

## PREVENTING WRA

Both employers and workers have a role to play in prevention.

### EMPLOYERS:

- Seek advice from occupational health professionals on how to recognize, evaluate, and control workplace hazards and their health effects.
- Try to eliminate the asthma causing agents: If elimination isn't possible, substitute with a less hazardous agent.
- When substitution is not possible enclose the work processes and install efficient ventilation systems.
- Ensure a current Safety Data Sheet for any hazardous product is readily available for workers.
- Inform workers about the health effects associated with exposure to agents in the workplace and provide instruction and training on safe work procedures.
- Assess and monitor the level of exposure to isocyanates and other hazardous agents in accordance with Ontario Ministry of Labour Occupational Exposure Limit Regulations.
- Provide workers with the correct type of personal protective equipment (PPE). Provide training and instruction on its use, storage and maintenance. PPE is the least effective way to control a worker's exposure to agents and should only be the last resort.

### WORKERS:

- Participate in training about hazards in your workplace and apply what you learn to your job.
- Consult the Safety Data Sheet for information about ingredients, health hazards and safety precautions.
- Follow safe work practices; use the PPE provided.
- Report any problems with equipment or ventilation systems to your supervisor.
- Be aware of and report early signs of work-related asthma.

## FOR MORE INFORMATION ABOUT WRA:

Occupational Health Clinics for Ontario Workers  
[ohcow.on.ca](http://ohcow.on.ca) | 1-877-817-0336

Infrastructure Health and Safety Association  
[ihsa.ca](http://ihsa.ca) | 1-800-263-5024

Workplace Safety and Insurance Board  
[wsib.on.ca](http://wsib.on.ca) | 1-800-387-0750

Ministry of Labour  
[labour.gov.on.ca](http://labour.gov.on.ca) | 1-877-202-0008

The Lung Association - Ontario  
Lung Health Information Line  
[lungontario.ca](http://lungontario.ca) | 1-888-344-LUNG (5864)

Additional Work-Related Asthma information  
[lungontario.ca/work-related-asthma](http://lungontario.ca/work-related-asthma)

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## Work-Related Asthma



Facts for workers and employers

[workrelatedasthma.ca](http://workrelatedasthma.ca)

## WHAT IS ASTHMA?

Asthma is a chronic lung disease that makes it hard to breathe. The airways in the lungs become irritated and inflamed when exposed to certain substances or conditions.

## SYMPTOMS OF ASTHMA

- Cough
- Chest tightness
- Wheeze
- Shortness of breath

## WORK-RELATED ASTHMA

When asthma is caused or triggered by breathing in a substance in the workplace or by a condition in the work environment, it is called “work-related asthma” (WRA). Internationally, up to 15% of adult onset asthma may be related to the workplace.

There are 2 types of work-related asthma:

### 1. OCCUPATIONAL ASTHMA (OA):

A worker’s asthma is caused by exposure to a sensitizing substance or an irritant in the workplace such as:

- Enzymes - in detergents, laboratories etc.
- Plants, foods, insects, fish or shellfish
- Wheat or other flours
- Western red cedar dust
- Isocyanates- in polyurethane foam and insulation, spray paints, adhesives etc.

### 2. WORK-EXACERBATED ASTHMA (WEA):

Pre-existing asthma is worsened because of work place conditions or substances such as:

- Scents/Perfumes
- Dusts
- Smoke/Chemical fumes
- Cold, heat and humidity
- Ozone
- Air pollution

## EXAMPLES OF HIGH RISK INDUSTRIES

- Agriculture
- Automobile - Spray painters
- Bakeries
- Cleaning and janitorial services
- Construction
- Fisheries and fish processing industries
- Hair, nail and beauty salons
- Healthcare
- Forestry/sawmills
- Manufacturing



## HOW TO RECOGNIZE WRA

The following questions should be asked if work-related asthma is suspected:

1. Are symptoms of asthma present? (cough, chest tightness, wheeze and/or shortness of breath)?  Yes  No
2. Do symptoms of asthma first start, or become worse, after the work day begins?  Yes  No
3. Do symptoms get worse as the work day or work week goes on?  Yes  No
4. Do symptoms decrease on holidays and/or when away from work?  Yes  No
5. Are workers exposed to asthma-causing agents?  Yes  No
6. Was there an unusual exposure at work (such as a chemical spill) within 24 hours before symptoms started?  Yes  No
7. Do co-workers also have symptoms of asthma?  Yes  No

A “yes” answer to questions 1 or 2, implies the need for assessment by a doctor or nurse practitioner.

## DIAGNOSIS OF WRA

The diagnosis of work-related asthma requires special breathing tests (spirometry) done at work and away from work.

- It is important that health-care providers are well informed about symptoms, job description and what workplace substances/conditions may contribute to WRA.
- Sensitizer induced occupational asthma may require a job change to eliminate exposure to the asthma-causing substance. For irritant induced or work-exacerbated asthma, a return to work is possible once asthma is controlled and exposures are reduced.