LabCorp

# It Takes Two:
## Respiratory and Food Allergen Profiles

LabCorp's regional respiratory profiles include the most common respiratory symptom triggers: pollens, mold, dust mites, insect emanations, and furry animals.[1] Now these profiles are also available with reflex to furry pet allergen components – cat and dog. Because risk for and severity of respiratory diseases increases with the number of furry allergen components to which a patient is sensitized[2,3,4] these reflexes may help enhance management strategies.

Self-reported food allergy is more common than confirmed allergy.[5] LabCorp's food allergen profile focuses on the small number of allergens that cause a high percentage of true food allergy: milk, egg, peanut, tree nuts, shellfish, fish, wheat and soy.

## Area 19: Regional Respiratory Profile with Furry Pet Component Reflexes

Accurate diagnosis is foundational to treatment efficacy and disease control. However, respiratory symptoms are frequently diagnosed on history and physical findings alone, and studies have demonstrated this approach may only be accurate about 50 percent of the time.[6] Given the prevalence of co-existent asthma in allergic rhinitis patients, this may lead to sub-optimal outcomes, including unmanaged symptoms, repeat office visits, and unnecessary referrals.[6]

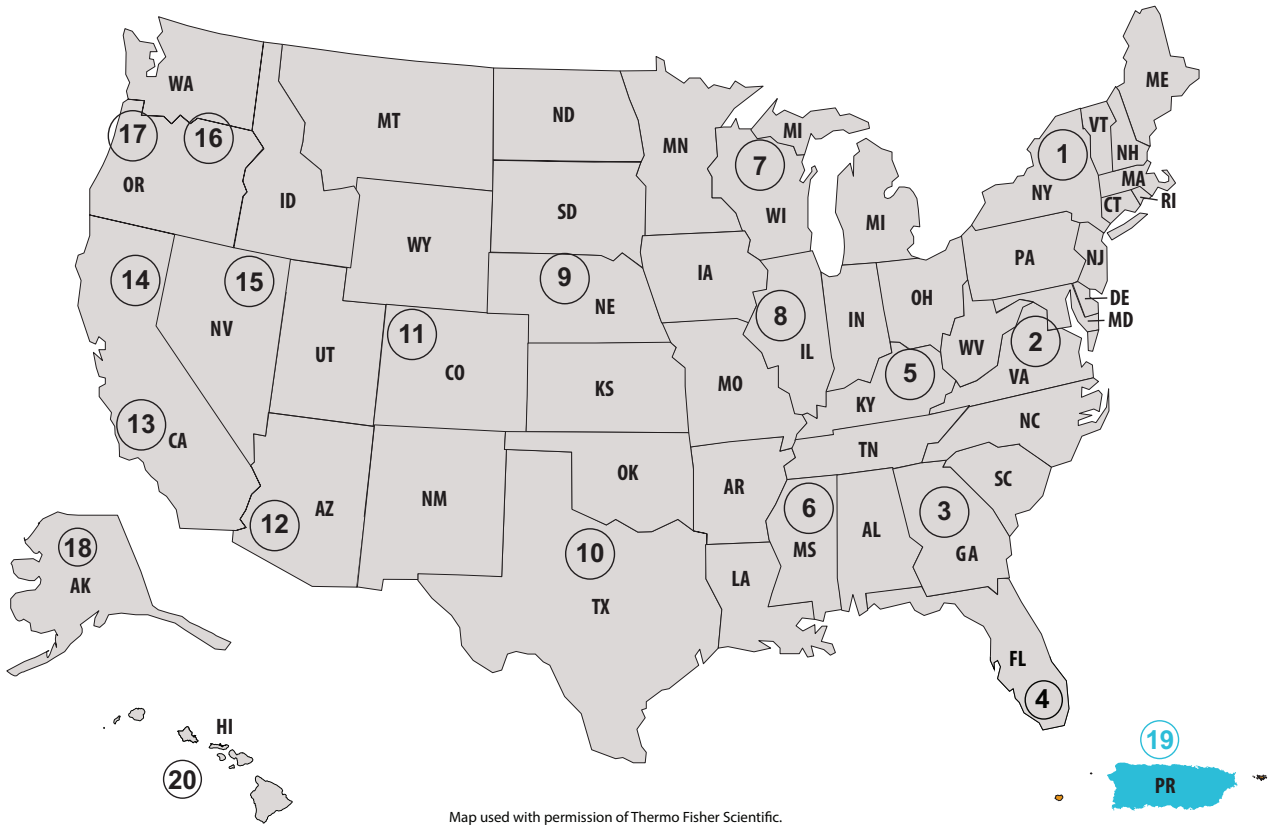
### Quantitative Allergen-specific IgE tests performed using the ImmunoCAP® method

### 606600 Allergen Profile with Total IgE, Respiratory — Area 19 (PR)

**Method:** Thermo Fisher ImmunoCAP® **Specimen Requirement:** 3.5 mL serum (room temperature)

| Tree | Weed | Grass | Mold | Animal/Dust |
|---|---|---|---|---|
| Elm, American | Pigweed, Common | Bermuda Grass | *Alternaria alternata* | *Blomia tropicalis* |
| Eucalyptus | Sheep Sorrel | Johnson Grass | *Aspergillus fumigatus* | Cat Dander |
| Oak, White | Wall pellitory | Red Top, Bentgrass | *Aureobasidium pullulans* | Cockroach, German |
| Pine, White | | | *Cladosporium herbarum* | *D farinae* |
| | | | *Penicillium chrysogenum* | *D pteronyssinus* |
| | | | | Dog Dander |
| | | | | Mouse Urine |

*If cat IgE ≥ 0.35 kU/L, reflex tests Fel d 1 IgE, Fel d 2 IgE, Fel d 4 IgE will be added. If dog IgE ≥ 0.35 kU/L, reflex tests Can f 1 IgE, Can f 2 IgE, Can f 3 IgE, Can f 5 IgE will be added. If reflex testing is performed, additional charges/CPT codes may apply.




Map used with permission of Thermo Fisher Scientific.

# Common Food Allergens

Adverse reactions to foods may be broadly grouped into two categories: immune mediated (food allergy, Celiac) and non-immune mediated (mainly food intolerance, eg, lactose intolerance).[7,8] Symptom overlap among conditions within these two broad groups[7,8] may challenge an empiric diagnosis.

## When approaching suspected food allergy, it is important to note[5]:

- Self-reported food allergy is more common than confirmed allergy.
- Food allergy is more common in children.
- Food allergy is more common in individuals with other atopic diseases.
- A small number of allergens cause a high percentage of food allergy.

## The most common food allergens in order of prevalence include[5]:

- Milk
- Egg
- Peanut
- Tree nuts
- Shellfish
- Fish
- Wheat
- Soy

To aid in a differential diagnosis, expert guidelines recommend a detailed medical history and physical exam to help identify suspected foods to guide diagnosis, followed by testing focused on those suspected foods.[5,8]

## Quantitative Allergen-specific IgE tests performed using the ImmunoCAP® method

### 604783 Allergen Profile, Food IgE II With Component Reflexes*

**Method:** Thermo Fisher ImmunoCAP® **Specimen Requirement:** 4 mL serum (room temperature)

| | | |
|---|---|---|
| Almond | Hazelnut (Filbert) | Scallop |
| Brazil Nut | Macadamia Nut | Sesame Seed |
| Cashew Nut | Milk | Shrimp |
| Clam | Peanut (Whole) | Soybean |
| Codfish | Pecan | Walnut |
| Corn | Pistachio | Wheat |
| Egg White | | |

If milk IgE ≥ 0.35 kU/L, reflex tests α-lactalbumin IgE, β-lactoglobulin IgE, and casein IgE will be added. If egg white IgE ≥ 0.35 kU/L, reflex tests ovalbumin IgE and ovomucoid IgE will be added. If IgE to Brazil nut, cashew nut, hazelnut (filbert), peanut (whole), and/or walnut is ≥ 0.10 kU/L, reflex tests will be added as follows: Brazil nut: Ber e 1 IgE / cashew nut: Ana o 3 IgE / hazelnut (filbert): Cor a 1 IgE, Cor a 8 IgE, Cor a 9 IgE, and Cor a 14 IgE / peanut (whole): Ara h 1 IgE, Ara h 2 IgE, Ara h 3 IgE, Ara h 6 IgE, Ara h 8 IgE, and Ara h 9 IgE / walnut: Jug r 1 IgE and Jug r 3 IgE.

***If reflex testing is performed, additional charges/CPT code(s) may apply.**


**References**

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4. Patelis A, Gunnbjornsdottir M, Alving K et al. Allergen extract vs. component sensitization and airway inflammation, responsiveness and new-onset respiratory disease. Clinical and Experimental Allergy 2015(46); 730-740.
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