Explain the procedure and inform that some pain on giving injection, and discomfort or fever after the injection can occur	<input type="checkbox"/>
7. Sterilize injection site with alcohol swab	<input type="checkbox"/>
8. Administer injection	<input type="checkbox"/>
9. Properly dispose the injection waste	<input type="checkbox"/>
10. Send the client to observation section for 30 minutes	<input type="checkbox"/>
11. After 30 minutes, and with no acute AEFI, client is ready to be sent home.	<input type="checkbox"/>
12. Respond to Qs if any, as the last step.	<input type="checkbox"/>