

2

“What could happen in case of a partial dosing or single nostril administration?”

- An incomplete dose of LAIV **does not need to be repeated** as long as at least 0.1 mL of the vaccine has been given intranasally as each half dose (0.1 mL) contains a sufficient number of viral particles to stimulate an immune response.⁶

Description of LAIV

- The prescribed dose of LAIV (0.2 mL; 0.1 mL per nostril) contains more virus than is needed to establish an infection.^{1,3}
- While the vaccine contains approximately 10^7 infectious units of each of the vaccine strains, the dose needed to infect half of a group of vaccinated adults (human infectious dose, 50%) is approximately 10-fold to 100-fold lower and for children up to 1000-fold lower³
- The binding of viruses to epithelial cells in the nasopharynx occurs rapidly, and successful vaccination depends primarily on the continued propagation of viruses after the initial deposition in the administered dose. Virus replication occurs for days in adults and beyond a week in some children.³

1. FLUMIST. Prescribing information. <https://www.azpicentral.com/pi.html?product=flumist>

2. Fluenz nasal spray suspension, influenza vaccine (live attenuated, nasal). Summary of product characteristics. https://www.ema.europa.eu/en/documents/product-information/fluenz-epar-product-information_en.pdf

3. Murphy BR, Coelingh K. Principles underlying the development and use of live attenuated cold-adapted influenza A and B virus vaccines. *Viral Immunol.* 2002;15(2):295-323. doi:10.1089/08828240260066242