

BIOALLERGENS AND ALLERGIC DISEASE IN THE VALLEY

By

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- Jett is a 5 year old boy who has had asthma his entire life.
- In 2009 he went to the ED 7 times for asthma flares.
- He was hospitalized twice.
- He wheezes 24/7.
- He's on Advair 230/21 2 puffs twice a day.

- So what do we do for Jett?
- Is our valley air killing this poor boy?
- Does he need to move out of the valley?

TRIGGERS

- We need to find out what's setting off Jett's asthma.

ALLERGENS

■ INDOOR

- Dust Mites

- Cockroaches

- Pets

- Cats

- Dogs

- Hamsters/Guinea Pigs

ALLERGENS

■ OUTDOOR

■ Trees

- Jan - July

■ Grasses

- Bermuda, Johnson, and everything else.

- March - July

■ Weeds

- Late August - October

■ Flowering Plants

ALLERGENS

- INDOOR/OUTDOOR

- Molds

- Alternaria

- Hormodendrum

- Stachybotchrus

- Anytime of year but worse October - December

FOODS

- Can food allergies trigger asthma?

Bronchoconstriction



Before



**10 Minutes After
Allergen Challenge**

TRIGGERS

- Working Environment
- Chemical Irritants
 - Perfume, hairspray, cosmetics, and household cleaners
 - Air Pollution
 - Ozone
 - Car exhaust
 - Wood smoke
 - Sulfur dioxide

TRIGGERS

- Physiologic Triggers
 - Exercise
 - Upper respiratory infections
 - Chronic Sinusitis
 - Chemicals in food or medicine
 - Sulfites in beer and wine
 - Aspirin
 - NSAIDS

TRIGGERS

- Physiologic Triggers
 - Intense emotion
 - Crying
 - Laughing
 - Shouting
 - Hyperventilation
 - Stress
 - Cold weather

So Why Is Jett's Asthma So Bad?

- Skin Test = Highly reactive to Cats, Dogs, Guinea Pigs.
- What do I tell the parents?
- How long will it take to get rid of the dander?
- Air Filters?

How Did Jett Respond?

- His initial FEV1 was 45%
- We had his parents get rid of the pets and treated him aggressively for allergies.
- One month later his FEV1 improved to 108% and he was symptom free.