Asthma and the Weather

Is there any connection with weather and asthma? The answer is yes, much more than you think. For example, a person with asthma can tell you that the sudden change from breathing warm indoor air to breathing cold air (dry or humid) can trigger an asthma attack. So, during winter, it is a good idea for anyone whose asthma symptoms are triggered by cold air to wear a scarf over the mouth and nose to warm the air they breathe. But there is more to the weather than a cold spell.

Mould & the Weather

Although moulds do not have a season (i.e. are always present), weather can encourage or retard the growth of mould since many mould spores depend on weather factors for both growth and dispersal. This can be influenced by factors such as temperature, rainfall, humidity, the patterns of sunlight and darkness, the prevailing winds and seasonal climatic factors. Spore concentrations increase when airflow increases and humidity falls. Hot windy weather is ideal for mould and pollen distribution.

Mould spores have been linked with asthma deaths and ‘epidemics’ that require hospitalization.

Tips to avoid mould:

• Keep windows and doors closed during the spring and fall
• Avoid camping, cutting grass, raking leaves, tending to compost handling hay and grain in barns.
• Make sure the exhaust fans in the kitchen and bathroom are in working order and use them regularly.
• Clean humidifiers and air conditioners
• Do not store fire wood inside as it often can have mould on the bark.

Pollen & the Weather

Pollens are the sex cells of plants that have their own season for flowering. Pollen release and dispersal depend on weather factors such as temperature, wind speed, humidity and atmospheric conditions. Thunderstorms, lightening flashes and rain can all have a major impact on pollen levels and also been linked with “asthma epidemics.” The change in pressure due to heavy rain can not only shatter pollen grains – such as ragweed – into minute particles but also increase the concentration of pollen allergens which are easily breathed in and which can trigger asthma.

For example, the pollen of birch, alder and hazel trees, when exposed to rain water, tend to rupture and release particles that are microscopic in size, becoming major allergens.
Birch pollen, which is normally too large to be inhaled into the lower airways, can also rupture when exposed to high humidity and moisture. When birch trees in the process of flowering are exposed to moisture followed by dry winds, pollen allergens small enough to be inhaled are produced. These are known to trigger asthma in sensitive individuals.

**Smog**
Smog is a combination of smoke and fog which appears as a brown haze mostly in urban areas. It usually results from an inversion where a layer of cold air lies unmoving and heavily on the layer of smoke, fog and exhaust from vehicles and industrial plants. Smog can make your asthma worse.

So keep an eye open for those weather changes! Weather can make your asthma worse.

**For More Information**
Contact the Asthma Society of Canada at 1-866-787-4050 or visit our Web site at www.Asthma.ca.