

OCCUPATIONAL ASTHMA

Working with grain and non-row crops (hay, alfalfa, soybeans, etc) Clinical Asthma affects 2.2 million Canadians of which 330,000 cases are *Occupational Asthma (OA)*. Many of these cases are directly related to the agricultural and horticultural sector workplace environments.

There are two types of Workplace related Asthmas:

OCCUPATIONAL ASTHMA —These are cases without an existing asthma condition where *OA* symptoms develop after exposure to a trigger found at work.

WORK-AGGRAVATED ASTHMA — These are cases with an existing asthma condition where the severity or frequency of asthma symptoms increase after exposure to a nonspecific trigger found in the workplace.

EFFECTS

Occupational Asthma is a leading non-musculoskeletal cause of disability causing lost work and production. Every year *OA* costs businesses millions of dollars. Consider how financially devastating being physically unable to work for 48 hours during harvest could be. Farm owners and self-employed people are less able to switch occupations or avoid exposure. Yet those who remain at their workplace experience a worsening of their asthma symptoms over time.

The longer people are exposed to the trigger that causes their *OA* the more likely the symptoms and effects will continue, even after leaving the source of the exposure. The severity and frequency of symptoms are often directly related to the number of hours of exposure to the trigger.

If you are perfectly healthy you could still develop permanent *OA* after only a single exposure.

RECOGNIZING SYMPTOMS

If you answer **YES** to one or more of the following questions you may have asthma and should see a doctor.

- Do you cough, wheeze or have a tight chest more than 3 times per week?
- Does coughing, wheezing, or chest tightness wake you at night more than once a week?
- Do you have to stop working due to lack of breath?
- Do you ever miss work because you can't breathe?

Symptoms often include inflammation and those more commonly associated with "hay fever" —i.e. itchy, runny nose, and redness plus sneezing. Symptoms can last for up to 12 hours while obstruction, malaise and breathlessness can last for up to 48 hours.

TRIGGERS

A trigger is a substance found in the workplace that produces *OA* symptoms following exposure. Triggers that are NOT tested for by standard allergy tests cause 50% of agricultural *OA*, therefore take this pamphlet and tell your doctor that you are a farmer or agricultural worker who may be exposed to *OA* triggers. Doctors and patients need to work together to identify the triggers that are causing your symptoms.

Occupational Asthma is often misdiagnosed as:

- Repeated diagnoses of *Bronchitis*, or;
- *Emphysema* wheeze in older people.

TREATMENT & AVOIDANCE

Your best bet is to avoid exposure to triggers in the first place, as treatment and preventive measures after the fact can only lessen and help control symptoms NEVER eliminate them - there is no cure.

There are three methods for dealing with *OA*:

- Remove the Triggers
- Remove the Worker from the Workplace and/or
- Control the Symptoms.

Often triggers can't be removed, and changing careers isn't an option. Therefore your best options are to avoid and reduce the exposure, and work with your health care professional on an asthma treatment plan.

Respirators offer the single greatest protection against *OA*. Wearing a respirator for preventative reasons, will result in far better health than if you develop asthma and have to wear a respirator because of symptoms.

Dust masks should be considered a bare minimum level of protection. Workers with confirmed asthma, allergies and occupational asthma, should avoid high-risk activities, and use a properly fitted N-95 rated respirator at ALL times when exposure is possible.

Respirators should ALWAYS be worn during cleaning, spraying, harvesting, weeding, tilling, or any time you are handling grain or working in animal confinement buildings. The respirator must be able to remove particulates (N95 or N100) and eliminate ammonia if any is present.

A hard hat Powered Air Purifying Respirator (PAPR) is a good investment; offering protection, cooling comfort, and can be used even with a beard, but may not offer 100% protection in that circumstance.

Wash work clothes separately at least once a week in hot water over 60°C/140°F, ideally in a separate machine designated just for work wear.

Damp or cold areas in the workplace can lower your body's resistance making attacks likely; use a portable heater if possible.

Don't dry brush/sweep feed or spills; wet and use an industrial vacuum with a High Efficiency Particulate Air (HEPA) filter.

Spraying water or canola oil on feed or bedding prior to distribution, in enclosed spaces and automatic feeding systems, will reduce airborne contaminants. Commercial anti-mold sprays or preparations will help to reduce mold levels.



Ensure adequate drying and conditioning of all crops prior to storage. Install exhaust fans in all storage areas and use covers or screen equipment used in the transfer or storage of grain. Ensure motors and exhaust vents DON'T exit at head height; use an additional length of pipe to exhaust into higher faster moving air.



ASTHMA RESOURCES

If you or your doctor have questions or want help with symptoms call:

Occupational Health Clinics for Ontario Workers:
www.ohcow.ca or 1-877-817-0336

If you want more information about agricultural related asthma contact the organizations below:

Asthma Action Help Line: 1-800-668-7682

Canadian Centre for Occupational Health & Safety:
www.ccohs.ca or 1-800-668-4284

Canadian Lung Association: www.lung.ca

Farm Safety Association, Inc: www.farmsafety.ca

Ontario Lung Association:
www.on.lung.ca or 1-888-566-5864

Telehealth Ontario: 866-797-0000

The Asthma Society of Canada: www.asthma.ca

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GRAIN & NON-ROW CROP WORK-RELATED ASTHMA



IN
AGRICULTURE, AGRIBUSINESS,
HORTICULTURE AND
LANDSCAPING

A pamphlet prepared by:



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