

Asthma Triggers and Corresponding Home Repairs

Trigger	Treatment
Pest Control (Provided by repair agency)	Eliminate pests during demo: vacuum cockroaches, clean rodent sebum (rub marks), etc., cockroach frass (feces), and grease build-up, etc.
	Seal Gaps and open joints in accessible HVAC ducts to reduce pest entry
	Repair sub-floor & seal along walls to exclude rodents. Ensure there are no gaps behind cabinets, etc.
	Seal any penetrations into basement, use copper mesh, xcluder, etc. and finish with patching cement or sheet metal. Ensure windows & doors seal. Install door sweeps.
	Remove trash and unwanted belongings from basements to reduce harborage for pests. Install wall or base cabinets in kitchen when they are badly damaged or missing, leading to insufficient storage for food.
Pest Control (Provided by Integrated Pest Management Company)	Fill rodent holes; use copper mesh, xcluder, etc. and finish with spackle or patching cement, if exterior.
	If reusing appliances, inspect & eliminate pests: refrigerator (gasket, motor, cooling grid), under stove top, and inside microwave - treat with gel bait; inspect for mice in fridge motor, and in stove wall insulation
	Seal all accessible plumbing penetrations to exclude mice; use copper mesh, xcluder, etc. and finish with spackle or patching cement. Use escutcheon plates
	Seal cabinets to walls, floor, etc. with silicone caulk to deny pest access. Apply boric acid dust (cockroach prevention) into voids before sealing.
	Apply baits, traps and low exposure chemical treatments as necessary
Mold (Caused by water infiltration)	Repair and replace materials that are damaged by water, use EPA guidelines when removing and remediating mold
	Repair plumbing leaks in sinks, showers/tubs, toilets, supply lines and/or drain lines
	Make needed repairs and upgrades to insure that the roof and building shell are water tight and properly shed water away from the home (e.g. new rubber roofs, new siding, brick pointing, stucco patching). Take measures to remediate basement moisture (but cannot guarantee completely dry basement)
Mold (Caused by poor ventilation and humidity)	Remove/decommission humidifiers if present
	Install dehumidifier if humidity in the home is above 60% and homeowner understands the maintenance requirements and electrical costs
	Install kitchen exhaust fan vented outside with at least 100CFM
	Install bathroom exhaust fan vented outside
	Ensure clothes dryer, if present, vents outside w/metal duct and unobstructed airflow Correct improperly vented exhaust fan to exhaust outside
Dust	Replace carpeting in kitchen and bathrooms with smooth, cleanable, and durable flooring.
	Remove carpeting in bedroom of person with asthma and install smooth, cleanable and durable flooring.
	Remove carpeting in living areas such as living rooms, dining rooms, and hallways and install smooth, cleanable and durable flooring
	Replace air filters on heating/cooling system; install FilterLocks if the slot for the furnace filter allows air to bypass the filter.
	Vacuum and clean grates and termination points in duct systems
	Prepare and paint with low-VOC paint, in accordance with EPA guidelines for lead paint, areas of home where interior paint covering is chipped or peeling. Prioritization given to living areas and bedrooms of individuals with asthma.
Heat and Cold	Repair or replace inoperable furnaces or boilers
	Install programmable thermostats as needed
	Provide window air conditioning units in bedroom of person with asthma
	Ensure windows in bedroom of person with asthma are operable and seal well

*Developed by Children’s Hospital of Philadelphia’s Community Asthma Prevention Program and home repair providers.