

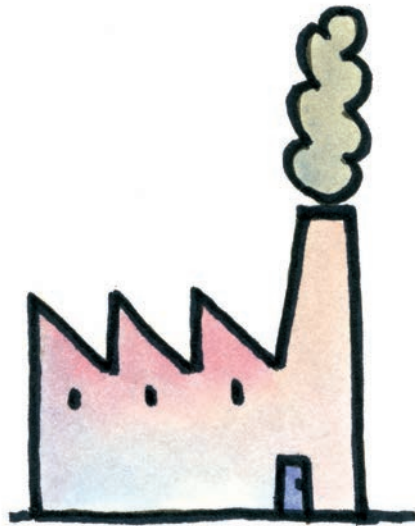


ARE THERE CARCINOGENS IN YOUR WORKPLACE?

RG-796

WHY THIS BROCHURE IS NEEDED

Occupational cancer not only has **human and social costs**, but also entails a **financial burden**. Besides **insurance premiums (CSST, income replacement, etc.)**, there is also a **workplace cost in terms of absenteeism**. In a number of industries, **labour shortages make these absences even more costly due to lost productivity**.



The risk of developing work-related cancer is far less obvious than the risk of falling or being injured on the job. Still, it's a very real risk. Just as employers and workers must do their part to make workplaces safer and try to eliminate accident risks, it is equally important for them to identify **carcinogens** and play an active role in reducing exposure.

Section 51 of the *Act respecting occupational health and safety*¹ stipulates that "Every employer must take the necessary measures to protect the health and ensure the safety and physical well-being of his worker." Employers must also comply with section 42 of the *Regulation respecting occupational health and safety* (RROHS)², which states that "When a worker is exposed to a substance identified in Schedule I as having a known or suspected carcinogenic effect on humans [...] such exposure shall be reduced to a minimum, even when it remains within the standards in that Schedule."

Only some carcinogens are covered by regulations, but to protect worker health properly, all carcinogens need to be considered.

This brochure is intended for occupational health and safety officers, employers and workers. It concerns all workplaces, from small businesses to large corporations. Its objective is to provide guidance on the prevention and reduction of exposure to carcinogens in the workplace. It deals primarily with chemical, biological and physical agents and is based on the most up-to-date knowledge available.

CARCINOGENS

Carcinogens are chemical, physical or biological agents, or also working conditions, that increase the risk of developing cancer.

Both **employers and workers** must be **committed to preserving health and safety**.

Taking action to prevent occupational cancer is a winning proposition for both employers and employees.

CANCER

More Quebecers die from cancer than from cardiovascular or respiratory diseases. The Canadian Cancer Society estimates that **20,200 people will die of cancer** (all causes combined) and **48,700 new cases of cancer will be diagnosed** in Quebec in 2013. For all types of cancer, **16% of deaths and 30% of new cases occur before age 60**⁴.

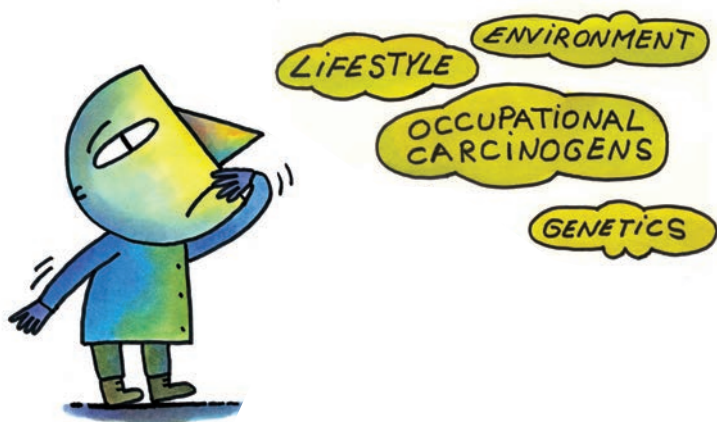
What are the causes?

A number of factors increase a person's risk of developing cancer, including family or genetic (hereditary) factors, lifestyle choices (like tobacco or alcohol use) and environmental exposure (like air or water pollution).

Exposure to certain carcinogenic agents or conditions at work (chemicals, radiation, working conditions, etc.) can add to these factors and increase the probability of getting cancer or developing it earlier.

These different factors can combine or even have a multiplier effect.

When trying to reduce the risk of cancer, every little bit counts. Reducing exposure to workplace carcinogens reduces the risk of cancer.



Is it easy to know whether cancer is work-related?

No. In contrast with accidents, which can easily be associated with work and for which the cause is easier to determine, it can often take several decades for cancer to develop following exposure. It is therefore more difficult to associate cancer with work. In some cases, people have changed jobs or may even have retired by the time the cancer is diagnosed.

It is known that some forms of cancer are strongly associated with work: one such example is mesothelioma, which can develop following exposure to asbestos. Of course, any type of cancer can have multiple causes. There is no visible difference between occupational cancer and cancer associated with another cause.

Are many cases of cancer work-related?

In 2011, in Québec, 68 workers died from occupational accidents and the CSST paid out compensation to the families of 100 workers who died of work-related cancer⁹.

Based on currently known carcinogens, it is estimated that from 3% to 10% of all new cases of cancer are related, in whole or in part, to workplace exposure. This would equate to between 1,500 and 4,900 new cases of occupational cancer in Québec in 2013^{10,11}. But scientists consider this to be an underestimate, as the carcinogenic effects of all substances found in the workplace have not yet been studied.

From **3% to 10%** of all new cases of **cancer** are thought to be associated, in whole or in part, with **workplace** exposure.

Cancer is the leading cause of **death** in **Québec** among women 35 and over and among men 45 and over³.

SOME FIGURES ON OCCUPATIONAL CANCER^{5,6,7,8}

6% to 29% of cases of sinus cancer among men are thought to be due to wood dust

8% to 10% of cases of lung cancer among men, and 1% to 2% of cases among women, are believed to be associated with asbestos

3% to 5% of cases of lung cancer among men are thought to be associated with silica

3% to 6% of cases of breast cancer among women are believed to be associated with night work.

The most **common** types of occupational cancer are **lung, bladder and skin** cancer.

CARCINOGENS IN THE WORKPLACE

A variety of **carcinogens** can be found in any given workplace. They may be **used, manufactured or produced** as a by-product of a process.

TYPE OF CARCINOGEN	EXAMPLES
Chemical agents	<ul style="list-style-type: none"> Trichloroethylene used for degreasing Silica in dust from sanding drywall compound
Physical agents	<ul style="list-style-type: none"> Solar radiation when working outside X-rays for medical and paramedical applications
Biological agents	<ul style="list-style-type: none"> Hepatitis B or C virus when handling contaminated material
ROUTE OF ENTRY INTO THE BODY ¹²	EXAMPLES
Inhalation	<ul style="list-style-type: none"> Diesel engine exhaust Wood dust Fumes from stripping furniture
Absorption through skin	<ul style="list-style-type: none"> Solvents used for cleaning
Contact with skin	<ul style="list-style-type: none"> Contact of hands with tar or soot
Ingestion	<ul style="list-style-type: none"> Handling food or a cigarette with contaminated or dirty hands
Direct exposure	<ul style="list-style-type: none"> Solar radiation

Is there a safe exposure level?

No. Any amount of exposure, even at low levels, means a risk. That's why every effort must be made to **reduce exposure as much as possible**. What can lead to the development of cancer is cumulative exposure over a long period of time. After all, we spend an average of 40 hours a week at work, for 30 to 40 years or more.

How are carcinogens classified?

There are a number of carcinogen classifications. The three most commonly used in Québec are the one in the *Regulation respecting occupational health and safety* (RROHS)², that of the American Conference of Governmental Industrial Hygienists (ACGIH®) and that of the International Agency for Research on Cancer (IARC).

REGULATION RESPECTING OCCUPATIONAL HEALTH AND SAFETY (RROHS)

Social consensus, provincial regulation

- C1 Carcinogenic effect detected in humans
- C2 Carcinogenic effect suspected in humans
- C3 Carcinogenic effect detected in animals

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH®)

Scientific and practical consensus, United States

- A1 Confirmed human carcinogen
- A2 Suspected human carcinogen
- A3 Confirmed animal carcinogen, with unknown relevance to humans
- A4 Not classifiable as a human carcinogen (lack of data)
- A5 Not suspected as a human carcinogen

INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC)

Scientific consensus, international

- 1 Carcinogenic to humans
- 2A Probably carcinogenic to humans
- 2B Possibly carcinogenic to humans
- 3 Not classifiable as to its carcinogenicity to humans
- 4 Probably not carcinogenic to humans

Yes, in some cases, **cancer** can be associated with **workplace exposure**.



ARE THERE CARCINOGENS IN MY WORKPLACE?

Maybe. To find out, consider your work environment: processes that use or produce carcinogens, products and materials used, tools and equipment, etc.

IDENTIFYING CARCINOGENS

Identification of carcinogens is a first step in drawing up a list of carcinogenic agents that can be found in the workplace and facilitating research on the hazards they can present.

TOOLS AND RESOURCES

- ✓ Label on containers
- ✓ Safety data sheet
- ✓ Signage
- ✓ Identification list
- ✓ Occupational health experts

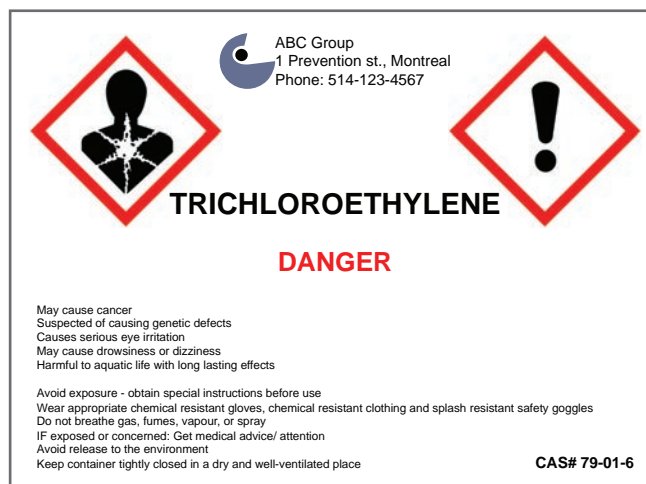


How to identify carcinogens

✓ LABEL

Chemical products are labelled to provide information on the hazards associated with them, the precautions to be taken when using them, instructions for storage and disposal, and the measures to be taken in the event of an accident. The [label](#) on a product's original container lists the ingredients and indicates hazards through the use of pictograms^{13, 14, 15}.

Example of label with GHS pictograms



Myth or reality?

"If a product is available on the market, then it can't be dangerous."

This is not necessarily true!

Caution!

If you transfer a product to a new container, be sure to label it clearly.

The **Workplace Hazardous Materials Information System (WHMIS)** provides information that can help to reduce injuries, diseases and fatalities associated with the use of hazardous materials in the workplace¹⁶. WHMIS pictograms will eventually be replaced by pictograms of the **Globally Harmonized System of Classification and Labelling of Chemicals (GHS)**¹⁷. In Quebec, employers must **provide WHMIS training to their employees.**



Toxic
WHMIS



Toxic, Carcinogenic
GHS

✓ SAFETY DATA SHEETS (MATERIAL SAFETY DATA SHEETS)

Manufacturers must provide a **safety data sheet (SDS)** for every controlled product. The SDS is normally available when the product is purchased, but it can also be downloaded from the manufacturer's website. The SDS contains essential information on the properties of the product, potential effects on health, protective measures, first aid in case of spills^{18, 19, 20}, etc. It must be readily accessible at all times to anyone who needs it.

- 1 **WHMIS Pictograms** Used on some SDSs, depending on the manufacturer.
- 2 **Protective Clothing** These pictograms indicate items of protective clothing required to handle the product and are shown on some SDSs, depending on the manufacturer.
- 3 **Product Name**
- 4 **CAS Number** An ingredient's CAS number is its unique identifier in the database of the Chemical Abstracts Service (CAS), a division of the American Chemical Society (ACS). Each ingredient has a unique number that can be used to obtain further information about it on websites such as the CSST's toxicological index (REPTOX).
- 5 **Hazards Identification** This section summarizes the hazards associated with the product.

Example of part of a safety data sheet

WHMIS (Pictograms)		WHMIS (Classification)	Protective Clothing	TDG (pictograms)		
		B-2, D-2A, D-2B				
Section 1. Chemical Product and Company Identification						
Product Name BENZENE			Code	W117		
Synonym Benzol; aromatic hydrocarbons (C6H6); cyclohexatriene.			Validated on	4/21/2004.		
Manufacturer	PETRO-CANADA P.O. Box 2844 Calgary, Alberta T2P 3E3		In case of Emergency	Petro-Canada: 403-296-3000 Canutec Transportation: 613-996-6666 Poison Control Centre: Consult local telephone directory for emergency number(s).		
Material Uses	Petrochemical manufactured by extraction process of petroleum fraction. Component of crude oil. Found in various refinery streams (eg. gasoline). Laboratory solvent. Used in manufacture of organic compounds (eg. detergents, dyes, insecticides).					
Section 2. Composition and Information on Ingredients						
			Exposure Limits (ACGIH)			
Name	CAS #	% (V/V)	TLV-TWA(8 h)	STEL	CEILING	
1) Benzene	71-43-2	99.6	0.5 ppm	2.5 ppm	Not established	
2) Toluene	108-88-3	0.3	50 ppm	Not established	Not established	
3) Non-aromatics	Mixture	0.1	Not established	Not established	Not established	
Manufacturer Recommendation	Not applicable					
Other Exposure Limits	Consult local, state, provincial or territory authorities for acceptable exposure limits.					
Section 3. Hazards Identification.						
Potential Health Effects	Flammable liquid. Exercise caution when handling this material. Contact with this product may cause skin and eye irritation. Prolonged or repeated contact may cause skin irritation, defatting, drying and dermatitis. Inhalation of this product may cause respiratory tract irritation and Central Nervous System (CNS) Depression, symptoms of which may include; weakness, dizziness, slurred speech, drowsiness, unconsciousness and in cases of severe overexposure; coma and death. Aspiration of liquid drops into the lungs may produce potentially fatal chemical pneumonitis (fluid in the lungs), severe lung damage, or respiratory failure. May cause cancer. May cause heritable genetic effects (mutagenicity). For more information refer to Section 11 of this MSDS.					

✓ SIGNAGE

Signs are a way of warning workers about certain working conditions that could be hazardous to their health, such as the presence of asbestos or radioactive substances. Appropriate signage is required to make it easy to locate radioactive sources in some kinds of equipment. Training regarding these sources, whether used or generated, must be provided to workers under the provisions of the federal General Nuclear Safety and Control Regulations²¹.



✓ IDENTIFICATION LIST

Chemical carcinogens in commercial products are often found in quite low quantities. It is important to identify them before using the product, however, as even irregular or low-dose exposures can increase the risk of cancer.

An identification list can be useful for taking an inventory of products used and their hazards, but also of products being stored or generated. Premises must be inspected, and carcinogens identified, regularly.

IDENTIFYING CARCINOGENS

Products

- Does the container have its original label and the pictograms "Toxic," "Carcinogenic" or "Radioactive source"?
- Does the safety data sheet mention that the product is carcinogenic?
- Are any of the ingredients carcinogenic?

Processes

- Can the process generate carcinogens in any of these forms?
 - fumes or gases
 - particles
 - ionizing radiation
- Can certain work situations increase the risk of developing cancer?

✓ OCCUPATIONAL HEALTH EXPERTS

In a complex situation, in order to assess exposure levels or if uncertain about how to proceed, it is better to consult an expert, such as the regional occupational health team, a consulting firm or a specialized website like REPTOX.

How to determine risk

The risk that a carcinogenic agent represents in the workplace can vary depending on various exposure factors. These factors can be used to estimate the degree of risk. This estimate can help measure workers' exposure, in accordance with section 44 of the RROHS², following the methods set out in the IRSST's [Sampling Guide for Air Contaminants in the Workplace](#).

Changes at work? Time for new identification

Rapid scientific and technological advances mean that changes are occurring regularly in workplaces, and some may introduce carcinogens:

- Changes in the composition of products being used
- Use of new products: The toxicity of any new product should be checked before it is introduced into the workplace
- Changes in process or work methods: Under section 43 of the RROHS², exposure measurements must "also be taken each time there is a change in industrial processes"

It is also possible that agents currently regarded as acceptable may later be recognized as carcinogens following new studies.

CONSIDER A FEW FACTORS

- Toxicological data
- Quantity used
- Exposure pathways
- Exposure frequency
- Exposure duration
- Conditions of use

It is important to remain vigilant. **New products or new processes** can present new risks.

NEW CARCINOGENS..

In 2012, the International Agency for Research on Cancer classified two new agents as known carcinogens:

- Diesel engine exhaust
- Trichloroethylene.



REDUCING EXPOSURE TO CARCINOGENS

Under section 51 of the *Act respecting occupational health and safety*,¹ all **employers** must take the necessary measures to protect the health and ensure the safety and physical well-being of their workers. Under section 49, **workers** also have an essential role to play.

It is important for workers to understand how the chosen prevention measures work. The employer must provide workers with training, especially regarding points prescribed in applicable regulations:

- Health effects of exposure to carcinogens in the workplace
- Means of reducing, if not eliminating, exposure to carcinogens
- Safe work methods.

Section 42 of the RROHS² stipulates that worker exposure to substances having a known or suspected carcinogenic effect on humans must be reduced to a minimum. Exposure must be kept as low as possible by taking preventive measures and periodically assessing their effectiveness.

The IARC has drawn up a list of known [Group 1], probable [Group 2A] and possible [Group 2B] carcinogens²² based on scientific consensus. The list is recognized and used internationally. Workplaces can refer to the list to identify carcinogens that should be given priority consideration.

Means of prevention

Once the hazards and risks have been determined, they must be prioritized and appropriate means of prevention must be put in place. Eliminating carcinogens or hazardous processes at source is the best way to reduce exposure risk.

1. SUBSTITUTION

Priority must be given to substituting less harmful or less polluting products or processes for carcinogenic ones. If substitution is not feasible, other means of prevention²⁴ can be implemented.

An example of substitution

The article "[Une attaque en règle contre les solvants](#)," published in the journal *Prévention au travail*²³, reports on an instance of successful substitution that followed the method described on the IRSST's [Solub website](#).

At the gluing station for polyurethane foam products, a water-based adhesive was successfully substituted for an adhesive containing dichloromethane.

2. TECHNICAL AND ENGINEERING CONTROLS

Equipment can be isolated (enclosure, protective curtains, closed-circuit processes), general or local mechanical ventilation systems can be installed (extraction arms, glove boxes), processes and equipment can be modified, etc.

An example of technical control

The article "[Pour en finir avec l'incommodant trichloroéthylène](#)," published in *Prévention au travail*²⁵, describes the case of an organization that isolated a trichloroethylene (TCE) tank in order to eliminate, or at least reduce, TCE fumes in areas adjacent to the tank.

Eliminating or reducing exposure to carcinogens in the workplace helps to **reduce** the risk of cancer.

Substitution must always be the **first choice** as a means of prevention.



The effectiveness of the means of prevention must be assessed upon implementation and then at regular intervals thereafter.

3. ADMINISTRATIVE CONTROLS

Administrative controls include worker training and information, putting up signs to indicate hazardous areas, preventive maintenance and housekeeping, establishing safe work procedures and methods, taking specific precautions, work organization, responsible procurement, etc. Responsible procurement means restricting purchasing to products made, and services provided, in conditions that respect the environment and workers' rights.

4. PERSONAL PROTECTIVE EQUIPMENT (PPE)

Personal protective equipment includes respiratory protective equipment (RPE), gloves, work overalls and protective clothing against ultraviolet (UV) radiation, as well as any specific equipment that protects workers against identified carcinogens.

After substitution, technical and engineering controls are amongst the most effective measures to take, as they can eliminate the risk at source. Over the long term, they are often the most economical measures, too. These controls must be implemented in accordance with generally accepted practices, and their effectiveness must be assessed periodically.

HERE ARE SOME GOOD PRACTICES FOR CONTROLLING CARCINOGEN EXPOSURE THAT APPLY TO BOTH EMPLOYERS AND EMPLOYEES:

Remain vigilant at work Check ingredients before buying products; read the labels and pictograms of products used and train workers about the associated risks and how to identify the products; report and control any accidental spill or leak of such products.

Provide, wear and ensure appropriate use of PPE Conduct RPE seal and fit testing in accordance with the employer's prevention program; clean RPE and replace cartridges as recommended; follow recommendations for work clothing and glove materials.

Promote development of safe habits Provide designated eating areas so that eating and drinking do not have to be done at workstations; provide sinks and soap to allow proper washing of hands and face, especially before eating.

Leave work hazards... at work Take off work overalls and wash hands before leaving work; do not take work clothes home.



Prevention action plan

To assess means of prevention in the workplace, it may be useful to refer to a list of carcinogen exposure prevention measures. The employer and the prevention officer or health and safety committee (HSC) can use the list below (page 10) to help them assess the situation and draw up an action plan to reduce worker exposure to carcinogens.

Action Plan: Reducing Exposure to Carcinogens

Workstation _____ Carcinogen _____ Date _____ Page ____ of _____ Name of officer _____	Not applicable	Doable		Date completed	Observations
		Yes	No		
SUBSTITUTION					
Is there a way of substituting something for the carcinogen or the process that produces it?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
TECHNICAL AND ENGINEERING CONTROLS					
Are engineering controls, such as local ventilation, available and satisfactory at the workstation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Could changes to the process reduce emissions of the carcinogen?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Is there a way to isolate or enclose the equipment that uses or produces the carcinogen?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
ADMINISTRATIVE CONTROLS					
Do current work methods reduce exposure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Is the carcinogen stored safely?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Is preventive maintenance done on the equipment that uses or produces the carcinogen?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Are the premises where the carcinogen is found cleaned regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Have workers been given information and training on the risks of the carcinogen and the use of protective measures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Are warning signs posted in the area where the carcinogen (e.g., X-rays, beryllium, asbestos) is used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Is admittance to the area prohibited to people not wearing PPE or without proper training?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Are workers aware of the importance of personal hygiene in reducing their exposure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Are the protective clothes and equipment used against this carcinogen left in the workplace? Are they cleaned on site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
PROTECTIVE EQUIPMENT					
Is RPE or other protective equipment available?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Have employees been trained in RPE use and maintenance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Is RPE being used appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

TO CONCLUDE

The prevention officer and the HSC are the best resources for workers and the employer to turn to for help in identifying carcinogens used or produced in the workplace. They can help raise the awareness of workers and the employer with respect to health and safety issues and help identify workplace hazards. For this purpose, the prevention officer or the HSC may regularly inspect workstations and make recommendations on dealing with hazardous situations^{26, 27}.

TOOLS AND GUIDES

Carcinogens

Substances classified as carcinogenic under the *Regulation respecting occupational health and safety*² are identified in Schedule 1, in the *Designation and Remarks* column: C1 – Carcinogenic effect detected in humans; C2 – Carcinogenic effect suspected in humans; C3 – Carcinogenic effect detected in animals. www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/S_2_1/S2_1R13_A.HTM

The list of carcinogens drawn up by the International Agency for Research on Cancer (IARC) is updated regularly. <http://monographs.iarc.fr/ENG/Classification/index.php>

Identification

The *Sampling Guide for Air Contaminants in the Workplace* sets out IRSST analysis methods. www.irsst.qc.ca/en/-tool-sampling-guide-for-air-contaminants-8th-edition.html

The CSST's toxicological index provides scientifically verified information on chemicals used in the workplace (in French). www.reptox.csst.qc.ca/

The Institut national de recherche et de sécurité (INRS) in France produces practical fact sheets on carcinogen identification (FAR) (in French). www.inrs.fr/accueil/header/actualites/nouvelles-far-fas.html

Information for workers

Carcinogens in your workplace? Ask yourself a few questions (Available soon). www.irsst.qc.ca/media/documents/PubIRSST/RR-796.pdf

Control measures

SUBSTITUTION

- The website Solub www.irsst.qc.ca/solub/ sets out a nine-stage substitution method leading to implementation of a solution tailored to a given workplace. Practical tools and useful resources are provided, as well as examples of substitution (in French).
- France's INRS also produces fact sheets on carcinogen substitution (FAS) (in French). www.inrs.fr/accueil/header/actualites/nouvelles-far-fas.html

BERYLLIUM

A good practices guide on cleaning and decontaminating workplaces where beryllium is found. <http://www.irsst.qc.ca/media/documents/PubIRSST/rg-652.pdf>

FORMALDEHYDE

- Prevention guide www.irsst.qc.ca/media/documents/PubIRSST/RG-473.pdf
- Exposure when manufacturing wood panels www.irsst.qc.ca/media/documents/PubIRSST/RG1-473.pdf
- Exposure when manufacturing wood furniture www.irsst.qc.ca/media/documents/PubIRSST/RG2-473.pdf
- Exposure in pathology laboratories www.irsst.qc.ca/media/documents/PubIRSST/RG3-473.pdf
- Exposure during embalming www.irsst.qc.ca/media/documents/PubIRSST/RG4-473.pdf

CHOOSING PPE MATERIALS FOR SKIN PROTECTION

The website ProtecPo hosts an interactive software program that helps you choose the most suitable materials for providing skin protection, especially against solvents and solvent mixtures. You can run different types of queries: by chemical, alone or in a mixture, by chemical family or by polymeric material. www.irsst.qc.ca/-outil-protecpo.html

RESPIRATORY PROTECTION EQUIPMENT AND CARTRIDGE SERVICE LIFE

The website Saturisk provides a software tool for estimating how long a cartridge exposed to a given substance can be effective under the conditions you specify. You can then calculate the cartridge replacement frequency for a respiratory protection program (in French). www.irsst.qc.ca/media/Outils/tsc/intro.html

Please visit the websites of the organizations listed below to find out more about other carcinogens and how to control exposure.

WHERE TO LOOK FOR FURTHER INFORMATION

CANADIAN CANCER SOCIETY

The mission of the Canadian Cancer Society is the eradication of cancer through prevention and research, and the enhancement of the quality of life of people living with cancer through information and support.

www.cancer.ca

Toll free: 1-888-939-3333

CANADIAN CENTRE FOR OCCUPATIONAL HEALTH AND SAFETY (CCOHS)

The CCOHS promotes a safe and healthy working environment by providing information and advice about occupational health and safety.

www.ccohs.ca

Toll free: 1-800-668-4284

CANADIAN NUCLEAR SAFETY COMMISSION (CNSC)

The CNSC regulates the use of nuclear energy and materials to protect health, safety, security and the environment.

www.suretenucleaire.gc.ca/eng

Toll free: 1-800-668-5284

CENTRE PATRONAL EN SANTÉ ET SÉCURITÉ DU TRAVAIL

This employers' association offers training and information services to help companies assume their leadership role in managing occupational health and safety.

www.centrepatronalsst.qc.ca/accueil.html

514-842-8401

COMMISSION DE LA SANTÉ ET DE LA SÉCURITÉ DU TRAVAIL (CSST)

The CSST is active in three main areas: prevention and inspection, compensation and rehabilitation of workers who have suffered a work-related accident or occupational disease, and funding the Quebec occupational health and safety program. Workers and employers can contact their regional office.

www.csst.qc.ca/nous_joindre/Pages/repertoire_general.aspx

Toll free: 1-866-302-CSST (2778)

INSTITUT NATIONAL DE SANTÉ PUBLIQUE DU QUÉBEC (INSPQ)

The INSPQ is a centre of expertise and reference centre in public health. Its expertise covers the risks associated with occupational diseases, occupational health and the state of health of Quebec workers. It also provides clinical screening services, in particular for occupational lung diseases.

www.inspq.qc.ca

JOINT SECTOR-BASED ASSOCIATIONS

The purpose of these sector-based associations is to promote occupational accident and disease prevention by establishing mechanisms to eliminate hazards to the health, safety and physical integrity of workers at source and to encourage employers and employees to assume joint responsibility for prevention. To find out if there is a joint association in your sector:

www.csst.qc.ca/nos_partenaires/Pages/associations_sectorielles_paritaires_asp.aspx

LABOUR ORGANIZATIONS

Labour organizations often provide occupational health and safety information and training courses. Contact your local, provincial or national organization to find out more.

POISON CONTROL CENTRE

The Poison Control Centre answers questions about poisoning, ingestion or inhalation of a chemical, contact of a chemical with the skin or eyes, and work accidents involving acute exposure to a toxic product, and responds to requests for information about toxic products.

Toll free: 1-800-463-5060. 24 hours a day, 7 days a week.

PREVENTION MUTUAL GROUPS

A prevention mutual group is an association of employers who join together to prevent workplace accidents and diseases and provide rehabilitation and return-to-work services to workers who have suffered an occupational injury. You can consult the list of prevention mutual groups here:

www.csst.qc.ca/asp/ListeDesMutuelles/Mutuelle.asp

PUBLIC OCCUPATIONAL HEALTH TEAM

The occupational health team of each health and social services centre is made up of physicians, nurses, hygienists and, in some cases, ergonomists. Its mandate is to work with employers and employees to develop and implement a health program tailored to the companies concerned. To find out which occupational health team serves your territory or region, go to:

www.santeautravail.qc.ca

REFERENCES

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To contribute, through research, to the prevention of industrial accidents and occupational diseases, and to the rehabilitation of affected workers;

To disseminate knowledge and serve as a scientific reference centre and expert;

To provide the laboratory services and expertise required to support the public occupational health and safety prevention network.

Mainly funded by the Commission de la santé et de la sécurité du travail, the IRSST has a board of directors made up of an equal number of employer and worker representatives.

KNOWLEDGE TRANSLATION AND DISSEMINATION OF RESEARCH FINDINGS

Interaction between researchers and the users of study findings is a key feature of research projects at the IRSST. The active participation of research partners right from the project design stage ensures that the study will satisfactorily meet their needs, be rooted in a real work context and will have a concrete impact on the workplace. This dynamic reflects the principles of employer-employee collaboration, which is at the basis of all occupational health and safety initiatives in Québec.

THE IRSST WISHES TO THANK THE PARTNER MEMBERS OF THE FOLLOW-UP COMMITTEE:

Sylvie Bédard, ASSTSAS; René Bellemare, FTQ; Fabienne Blais, CSSSML-RSPSAT Chaudière-Appalaches; Marie-Josée Caron, CSST; Geoffroy Denis, DSP Montréal; Jacinthe Hovington, Canadian Cancer Society (Québec); Marc-André Lavoie, Rio Tinto Alcan; Isabelle Lessard, Centre patronal SST; Isabelle Ménard, CSN; Jean-Guy Trottier, Auto Prévention.

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LEGAL DEPOSIT

Bibliothèque et Archives nationales du Québec
2013

ISBN: 978-2-89631-694-6 (PDF)

ISSN: 0820-8395

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© Institut de recherche Robert-Sauvé
en santé et en sécurité du travail
September 2013

THIS DOCUMENT TO BE CITED AS FOLLOWS:

Labrèche, F. et al. *Are there carcinogens in your workplace? It's time to act!* Montréal, Québec: IRSST, 2013. RG-796, 14 pages.

www.irsst.qc.ca/media/documents/PubIRSST/RG-796.pdf