

AT THE FOREFRONT OF **KIDS** MEDICINE™  
**UChicago Medicine**  
**Comer Children's**

## Food Allergy and Asthma

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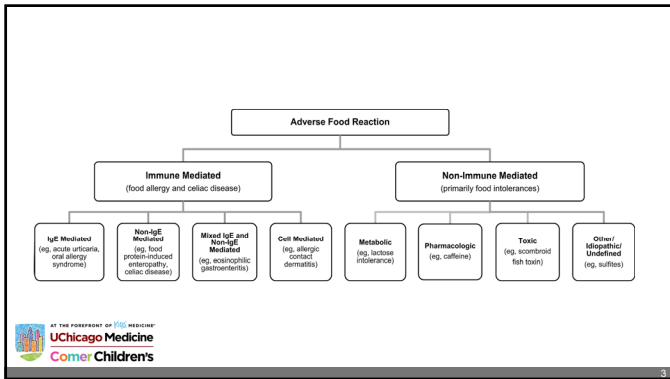
### Disclosures

**Ad Hoc Advisor:**  
 Aimmune  
 DBV  
 Genentech  
 Novartis  
 ALK

**Advisory Board:**  
 SioIta  
 Clostrabio



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### IgE Mediated Food Allergy

15 million Americans

- 4% adults
- 8% children


200,000 ED visits each year  
 150 deaths/year

- Thought food to be safe
- 90% peanut/tree nut

**Rapid-onset and rapid reversal**  
 30% biphasic

**Localized or generalized**

- Skin: Pruritis/Hives/Angioedema
- GI: Vomiting/Diarrhea
- Respiratory: Coughing/Wheezing/SOB/Acute Rhinitis/Acute Conjunctivitis
- CV: Tachycardia/low blood pressure



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**FASTER ACT: January 1, 2023, sesame will be labeled on packaged foods sold in the U.S.**

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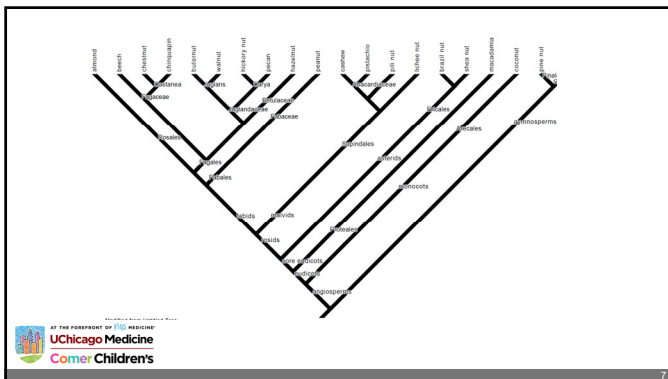
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If Allergic to	Risk of Reaction to at Least One:	Risk:
A legume*	Other legumes	9%
A tree nut	Other tree nuts	37%
A fish	Other fish	50%
A shellfish	Other shellfish	75%
A grain*	Other grains	20%
Cow's milk	Eggs	10%
Cow's milk	Other milk	92%
Cow's milk	Wheat's gluten	4%
Peanut	Other tree nuts	55%
Wheat	Other grains	55%
Wheat	Other tree nuts	92%
Latex	Fruits/vegetables	35%
Latex	Other grains	11%

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Sicherer, SH J Allergy Clin Immunol 2001; 108: 881-890

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### Oral Allergy Syndrome

**Ragweed:** Bananas, melons (watermelon, cantaloupe, honeydew), zucchini, cucumber, dandelions, chamomile tea

**Birch:** Apples, pears, peaches, apricots, cherries, plums, nectarines, prunes, kiwi, carrots, celery, potatoes, peppers, fennel, parsley, coriander, parsnips, hazelnuts, brazil nut, cashew, almond, walnut, peanut, soy

**Grass:** Peaches, celery, melons, tomatoes, oranges, peanut, soy, wheat

**Mugwort:** Celery, apple, kiwi, peanut, fennel, carrots, parsley, coriander, sunflower, peppers

**Alder:** Celery, pears, apples, almonds, cherries, hazelnuts, peaches, parsley

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### Allergy and Anaphylaxis Emergency Plan

American Academy of Pediatrics

Child's name: \_\_\_\_\_ Date of plan: \_\_\_\_\_  
Age: \_\_\_\_\_ Weight: \_\_\_\_\_ Sex: \_\_\_\_\_  
Allergy: \_\_\_\_\_  
Gluten: \_\_\_\_\_  
Egg: \_\_\_\_\_

Child has allergy to: \_\_\_\_\_  
 Tree nuts  
 Peanuts  
 Shellfish  
 Dairy  
 Wheat  
 Soy  
 Eggs  
 Fish  
 Medication  
 Latex  
 Other: \_\_\_\_\_

Child has asthma:  Yes  No  
 Child has had anaphylaxis:  Yes  No  
 Child has had anaphylaxis:  Yes  No  
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## Oral Immunotherapy

- Fever
- Hot Showers
- Exercise (3 hours)
- NSAID use
- Menstrual cycle

## Asthma

- Most common chronic non-communicable disease in the world
- Characterized by variable respiratory symptoms
  - Wheeze
  - Shortness of breath
  - Chest tightness
  - Cough

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## Asthma

The Global Initiative for Asthma (GINA)  
Established by the WHO and NHLBI in 1993  
Tasked to increase awareness about asthma  
Tasked to improve asthma prevention and management

Released Asthma Guidelines in 2019

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## COVID-19 and Asthma

- People with asthma do not appear to be at increased risk of acquiring COVID-19, and systemic reviews have not shown an increased risk of severe COVID-19 in people with well-controlled, mild-to-moderate asthma
- People with well-controlled asthma are not at increased risk of COVID-19 related death. It is increased with people who had recently needed oral corticosteroids and in hospitalized patients with severe asthma
- Overall reduction in asthma exacerbations during the pandemic

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## COVID-19 and Asthma

- Make sure everyone has a written asthma action plan
- Avoid nebulizers (replace with inhaler and spacer)
- Remember personal PPE as asthmatics cough...a lot!
- Encourage flu vaccination and COVID-19 vaccination\*
- \*a gap of 14 days between COVID-19 vaccination and influenza vaccination is recommended by the CDC

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## LANDMARK CHANGE

- Short acting bronchodilators alone are no longer the preferred treatment for Step 1 asthma in adults in adolescents
- **Inhaled corticosteroids and either a long acting or short acting bronchodilator are recommended** (MART: Maintenance and Reliever Therapy)
- May also have a roll in any school aged children

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## Why?

- Regular use of SABA, even for 1-2 weeks, is associated with adverse effects
- Higher use of SABA is associated with adverse outcomes
- ICS reduce the risk of asthma death, hospitalizations and exacerbations
- MART therapy reduced severe exacerbations by 2/3
- Ultimately there is no evidence for safety or efficacy of SABA-only treatment

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## Asthma Medications-beyond ICS

### Biologic Therapies:

Omalizumab (Xolair)  
Benralizumab (Fasenra)  
Mepolizumab (Nucala)  
Dupilumab (Dupixent)

### Long Acting Muscarinic Antagonists (LAMA)

Aclidinium (Tudorza)  
Tiotropium (Spiriva)  
Glycopyrrolate (Lonhala)  
Umeclidinium (Incruse)

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