

CCHMC, Division of Allergy & Immunology
Egg Allergies & Influenza Vaccination Guideline Statement (2011-2012)

Patients with a history of a positive egg skin prick test (SPT) or elevated serum egg-specific IgE-RAST (≥ 7 kU/L if ≥ 2 years old, or ≥ 2 kU/L if < 2 years old) and patients who have had allergic reactions to egg or influenza vaccination previously are at risk for similar reactions after influenza vaccination this year. Based on our own recent study and recent publications, we have simplified our guideline recommendations. We recommend that all patients be monitored for at least 30 minutes post-vaccination. The suggested protocol for graded challenge can be found at the end of this statement.

We recommend that ideally *every healthy CCHMC patient and all of their close contacts* meeting CDC criteria for vaccination (www.cdc.gov/flu/) should receive some form of influenza prophylaxis for the duration of the typical flu season (October through April). While every patient at CCHMC represents a unique individual with a distinct set of medical conditions, we believe that we can effectively categorize patients into 3 distinct risk groups, as it pertains to egg allergy and influenza prophylaxis. Please note that group definitions have changed since last year.

- **Green Group** – *Minimal risk*. Non-egg-allergic patients should receive either the inactivated (intramuscular [IM]) or live (intranasal) vaccine at their General Practitioner’s office, where epinephrine-IM should be available.
- **Yellow Group** – *At risk*. Egg-allergic patients, patients with a history of positive egg allergy testing (SPT or RAST), and patients who are avoiding eggs entirely for any medical reason should be evaluated in the Allergy Clinic. We generally recommend that these patients only receive the inactivated flu vaccination, and do so either as a graded challenge (see below) or as a single injection. If a 2-step booster vaccination is indicated and the patient passes the first vaccination without reaction, a second same-lot vaccination may be given as a single injection without further testing. At the discretion of the attending Allergist, full-strength skin prick testing may be performed prior to any vaccine administration.
- **Red Group** – *Special risks*. Pregnant women, patients with chronic respiratory disease, patients with immunodeficiency, and patients with other contraindications to either version of the flu vaccine should consult with their healthcare provider(s) prior to receiving it, and their close contacts and caregivers should strongly consider inactivated (i.e. *not live*) influenza vaccination. Patients in this group should be otherwise stratified according to the above Green or Yellow groups, as it pertains to potential egg allergy. Patients with chronic respiratory disease should only receive the inactivated vaccination. Patients with immunodeficiency should follow closely with their specialist(s); this group should also receive a prescription for a neuraminidase inhibitor (e.g. oseltamivir or zanamivir) only to be filled & taken at the first sign of clinical influenza infection.

These guidelines were formulated in review of the most up-to-date egg allergy-flu vaccination guidelines (e.g. AAAAI, CDC & BASCI). We note that all published guidelines vary. Our guidelines are not CCHMC policy and they are meant only to assist physicians in their individualized patient care decision-making process. These guidelines do not address the management of other allergenic components of the influenza vaccine (e.g. latex, gelatin, & antibiotics).

We look forward to assisting you with your patient care needs.

Graded Challenge Protocol:

At 30-minute intervals:

1. Give 1/10 of the total volume of full-strength (FS) vaccine
2. Give 9/10 of the total volume of FS vaccine