

**Fluzone® Quadrivalent Influenza Vaccine, 2017-2018 Formula**

**Catalog No. NR-51401**

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**For research use only. Not for human use.**

**Contributor:**

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**Manufacturer:**

Sanofi Pasteur, Inc., Swiftwater, Pennsylvania, USA

**Product Description:**

NR-51401 is an inactivated influenza virus vaccine prepared from influenza viruses propagated in embryonated chicken eggs. The virus-containing allantoic fluid was harvested and inactivated with formaldehyde. Influenza virus was concentrated and purified in a linear sucrose density gradient solution using a continuous flow centrifuge. The virus was then chemically disrupted using a non-ionic surfactant, octylphenol ethoxylate (Triton® X-100) producing a "split virus". The split virus was further purified and then suspended in sodium phosphate-buffered isotonic sodium chloride solution. The Fluzone® Quadrivalent process uses an additional concentration factor after the ultrafiltration step in order to obtain a higher hemagglutinin (HA) antigen concentration.

The hemagglutinin content was standardized according to U.S. Public Health Service requirements. Each 0.5 mL syringe contains the recommended ratio of 15 µg each of the hemagglutinin antigens from influenza viruses A/Michigan/45/2015 X-275 (H1N1), A/Hong Kong/4801/2014 X-263B (H3N2), B/Phuket/3073/2013 (B Yamagata lineage) and B/Brisbane/60/2008 (B Victoria lineage). No thimerosal, antibiotics or any other preservative was used in the manufacturing process of the single-dose presentations of Fluzone® vaccine.

Please note that this vaccine preparation is being released for research use only and not for human use. Vaccines produced for the 2017-2018 season are now past their expiration dates (EXP. 30JUN18).

**Material Provided:**

Each syringe contains 0.5 mL of split-virus vaccine in phosphate-buffered saline.

**Packaging/Storage:**

NR-51401 is packaged in a 0.5 mL prefilled syringe. The product is provided on refrigerated bricks and should be stored at 2°C to 8°C immediately upon arrival. Do not freeze. Protect from light.

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH:

Fluzone® Quadrivalent Influenza Vaccine, 2017-2018 Formula, NR-51401."

**Biosafety Level: 1**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. Grohskopf, L. A., et al. "Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices – United States, 2017-2018 Influenza Season." MMWR Recomm. Rep. 66 (2017): 1-20. PubMed: 28841201.
2. [WHO Recommendations for Influenza Vaccines](#)

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