# Selections from international journals

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## Administering influenza vaccine to egg allergic recipients: a focused practice parameter update.

Greenhawt MJ, Li JT, Bernstein DI, Blessing-Moore J, Cox L, Khan D, Lang DM, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph C, Schuller DE, Spector SL, Tilles SA, Wallace D.

The well-proven benefits of influenza immunization can now be made available to persons with a history of egg allergy. Individuals with diagnosed or suspected egg allergy who need an influenza vaccination should be evaluated by an allergist/immunologist for evaluation of egg allergy and for administration of the 2010-2011 trivalent influenza vaccine (TIV) if clinically indicated. Studies have suggested that influenza vaccines can be administered to patients with a history of anaphylaxis to egg without adverse effects. However, such studies are limited in number, and reactions to influenza vaccines in egg allergic persons can occur. Caution is warranted in patients with a history of anaphylaxis or where the severity of their clinical reactivity is uncertain, particularly when the ovalbumin content of the vaccine is unknown. Therefore, consultation with an allergist experienced in food allergy and anaphylaxis is strongly recommended. For the 2010-2011 influenza season, the routine practice of skin testing to the TIV is no longer recommended. Both the 2-dose (10%, 90%) and single-dose methods are appropriate for administering influenza vaccine to egg allergic individuals. Egg allergic individuals can receive TIV without prior skin testing to the vaccine, with the vaccine being administered via a 2-step graded challenge: first administer 10% of the age-appropriate dose, with a 30-minute observation after administration for symptom development. If no symptoms develop, the remaining 90% can be administered, with a 30-minute observation for symptom development. The same TIV product brand should be used for booster vaccinations if possible, but it is not necessary to use the same lot. Egg allergic individuals can receive TIV without prior skin testing to the vaccine as a single, age-appropriate dose without use of graded challenge. Individuals should be observed for 30 minutes after injection for evidence of a systemic reaction. The same TIV product brand should be used for booster vaccinations, but the same lot is not necessary.

***Allergy. 2011;66(3):404-11.***

## Infant eczema, infant sleeping problems, and mental health at 10 years of age: the prospective birth cohort study LISAplus.

Schmitt J, Chen CM, Apfelbacher C, Romanos M, Lehmann I, Herbarth O, Schaaf B, Kraemer U, von Berg A, Wichmann HE, Heinrich J; LISA-plus Study Group.

BACKGROUND: Cross-sectional studies suggest an association between eczema and mental health problems, possibly modified by sleeping problems, but prospective evidence is missing. We aimed to prospectively investigate the relationship between infant eczema (within first 2 years of age), infant sleeping problems (within first 2 years of age), and the risk of mental health problems at 10 years of age.
METHODS: Between 1997 and 1999, a population-based birth cohort was recruited in Munich, Leipzig, Wesel, and Bad Honnef, Germany, and followed until 10 years of age. Physician-diagnosed eczema, parent-reported sleeping problems, and known environmental risk factors for atopy were regularly assessed until 10 years of age. Mental health was measured using the Strengths and Difficulties Questionnaire (parent version) at 10 years of age. We applied logistic regression modeling adjusting for environmental and lifestyle factors, allergic comorbidity, and family history of eczema. RESULTS: From the original cohort of 3097 neonates, 1658 (54%) were followed until age 10, while 1578 (51%) were eligible for analysis. In the fully adjusted model, children with infant eczema were at increased risk of hyperactivity/inattention at 10 years of age [odds ratio (OR) 1.78; 95% confidence interval (95% CI) 1.02-3.09]. Infant eczema with concurrent sleeping problems predicted emotional problems [OR 2.63; 95% confidence interval (95% CI) 1.20-5.76] and conduct problems (OR 3.03; 95% CI 1.01-9.12) at 10 years of age. CONCLUSIONS: Infant eczema with concurrent sleeping problems appears to be a risk factor for the development of mental health problems.

***J Allergy Clin Immunol. 2010;126(6):1105-18.***

## Guidelines for the diagnosis and management of food allergy in the United States: summary of the NIAID-Sponsored Expert Panel report.

Boyce JA, Assa'ad A, Burks AW, Jones SM, Sampson HA, Wood RA, Plaut M, Cooper SF, Fenton MJ, Arshad SH, Bahna SL, Beck LA, Byrd-Bredbenner C, Camargo CA Jr, Eichenfield L, Furuta GT, Hanifin JM, Jones C, Kraft M, Levy BD, Lieberman P, Luccioli S, McCall KM, Schneider LC, Simon RA, Simons FE, Teach SJ, Yawn BP, Schwaninger JM; NIAID-Sponsored Expert Panel.

Food allergy (FA) is an important public health problem that affects adults and children and may be increasing in prevalence. Despite the risk of severe allergic reactions and even death, there is no current treatment for FA: the disease can only be managed by allergen avoidance or treatment of symptoms. Moreover, the diagnosis of FA may be problematic, given that nonallergic food reactions, such as food intolerance, are frequently confused with FAs. Additional concerns relate to the differences in the diagnosis and management of FA in different clinical practice settings. Due to these concerns, the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health, working with more than 30 professional organizations, federal agencies, and patient advocacy groups, led the development of ‘‘best practice’’ clinical guidelines for the diagnosis and management of FA (henceforth referred to as the Guidelines). Based on a comprehensive review and objective evaluation of the recent scientific and clinical literature on FA, the Guidelines were developed by and designed for allergists/immunologists, clinical researchers, and practitioners in the areas of pediatrics, family medicine, internal medicine, dermatology, gastroenterology, emergency medicine, pulmonary and critical care medicine, and others. The Guidelines focus on diseases that are defined as FA and include both IgE-mediated reactions to food and some non-IgE-mediated reactions to food. The Guidelines do not discuss celiac disease, which is an immunologic non-IgE-mediated reaction to certain foods. Although this is an immunebased disease involving food, existing clinical guidelines for celiac disease will not be restated here. Finally, these Guidelines do not address the management of patients with FA outside of clinical care settings (for example, schools and restaurants) or the related public health policy issues. These issues are beyond the scope of this document.

***J Allergy Clin Immunol. 2011;27(3):587-593.e22.***

## World Allergy Organization anaphylaxis guidelines: Summary.

Simons FE, Ardusso LR, Bilò MB, El-Gamal YM, Ledford DK, Ring J, Sanchez-Borges M, Senna GE, Sheikh A, Thong BY; World Allergy Organization.

The unique World Allergy Organization (WAO) Guidelines for the Assessment and Management of Anaphylaxis were created in response to the absence of global guidelines for anaphylaxis. They were developed after documenting that essential medications, supplies, and equipment for assessment and management of anaphylaxis are not universally available worldwide. Additionally, they were developed with the awareness that any health care professional might, at some time, have to assess and manage anaphylaxis in a low-resource environment, whether this be a country, a region, or a specific location, such as an aircraft cabin or a remote area. They incorporate contributions from more than 100 allergy/immunology specialists on 6 continents received through the WAO member societies and the WAO Board of Directors. In order to transcend language barriers, the principles of anaphylaxis assessment and management set forth in the guidelines are summarized in 5 comprehensive illustrations.

The guidelines review patients’ risk factors for severe or fatal anaphylaxis, cofactors that amplify anaphylaxis, and anaphylaxis in vulnerable patients, such as pregnant women, infants, and the elderly. The biologic role of cardiac mast cells is examined, and anaphylaxis presenting as an acute coronary syndrome is discussed. They focus on the supreme importance of making a prompt clinical diagnosis and on the basic initial treatment (ie, epinephrine [adrenaline], patient positioning, supplemental oxygen, and intravenous fluid resuscitation) that is urgently needed and should be possible even in a low-resource environment. They advise, in parallel with new Resuscitation Guidelines, that cardiopulmonary resuscitation should be initiated with continuous chest compressions before giving rescue breathing.

No randomized controlled trials of any therapeutic interventions have been performed during an acute anaphylactic episode. The recommendations in the guidelines are therefore based on the best evidence available and supported by citation of 150 references published up to the end of 2010. They reflect general agreement among the contributors. A global research agenda to address some of the uncertainties in the assessment and management of anaphylaxis is proposed.

The guidelines are organized into 3 main sections: assessment of patients with anaphylaxis, management of anaphylaxis in a health care setting, and management of anaphylaxis at time of discharge from a health care setting.