HEALTH BASICS

Identifying asthma triggers

Identifying asthma triggers means finding exposures or activities linked to worsening asthma.

WHAT IT IS
Finding exposures or activities linked to asthma worsening

WHERE IT COMES UP
Asthma reviews, symptom diaries, workplaces, exercise, and allergy assessments

WHY IT MATTERS
Helps target avoidance and strengthen an asthma action plan

WHAT IT IS NOT
Not a disease or a diagnosis

WHO TO ASK
Primary care clinician, asthma nurse, allergist, or respiratory specialist

HOW IT IS CHECKED
Pattern review; sometimes peak-flow, allergy, or challenge testing

Overview

Identifying asthma triggers is not a disease or a diagnosis. It is the process of looking for things that make a person's existing asthma symptoms or airflow limitation worse.

A trigger is not the same as the underlying cause of asthma. Triggers can irritate sensitive airways or set off inflammation, which is swelling and irritation inside the breathing tubes. A trigger may lead to coughing, wheezing, chest tightness, shortness of breath, or a drop in peak flow.

Common triggers include respiratory infections, allergens, smoke, air pollution, exercise, cold air, strong emotions, and some medicines. Allergens are normally harmless substances, such as pollen or animal dander, that provoke an immune response in someone who is allergic.

Not everyone has the same triggers. One person may react to cats and pollen, while another mainly notices problems during viral infections or exercise. Several triggers may act together. Sometimes there is no clear trigger.

Finding a possible trigger does not replace asthma treatment. Regular treatment and a written asthma action plan remain important, even when a trigger can be reduced or avoided.

How it works

Trigger identification usually begins by looking for a repeated pattern. You may notice that asthma worsens in a certain season, building, room, workplace, or activity. The timing matters.

For example, symptoms that appear during pollen season may suggest seasonal allergy. Symptoms that improve during weekends or holidays may raise concern about a workplace exposure. Breathing problems during or shortly after exercise may need assessment for exercise-induced bronchoconstriction, meaning temporary narrowing of the airways caused by physical activity.

A diary can help show patterns that are easy to miss. Useful details include:

A peak-flow meter measures how quickly you can blow air out. Repeated readings may show that airflow changes after an exposure. However, technique, effort, and normal daily changes affect the result. A single reading cannot identify a trigger.

Allergy testing may be useful when the history suggests an allergic trigger. Skin-prick tests and blood tests for specific immunoglobulin E, or IgE, can show sensitisation to an allergen. Sensitisation means the immune system recognises that substance. It does not prove that the substance causes asthma symptoms. Results need to be compared with what happens in real life.

Specialist-supervised breathing or exercise challenge tests may be used in selected cases. Standard spirometry, which measures how much and how quickly you breathe out, helps assess asthma but usually does not identify a particular trigger by itself.

- Symptoms, their timing, and what you were doing
- Places, animals, smoke, fumes, weather, or infections involved
- Reliever inhaler use and whether it helped
- Peak-flow readings, if these are part of your asthma plan
- Workdays, rest days, exercise, sleep, and menstrual periods
- New medicines or changes to existing medicines

Why it matters for your health

Recognising a genuine trigger can help you make focused changes. This may reduce exposure, improve symptom control, or help your clinician adjust your asthma action plan.

The aim is not to remove every possible irritant from your life. Broad restrictions can be

expensive, stressful, or ineffective. Evidence for environmental measures differs by trigger, and changes are most useful when there is a clear link between the exposure and your asthma.

Trigger identification can also protect activities that matter to you. For example, exercise commonly brings on asthma symptoms, but avoiding all physical activity is usually not the goal. Assessment and an appropriate asthma plan can help many people remain active.

Work-related patterns are particularly important. Flour dust, wood dust, cleaning products, laboratory animals, welding fumes, isocyanates in some paints and foams, and other substances can cause or worsen work-related asthma. Early assessment may help clarify the relationship and guide safer workplace changes.

Knowing your triggers can make a written asthma action plan more specific. The plan can explain what to do during a viral infection, pollen season, exercise, travel, or another predictable situation. Do not change prescribed treatment based only on a suspected trigger without discussing it with the clinician responsible for your asthma care.

What can go wrong

A suspected trigger may be blamed when the main problem is uncontrolled asthma, incorrect inhaler technique, missed treatment, or another condition. Reflux, nasal and sinus disease, inducible laryngeal obstruction, heart conditions, and anxiety-related breathing changes can sometimes resemble or add to asthma symptoms. These require their own assessment.

Allergy tests can also be misunderstood. A positive test without matching symptoms does not prove that an allergen is responsible. Conversely, a negative allergy test does not rule out non-allergic triggers such as smoke, cold air, strong odours, infection, or exercise.

Food is not a common cause of isolated asthma symptoms. However, breathing difficulty after eating can be part of anaphylaxis, a severe allergic reaction. This may also cause swelling, hives, vomiting, faintness, or collapse. Use prescribed adrenaline if available and call emergency services.

Some medicines can worsen asthma in susceptible people. These include aspirin or other non-steroidal anti-inflammatory drugs like ibuprofen or naproxen , known as NSAIDs, and beta blockers like metoprolol or propranolol used for some heart, blood pressure, eye, or migraine conditions. Do not stop prescribed medicine on your own. Ask the prescriber or pharmacist to review the timing and possible alternatives.

Seek prompt clinical advice if asthma is waking you at night, limiting usual activity, requiring the reliever more often than your plan allows, or producing peak-flow readings in the warning range of your action plan.

Call emergency services for severe difficulty breathing, inability to speak in full sentences, blue or grey lips, confusion, unusual drowsiness, collapse, or symptoms that are not improving with the emergency steps in your asthma action plan.

What you can do

Keep a dated symptom and exposure record for several weeks, or long enough to include both better and worse periods. Record facts rather than trying to decide the cause in advance. Bring the record, inhalers, and any peak-flow readings to a routine asthma review.

Useful questions include:

Avoid deliberate "tests" in which you expose yourself to a suspected trigger. This is especially important for foods, medicines, workplace chemicals, or anything linked to a previous severe reaction. Challenge tests, when needed, should be planned and supervised by an appropriate clinical service.

Do not start a restrictive diet, remove a pet, leave a job, or make costly changes to your home based only on a guess or an isolated test result. Discuss the evidence, likely benefit, and practical options first.

There may be nothing specific to remove. Viral infections, weather changes, and emotional stress cannot always be avoided. In those cases, the useful action is to keep asthma treatment up to date and know what your action plan says to do when symptoms worsen.

- Does this pattern suggest allergy, exercise-related, or work-related asthma?
- Would allergy testing change what I should do?
- Should I measure peak flow at work and away from work?
- Could a medicine be contributing?
- Is my inhaler technique correct?
- Does my written asthma action plan cover this situation?

Common questions

Can I have more than one trigger?

Yes. Triggers often overlap. For example, exercise may cause more trouble during a viral infection, in cold air, or when pollen levels are high.

Does wheezing around a pet prove an allergy?

No. The timing makes allergy possible, but other exposures may be present. A clinician may compare your history with allergy testing. There are no truly allergen-free breeds of cat or dog.

Can stress trigger asthma?

Strong emotions can change breathing and may contribute to asthma symptoms. This does not mean the symptoms are imaginary. Stress can also occur because breathing feels difficult. Repeated symptoms still need an asthma assessment.

Should I avoid exercise?

Usually not. Exercise supports overall health, and asthma should not automatically prevent participation. Symptoms with exercise may indicate that asthma control, inhaler technique, or the diagnosis needs review. A clinician can advise how your action plan applies before and during activity.

Can a home air-quality monitor identify my trigger?

It may show levels of particles, humidity, or some pollutants, but it cannot prove what is causing symptoms. Consumer devices also differ in accuracy. Compare any readings with a symptom diary rather than treating them as a diagnosis.

How long does identification take?

There is no fixed period. A clear workplace or seasonal pattern may require observations across work and rest days or across different seasons. Severe reactions should not be recreated to confirm a pattern.

Sources

- Global Initiative for Asthma. Global Strategy for Asthma Management and Prevention, 2025 update .
- National Institute for Health and Care Excellence. Asthma: diagnosis, monitoring and chronic asthma management (NG245) . 2024.
- Cloutier MM, Baptist AP, Blake KV, et al. 2020 Focused Updates to the Asthma Management Guidelines . Journal of Allergy and Clinical Immunology. 2020;146(6):1217-1270.
- US Centers for Disease Control and Prevention. Controlling Asthma .
- US Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health. Diagnosing Work-related Asthma .



- Parsons JP, Hallstrand TS, Mastronarde JG, et al. An Official American Thoracic Society Clinical Practice Guideline: Exercise-induced Bronchoconstriction . American Journal of Respiratory and Critical Care Medicine. 2013;187(9):1016-1027.