

Using Compressed Air for Cleaning – Know the Laws of Your Province



Compressed air is readily available at many workplaces. And it's highly effective in cleaning off dusty surfaces, machinery, and even clothing and PPE. The problem is that cleaning with compressed air is also potentially dangerous. The high-pressure air jet can directly injure the eyes and face, as well as throw off dusts and debris that cause the same result. The danger becomes exponentially greater when compressed air is used to remove or near asbestos and other substances that become hazardous when airborne. That's why the OHS laws of most jurisdictions strictly regulate the use of compressed air for cleaning operations.

Newfoundland has the strictest and simplest rules: It simply bans use of compressed air for cleaning. While banning compressed air to clean dust and debris containing substances that become hazardous when airborne, such as asbestos, lead, and combustible dusts, most jurisdictions allow it for non-hazardous dust and debris, provided that specific measures are taken to protect health and safety. BC has the strictest and most extensive requirements. Prince Edward Island is the only jurisdiction whose OHS regulations don't specifically address the issue.

Here's a summary of the compressed air cleaning rules in each

part of Canada. Go to the OHS Insider website for a complete [Use of Compressed Air for Cleaning Safety & Compliance Game Plan](#).

Abbreviations

kPa means kilopascals, a measure of air pressure.

MPa means megapascals, also measure of air pressure.

Compressed Air Cleaning Requirements Across Canada

FEDERAL

1. Compressed air, gas, or steam must not be used for blowing dust or other substances from structures, machinery or materials if: (a) there's a risk of any person being directly exposed to the jet or where a fire, explosion, injury or health hazard is likely to result from such use; or (b) it would result in a concentration of an airborne chemical agent above its permissible exposure limits (*COHS Regs*, Sec. 10.21);
2. Compressed air may not be used for cleaning clothing contaminated with: (a) asbestos; or (b) a hazardous substance referred to in Sec. 10.19(1)(a)+(b), (i.e., an airborne chemical agent, other than airborne grain dust, airborne flour dust and airborne asbestos fibres, over the ACGIH TLV or BEI value for that chemical agent; or airborne grain dust in excess of 4 mg/m³) having an exposure limit lower than 1 mg/m³ (*Regs*, Sec. 10.22(1));
3. If compressed air is used to clean clothing: (a) appropriate eye protection must be worn; and (b) either the maximum compressed air pressure in the pipeline must be 69 kPa (10 psi) or a safety nozzle limiting the air pressure to no more than 69kPa (10 psi) must be used

(Regs, Sec. 10.22(2)); and

4. If an employee performing automotive service procedures may be exposed to asbestos from friction material or dust arising from that material, employer must ensure that use of compressed air, brushes or similar means to dry-remove friction material dust from automotive assemblies is banned (Regs, Sec. 10.26.3).

ALBERTA

A worker must ensure that compressed air isn't used to blow dust or other substances from clothing where compressed or liquefied gas containers are used, handled, stored, and transported (OHS Code, Sec. 171(8)(d)).

BRITISH COLUMBIA

Compressed Air for Cleaning:

1. Compressed air or steam must not be used for blowing dust, chips, or other substances from equipment, materials, and structures if a person could be exposed to the jet, or to the material it expels or propels and an injury or health hazard due to fire, explosion or other cause is likely to result;
2. Compressed air may not be used for blowing harmful or hazardous dusts or other harmful substances from workers' clothing;
3. Suitable cleaning equipment must be used if clothing is to be cleaned before leaving the work area;
4. Compressed air may be used in specially designated areas for blowing dusts or other substances from clothing being worn by workers, if: (a) the substances have an exposure limit above 1.0 mg/m³, (b) appropriate respirators and eye protection are worn, and (c) the compressed air supply pressure is limited to a pressure of 70 kPa gauge (10 psig), or safety nozzles which have

the same pressure limiting effect are used (*OHS Reg*, Sec. 4.42).

Asbestos:

1. Must not use pressure spraying equipment of any type to remove asbestos insulation or other asbestos-containing material from buildings or structures;
2. Employer must not permit use of compressed air to clean up or remove asbestos dust or debris, or dry sweeping or dry mopping of asbestos waste; and
3. Employer must ensure that dry removal of friction material dust from automotive assemblies using compressed air, brushes, or other similar means is prohibited where automotive service procedures may involve friction material that is asbestos-containing material or dust arising from such material and that signs are posted to that effect (*Reg*, Secs. 6.9 + 6.24).

Lead: A person must not use blowers, compressed air, compressed gas, or dry sweeping cleaning methods in areas where lead processes are conducted (*Reg*, Sec. 6.65).

RCS Dust: Employer must not permit the use of blowers, compressed air, dry sweeping, or dry mopping to clean up or remove respirable crystalline silica dust (*Reg*, Sec. 6.112.6(2)).

MANITOBA

Employer must not require or permit: (a) use of pressure spraying equipment of any type to remove asbestos-containing material; (b) use of compressed air to clean up asbestos-containing material; or (c) dry sweeping or dry mopping of asbestos-containing material (*WSH Reg*, Sec. 37.9(1)).

NEW BRUNSWICK

1. Employer must ensure that where compressed air is used to clean any surface: (a) a blowpipe is installed on the end of the hose, (b) a control valve is part of the blowpipe, and (c) appropriate protective equipment is worn by an employee using the compressed air; and
2. Employer must ensure that where compressed air is used for blowing dust and other substances from clothing worn by an employee: (a) appropriate protective equipment for eyes is used by an employee, and (b) either: (i) the compressed air supply is limited to 69 kPa, or (ii) safety nozzles are used that have the same pressure limiting effect (*OHS Gen Reg*, Sec. 254).

NEWFOUNDLAND

Compressed air may not be used to clean clothes, machinery, work benches, or floors (*OHS Regs*, Sec. 37).

NOVA SCOTIA

1. "Compressed air" defined as air at an absolute pressure greater than 275 kPa; and
2. Where compressed air is used to clean a surface or person, employer must ensure that the device used to deliver the air is: (a) commercially manufactured and approved in the manufacturer's specifications for the purpose of cleaning a surface or person with compressed air; or (b) certified by an engineer as adequate for the purpose of cleaning a surface or person with compressed air (*Occ Safety Gen Regs*, Sec. 101).

ONTARIO

1. A compressed air or other compressed gas blowing device

may not be used for blowing dust or other substances:
(a) from clothing worn by a worker except where the device limits increase in pressure when the nozzle is blocked; or (b) in such a manner as to endanger a worker's safety (*OHS Ind. Ests. Reg*, Sec. 66); and

2. Compressed air may not be used to clean up and remove dust from any surface at any project, building or work that's a Type 1, Type 2 or Type 3 operation subject to the asbestos on construction and building and repair operations regulations (*OHS Reg. Designated Subst.—Asbestos on Const. Projects and in Building and Repair Ops. Regs*, Secs. 10 + 13).

PRINCE EDWARD ISLAND

OHS Regulations don't include express requirements governing use of compressed air for cleaning, but they do say that employers must prevent asbestos-containing material identified at the workplace from becoming airborne (*OHS Act General Regs*, Sec. 49.6(a)(i)).

QUÉBEC

1. Use of compressed air to clean a person is prohibited;
2. The pressure of compressed air used for the cleaning of a machine or piece of equipment shall be less than 200 kPa, unless the cleaning is carried out in an enclosure specially designed for abrasive air blasting and equipped with a vacuum system (**Exception:** This requirement doesn't apply to automated cleaning systems);
3. Piping in which compressed air flows must be protected from all impacts and clearly identified as to the nature of its contents;
4. Flexible hose lines in which compressed air flows must be equipped with one of the following attachments in the

event of section-by-section assembly: (a) collars located on either side of the connection and held together by an attachment; (b) an automatic locking device; or (c) a coupling fitted with a clamping device (*OHS Reg*, Secs. 325 to 328); and

5. When the work area and equipment are being cleaned, it's prohibited to use work methods that may cause dust from materials presumed to contain or containing crystalline silica to become suspended in the air, such as dry sweeping or the use of compressed air (*Safety Code for Construction*, Sec. 3.25.10).

SASKATCHEWAN

1. No employer may require or permit compressed air to be directed towards a worker: (a) for the purpose of cleaning the worker's PPE or clothing; or (b) for any other purpose if the use of compressed air may cause dispersion into the air of contaminants that may be harmful to workers (*OHS Regs*, Sec. 3-16); and
2. Employer or contractor must ensure that if a worker is required or permitted to use an airless spray unit capable of operating at a pressure greater than 7 MPa: (a) the gun, reservoir and pump are bonded to ground with a single continuous approved bonding conductor; and (b) the gun is fitted with suitable tip and trigger guards (*OHS Regs*, Sec. 10-11).

NORTHWEST TERRITORIES & NUNAVUT

1. Employer must ensure that no compressed air is directed towards a worker: (a) for the purpose of cleaning PPE or clothing; or (b) for any other purpose, if the use of compressed air could cause dispersion into the air of contaminants that could be harmful to workers (*OHS Regs*, Sec. 26); and

2. Employer must ensure that if a worker is required or permitted to use an airless spray unit capable of operating at a pressure greater than 7 MPa: (a) the gun, reservoir and pump are bonded to ground with a single continuous approved bonding conductor; and (b) the gun is fitted with suitable tip and trigger guards (*OHS Regs*, Sec. 152).

YUKON

1. A worker using compressed air, steam, or other propelling agent to remove dust, chips, dirt, grime, paint, or other substance: (a) must not expose any worker to the direct or indirect jet stream or the material expelled or propelled by the jet, and (b) must cease use if a fire, explosion or other hazard is likely to result; and
2. A worker must not blow dust from clothing being worn unless: (a) there's an area specifically designated for such purpose, (b) all the workers in the area wear proper eye protection, and (c) only compressed air, with the pressure regulated down to 69 kPa (10 psi), or a safety nozzle that has the same limiting effect, is used (*WSC Regs*, Sec. 1.54).