

Allergen Sampling

Dust Sampling for Indoor Allergens

Objective

- To determine the levels of different allergens, i.e., dust mites (*Der p1*, *Der f1*, Dust Mites Group 2), cockroach (*Bla g1*, *Bla g2*), cat (*Fel d1*), and dog (*Can f1*), present in the surface sampled.

Advantages and Disadvantages

- **Advantages**
 - Surface dust samples, not air samples, are usually how allergen levels are determined.
 - No major sampling equipment is necessary to sample for dust allergens.
- **Disadvantages**
 - Analysis cannot be performed unless a sufficiently large amount of dust is sampled. See section 4.1 below.

Equipment

- Allergen dust collector (e.g. DustChek™, DUSTREAM™).
- Vacuum cleaner or pump.

Sampling Protocols

- Typically, the amount of dust collected is far more important than vacuuming time, pump speed, or surface area sampled. As much dust as possible with a minimum of at least a teaspoon or ~150 mg of dust is required to perform the analysis. More is better.
- Remove the caps from each end of the allergen dust collector and then attach the collector to the end of the hose on the vacuum cleaner.
- With the allergen dust collector attached to the vacuum, turn on the vacuum and drag the dust collector over the surface to be sampled (floor, bedding, furniture, etc.). Corners of rooms are often good areas to collect dust samples.
- Remove the allergen dust collector from the vacuum hose and put the caps back on each side of the collector.

Shipping

- Dust samples for [allergen analysis](#) should be sent via an overnight courier.