

OCCUPATIONAL ASTHMA

Those working with large animals, especially cows and horses are at elevated risk of developing *Occupational Asthma (OA)* compared with other Canadians.

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 trigger found in THE WORKPLACE.

EFFECTS

Occupational Asthma is the leading non-musculoskeletal cause of disability resulting in lost work and production among workers. Every year *OA* costs businesses millions of dollars. Consider how financially devastating being physically unable to work for 48-hours during harvest could be.

Initial respiratory problems often start only after a few months of employment and can become permanent after a single exposure, even if you are perfectly healthy. Permanent disability or even death can occur.

Large animals are more often associated with asthma attacks than other types of asthma effects.

Length of exposure to a trigger increases the chance that your symptoms and effects will continue even after you leave the source of the exposure. The severity and frequency of symptoms are often directly related to the number of hours of 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?

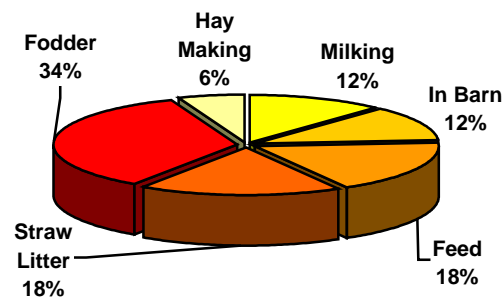
Symptoms are caused by inflammation and airway tightening and can include cough, wheezing and difficulty breathing. If symptoms continue to the point that talking is difficult or medication doesn't last more than 2 hours, you should call 911 and go to the nearest emergency room.

TRIGGERS

If you work with large animals, you are at an increased risk of *Occupational Asthma* from exposure to:

- Hair and Dander
- Mites & Mould, and
- Grain, Feed and Fodder.

Different tasks have different risk levels associated with them due to the different types of exposure. Dairy *OA* occurrences associated with the reported task carried out most frequently:



Inform your doctor that you work with large animals and that you are exposed to possible *Occupational Asthma* triggers which are often misdiagnosed as:

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

TREATMENT & AVOIDANCE

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 Trigger
- Remove the Worker from the Workplace and/or
- Lessen the Symptoms.

Changing careers isn't always an option. Therefore your best options are to avoid and reduce the exposure.

Respirators offer the single greatest protection against *OA*, especially in confined spaces. Your respiratory health, if you wear a respirator for preventative reasons, will be far better than if you develop *OA* and have to wear a respirator because of symptoms. You should use a dust mask as a minimum or preferably an N-95 respirator to reduce your risk of *OA*. A dust mask cannot protect you against chemical exposure; ALWAYS wear appropriate personal protective equipment (PPE).

When dealing with bovine tuberculosis ALWAYS wear a N-95 or better respirator. A Powered Air Purifying Respirator (PAPR) offers protection, cooling comfort, and excellent fit, even with a beard.

Don't sweep up feed or spills; wet and use an industrial vacuum with a High Efficiency Particulate Air (HEPA) filter. Regular vacuuming will improve conditions and the health of both people and animals.

Grain storage bins are especially hazardous due to the high levels of dust, , endotoxins and fungi present;

install ventilation and NEVER enter without proper PPE.

Mites in storage bins, barns and other dusty areas can exceed what is considered a harmful “indoor-asthma” level by 100 to 1,000 times. Mites may be transported indoors where they colonize in areas where clothing is kept, then spread and affect the rest of the home. Don’t bring work clothes home to wash them. Wash clothing and horse blankets once a week in hot water (over 60°C/140°F) in a dedicated washing machine.

Mites, fungi and mould thrive in warm high humidity areas. Many buildings lack good ventilation. Eliminate dead zones and consider automatic ventilation systems. Gas heaters and diesel generators must be properly exhausted outdoors as even low levels of combustion by-products can increase your risk of OA.

Cleaning powders can increase OA by 25%. You should use liquid cleaners whenever appropriate.

Frequent brushing of horses, and other large animals releases dangerous levels of airborne particles increasing your risk by 40% - ensure adequate ventilation and wear a dust mask.

Working with animals that are kept indoors for most of their lives increases your chance of getting OA. Cow and horse urine, hair, dander and epithelium exposure are linked to the majority of agricultural OA. Wear a respirator, add ventilation and vacuum frequently to reduce your risk.

Endotoxins and insects (especially botfly and grain weevils) in feed or fodder can increase your risk. Feed containing cereal flour should ALWAYS be handled with gloves, a respirator and dedicated clothing. Adding dust suppressants (molasses, etc.) to animal feed and using automated feeders can reduce airborne dust and protect you against OA.

Allow all crops to dry completely before storage, and commercial anti-mould sprays or preparations will help to reduce mould levels in storage areas.

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: 1-866-797-0000

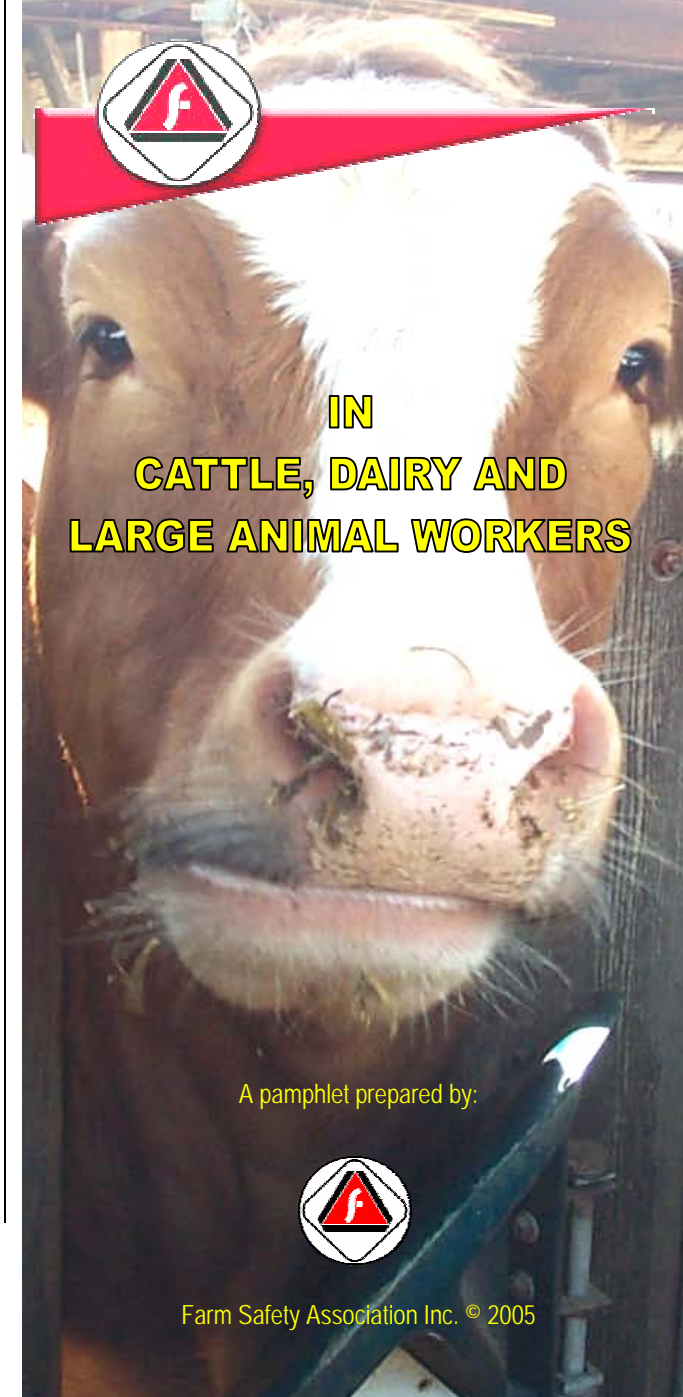
The Asthma Society of Canada: www.asthma.ca

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LARGE ANIMAL WORKERS WORK-RELATED ASTHMA



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