

Asthma triggers

Asthma is a chronic lung disease characterized by obstructed airways due to inflammation and secretions. Avoiding asthma “triggers” is essential in preventing asthma flare-ups.

The workplace is all too often a place where these triggers cannot be avoided. Individuals with asthma or other responses to certain triggers are often at the mercy of their coworkers in their efforts to avoid these triggers. Many people are unaware of the multitude of things that can trigger an asthma attack. In the work place, everyone must take into consideration all others that work at that location. Everyone should do their part in reducing work place triggers so that all employees can remain healthy and productive.

There are a variety of medications including inhalers that can help to treat asthma but the key to prevention of exacerbations is to avoid triggers. In general air filters and air cleaners are not very effective in preventing asthma exacerbations though studies have shown that after prolonged use (eg. a minimum of one year), there is some clinical benefit.

There are a variety of exposures that can cause or exacerbate symptoms including the following categories:

- Inhaled allergens
- Inhaled respiratory irritants
- Respiratory infections
- Hormonal fluctuations
- Medications
- Physical activity
- Emotional state (anxiety, sudden upsets)

Allergens

Inhalant allergens: Common inhalant allergens that can induce asthma or cause exacerbations include:

- Animal allergens (pets and pests including cats, dogs, rodents, birds)
- House-dust mites (which are present in all but arid or high altitude regions)
- Cockroaches
- Indoor and outdoor fungi (mold, mildew)
- Outdoor plant allergens (tree, grass, weed pollen)

Food allergens: Food allergies rarely cause isolated asthma without other symptoms. However someone with food-induced anaphylaxis can exhibit asthma symptoms

Generally this occurs after eating something that a person is allergic to, but in certain circumstances, food allergens can be aerosolized in sufficient amounts that highly sensitive individuals can develop asthma symptoms. Examples include seafood, eggs, or cow's milk-allergic individuals reacting to steam, vapors, or sprays from the cooking or processing of these foods.

Irritants:

A variety of irritants can induce asthma symptoms. These include:

- cigarette smoke
- fireplace smoke
- ashes
- aerosol sprays
- Perfumes/colognes including perfumed hand lotions, etc.
- cooking odors
- musty odors
- shower steam
- traffic fumes
- air pollution
- workplace irritants (including cleaners, chlorine, formaldehyde from carpets, etc)

Many individuals do not realize the effect that wearing perfume or other scented products can have on individuals around them. All too often, the person has become so sensitized to whatever scent is being worn, that it is impossible to judge how much of the product has been applied and how strong the scent is.

Respiratory infections:

Colds, influenza, bronchitis, ear infections, sinus infections and pneumonia are common asthma triggers because they cause airway inflammation.

Temperature and Weather:

Temperature and humidity may play a role in exercise-induced asthma. This may be due to increased breathing during exercise which can cause water loss in the airways which then can lead to inflammation.

Wet conditions and thunderstorms have also been linked to asthma exacerbations. There are often increased levels of respiratory allergens present in the air, particularly pollen during weather events.