

POLICY		21-111
Conditions for Entitlement – Occupational Diseases	Effective: [Date]	Release <u>4</u>

PROPOSED	CURRENT	RATIONALE
Authority	Authority (<i>section moved up</i>)	
Workers' Compensation Act	Workers' Compensation Act	
7(1), 7(2), 7(2.1), 85(1), 85(1.1), 85(2), 85(3)	Sections 7(1), 7(2), 7(2.1), 85(1), 85(1.1), 85(2), 85(3)	
Regulation 84-66 – General <u>Regulation</u> - Workers' Compensation Act	Regulation 84-66 – General- Workers' Compensation Act	
	PURPOSE	
	The purpose of this policy is to outline how WorkSafeNB gathers and weighs medical evidence during the adjudication of occupational disease claims.	
	SCOPE	
	This policy applies to all claims for compensation involving occupational diseases.	
<u>Definitions</u>	GLOSSARY	
Accident - includes a wilful and intentional act, not being the act of a worker, and also includes a chance event occasioned by a physical or	Accident - includes a wilful and intentional act, not being the act of a worker, and also includes a chance event occasioned by a physical or natural cause, as	

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natural cause, as well as a disablement caused by an occupational disease and any other disablement arising out of and in the course of employment, but does not include the disablement of mental stress or a disablement caused by mental stress, other than as an acute reaction to a traumatic event (Workers' Compensation Act)	well as a disablement caused by an occupational disease and any other disablement arising out of and in the course of employment, but does not include the disablement of mental stress or a disablement caused by mental stress, other than as an acute reaction to a traumatic event (<i>WC Act</i>)	
	Appeals Tribunal – means the Workers' Compensation Appeals Tribunal established under the WHSGC & WCAT Act.	<ul style="list-style-type: none"> • “Appeal Tribunal” is not referenced in policy and therefore removed from definitions
Attributable Risk Fraction – is a figure derived from the population measuring overall strength of association and is a measure of the proportion of cases of the disease that are reasonably attributable to the exposure.	Attributable Risk Fraction – is a figure derived from the overall strength of association and is a measure of the proportion of cases of the disease that are reasonably attributable to the exposure.	<ul style="list-style-type: none"> • To clarify that Attributable Risk Fraction is based on the population
	Evidence to the contrary – any information that may suggest the accident or injury, including occupational disease, did not arise out of and in the course of employment.	<ul style="list-style-type: none"> • Term not referenced in policy and therefore removed from definitions
	Occupational disease – any disease, which by the regulations, is declared to be an occupational disease and includes any other disease peculiar to or characteristic of a particular industrial process, trade or occupation (WC Act)	<ul style="list-style-type: none"> • Term is explained within the policy
	Preponderance of evidence – the most persuasive and impressive information on one side of a case	<ul style="list-style-type: none"> • Term is explained within the policy

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	that outweighs the information on the other side. A preponderance of evidence is not decided on the quantity of information alone, but on the significance and strength of the evidence as well.	
	WorkSafeNB – means the Workplace Health, Safety and Compensation Commission or "the Commission" as defined by the WHSCC & WCAT Act.	<ul style="list-style-type: none"> “WorkSafeNB” is no longer defined in policy
Policy	POLICY STATEMENTS	
	1.0 General Statements	
Occupational disease is any disease that is peculiar to or characteristic of a particular industrial process, trade or occupation. Occupational diseases or related disablements may have occurred over time and may have resulted from an exposure with one employer or from multiple exposures at various workplaces.		<ul style="list-style-type: none"> Moved up to explain what is an occupational disease
WorkSafeNB makes decisions on acceptance of all claims, including occupational disease claims, using Section 7 of the Workers’ Compensation Act (WC Act) and Policy 21-100 Conditions for Entitlement – General Principles. However, given the complexity of occupational diseases, this policy provides additional information for decision-making on occupational diseases.	WorkSafeNB uses Section 7 of the Workers’ Compensation Act (WC Act) and Policy 21-100 Conditions for Entitlement – General Principles to adjudicate all claims for compensation involving a personal injury caused by accident arising out of and in the course of employment, including claims for occupational diseases.	<ul style="list-style-type: none"> Additions to clearly outline the purpose of the policy

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<p>Specifically, guidance is provided to inform:</p> <ul style="list-style-type: none"> Population-level causation: Whether the identified disease is recognized as an occupational disease in the general population; and Individual causation: The type of information gathered to determine whether it is more likely than not that the worker's disease is work related. 		<ul style="list-style-type: none"> Highlighting that both levels of causation – population and individual – are required to make a decision
	<p>The WC Act defines an accident as a:</p> <ul style="list-style-type: none"> Wilful and intentional act not being the act of the worker who suffers the accident; Chance event or incident occasioned by a physical or natural cause; Disablement caused by an occupational disease; Disablement or disabling condition; or Disablement from mental stress that is caused by an acute reaction to a traumatic event. 	<ul style="list-style-type: none"> Information removed as already provided above in the <i>Definitions</i> section under “Accident”
	<p>Occupational diseases are illnesses that an injured worker may develop as a result of certain exposures, and are peculiar to or characteristic of a particular industrial process, trade or occupation. Occupational diseases or related disablements may have occurred over time, and may have resulted from an exposure with one employer or from multiple exposures at various workplaces.</p>	<ul style="list-style-type: none"> Information moved to first paragraph

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<p>To determine the existence of an occupational disease at the population level, WorkSafeNB relies on two approaches:</p> <ul style="list-style-type: none"> Use of Appendix A, which outlines diseases that WorkSafeNB considers occupational diseases; or By evaluating scientific and medical literature to determine the link between the disease and the characteristics of a particular trade, occupation, or work environment. <p>Regardless of the approach, occupational diseases are not exempt from WorkSafeNB's adjudication process to determine if the disease arose out of and in the course of employment.</p>	<p>Regulation 84-66 outlines some diseases that are known to be work-related, however these diseases are not exempt from WorkSafeNB's adjudication process to determine if the disease arose out of and in the course of employment.</p>	<ul style="list-style-type: none"> Removing reference to Regulation 84-66 as it is being replaced by a newly created appendix largely based on the regulation. The proposed appendix allows for easy reference, ability to update with other known occupational diseases, and add additional information on occupational diseases that may assist in the adjudication process
<p>To make a decision on the claim, WorkSafeNB gathers and analyzes all information related to the claim, as per Policy 21-113 Decision-making. WorkSafeNB considers medical evidence to be the most important information for establishing if a work-related exposure could have caused the disease. When the preponderance of all the evidence weighs more heavily towards that the disease is an occupational disease that arose out of and in the course of employment, the claim is accepted.</p>	<p>In order to accept a claim for compensation, WorkSafeNB must determine that the disease is an occupational disease that arose out of and in the course of employment. To determine this, WorkSafeNB:</p> <ul style="list-style-type: none"> Evaluates scientific and medical literature to determine that there is a probable causal association between the exposure reported and the disease (section 2.1); and Weights other information, such as medical evidence specific to the claim, to evaluate if the particular exposure and the disease reported are work-related (section 2.2). <p>2.0 Medical and Scientific Evidence of</p>	<ul style="list-style-type: none"> Bullet on scientific and medical literature has been moved in-part above Statement on gathering information has been summarized from below Added reference to Policy 21-113 Decision-making for more information on how WorkSafeNB makes decisions

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	Causation WorkSafeNB considers medical evidence to be the most important factor for establishing if a work-related exposure could have caused the disease. When evaluating medical information, WorkSafeNB uses a method that is:	
	• Evidence-based;	<ul style="list-style-type: none"> Deleted as information found in related medical aid policies
	• Reproducible; and	
	• Transparent.	
	This means that WorkSafeNB's evaluation of medical information and the resulting conclusions:	
	• Are based upon the most credible scientific literature and studies;	
	• Can be accurately reproduced by other health care providers; and	
	• Are easily understood	
For more information on the types of medical and scientific literature WorkSafeNB accepts, see Policy 25-014 Medical Aid Decisions.	For more information on the types of medical and scientific literature WorkSafeNB accepts, see Policy 25-014 Medical Aid Decisions.	
For the decision-making process for occupational hearing loss claims, please see Policy 21-112 Occupational Hearing Loss and for infectious diseases claims, please see Policy 21-109 Conditions for Entitlement – Infectious Diseases.		<ul style="list-style-type: none"> Separate WorkSafeNB policies cover occupational hearing loss and infectious diseases and these two policies have been added as a reference and for clarity

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	To determine any causal association between an exposure and a disease, WorkSafeNB gathers and weighs evidence to answer the following two questions:	<ul style="list-style-type: none"> This has been captured below in the <i>Interpretation</i> section
	1— Does medical and scientific literature show that the diagnosed medical condition is characteristic of the occupation?	
	2— If yes, does all available evidence establish that the disease in this claim arose out of and in the course of employment?	
Interpretation		
Determining an occupational disease at a population level	2.1 Determining Association Between the Exposure and the Disease	
1. WorkSafeNB primarily consults Appendix A to confirm the diagnosed illness as an occupational disease. If the disease is not listed in the appendix, WorkSafeNB applies the Bradford Hill criteria to determine a potential causal link between exposure and disease.		<ul style="list-style-type: none"> Clearly outlines steps to determine a population level occupational disease

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<p>2. The Bradford Hill criteria is a tool that was developed to interpret epidemiological evidence of a general causal relationship between exposure to an agent and the disease. WorkSafeNB applies the Bradford Hill criteria to its analysis of medical and scientific literature to determine any causal association between the exposure and the disease. Specifically, WorkSafeNB uses this criteria to determine:</p>	<p>WorkSafeNB applies the Bradford Hill criteria to its analysis of medical and scientific literature to determine any causal association between the exposure and the disease. The Bradford Hill criteria is a tool that was developed to interpret epidemiological evidence of a general causal relationship between exposure to an agent and the disease. Specifically, WorkSafeNB uses this criteria to determine:</p>	<ul style="list-style-type: none"> Information remains the same, but the order of the sentences has been changed.
<ul style="list-style-type: none"> Plausibility – Is there a biologically plausible mechanism linking exposure and disease? 	<ul style="list-style-type: none"> Plausibility – is there a biologically plausible relationship between the proposed exposure and the condition? 	<ul style="list-style-type: none"> Language updated to reflect current medical terminology
<ul style="list-style-type: none"> Temporal – Did the exposure precede disease onset appropriately? 	<ul style="list-style-type: none"> Temporal – did the condition occur after a reasonable duration of exposure and latency based on current medical/scientific knowledge? 	
<ul style="list-style-type: none"> Specificity – Is the disease associated specific ally with the exposure type? 	<ul style="list-style-type: none"> Specificity – is the condition being linked to a specific type of exposure as opposed to multiple vague exposures? 	
<ul style="list-style-type: none"> Dose-response – Does severity increase with exposure dose or duration? 	<ul style="list-style-type: none"> Dose-response – does the exposure exhibit a dose-response gradient in which little exposure gives rise to a mild or sub-clinical condition and heavy exposure to a more severe, overt condition? 	
<ul style="list-style-type: none"> Consistency – Are results consistent across multiple studies? 	<ul style="list-style-type: none"> Consistency – is there a consistency across the literature on the relationship between the proposed exposure and the condition? 	
<ul style="list-style-type: none"> Strength of association – the relative incidence of the condition under study between those exposed and those non- 	<ul style="list-style-type: none"> Strength of association – the relative incidence of the condition under study between those exposed and those non-exposed. 	

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exposed.		
<p>3. Bradford Hill's strength of association criteria is measured using the attributable risk factor to determine whether it is more likely than not that the type of occupational exposure reported is capable of causing the disease in the general population. An Attributable Risk Fraction of:</p> <ul style="list-style-type: none"> Fifty percent or greater means it is more probable than not that a case of the disease is attributable to the specified agent, exposure, or occupation; Between twenty-five and forty-nine percent means a case of the disease could possibly be attributable to the specified agent, exposure, or occupation; but it is not probable; or Less than twenty-five percent means there is insufficient evidence to suggest that a case of the disease is attributable to the specified agent, exposure or occupation. 	<p>If the criteria supports a causal association between the exposure and the disease, then WorkSafeNB determines the strength of association in terms of the Attributable Risk Fraction.</p> <p>An Attributable Risk Fraction of:</p> <ol style="list-style-type: none"> 1- Fifty percent or greater means it is more probable than not that a case of the disease is attributable to the specified agent, exposure, or occupation; 2- Between twenty-five and forty-nine percent means a case of the disease could be attributable to the specified agent, exposure, or occupation; but an alternate cause is more likely; or 3- Less than twenty-five percent means it is unlikely that a case of the disease is attributable to the specified agent, exposure or occupation. 	<ul style="list-style-type: none"> Adding information on the relationship between the Bradford Hill and the attributable risk fraction Highlighting that the attributable risk fraction is a population-based measure Wording changes to clarify the meaning and intent of percentage ranges
Determining if the specific exposure caused the worker's disease	2:2 Determining if the specific exposure caused the disease	<ul style="list-style-type: none"> Added “worker’s” to specify that this is an individual-level causal attribution
<p>4. Population-level information plays a key role in WorkSafeNB's decision-making process. However, even with strong</p>	<p>After WorkSafeNB has analyzed the medical and scientific literature and is satisfied that there is a probable causal association between the</p>	<ul style="list-style-type: none"> Information added for clarity on process The information in the bullet

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evidence of causality at the population level, the worker's specific exposure and individual circumstances must be considered.	<p>exposure and the disease, WorkSafeNB then proceeds to confirm if the :</p> <ul style="list-style-type: none"> • Worker was exposed to the substance that was reported to have caused the disease; • Exposure occurred at work; and • Exposure caused the disease. 	points have been moved down to paragraph 6
<p>5. In addition to the information at the population level, WorkSafeNB examines the specific facts and information of the worker to determine if it is reasonable that the individual disease arose out of and in the course of employment, including:</p> <ul style="list-style-type: none"> • Where the exposure occurred; • Type, nature, duration, and frequency of exposure; • Latency period specific to that disease; • Specificity of exposure; • Whether or not personal protective equipment was used; • The worker's medical history; • Specialists' reports; • Pathology reports; and • Evidence of alternate cause 	<p>At this stage, WorkSafeNB examines the specific facts and information of the claim to determine if it is reasonable that the worker's disease arose out of and in the course of employment, including:</p> <ul style="list-style-type: none"> • Where the exposure occurred; • Type, nature, duration, and frequency of exposure; • Latency period specific to that disease; • Specificity of exposure; • Whether or not personal protective equipment was used; • The worker's medical history; • Specialists' reports; • Pathology reports; and • Evidence of alternate cause 	<ul style="list-style-type: none"> • Wording added to explicitly state that information on the occupational disease at a population level is taken into consideration when determining if the worker's occupation disease specifically arose out of and in the course of their employment
<p>6. WorkSafeNB reviews all information on file to assess its reliability and relevance. Information deemed both reliable and relevant is admitted as evidence for the purpose of determining:</p> <ul style="list-style-type: none"> • The worker was exposed to the substance that was reported to have 	<p>WorkSafeNB analyzes all information related to the claim in order to make a decision.</p>	<ul style="list-style-type: none"> • Added information to clarify how WorkSafeNB evaluates all the collected information • Bullets moved down from above

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<ul style="list-style-type: none"> caused the disease; The exposure occurred at work; and The exposure caused the disease. 		
7. When the preponderance of evidence weighs more heavily towards that the worker's disease being work-related, WorkSafeNB accepts the claim.	When the preponderance of evidence weighs more heavily toward the disease being work-related, WorkSafeNB accepts the claim.	
	For more information on the process used to adjudicate claims, see Policy 21-100 Conditions for Entitlement – General Principles.	<ul style="list-style-type: none"> Removed as already stated above in <i>Policy Statement</i>
Date of accident	3.0 Determining the Date of Accident	
	Date of accident for hearing loss is determined using Policy 21-112 Occupational Hearing Loss.	<ul style="list-style-type: none"> Removed as reference to Policy 21-112 Hearing Loss moved to under <i>Policy Statement</i>
8. For occupational disease, other than occupational hearing loss, the date of accident is the date of disablement. When there is no evidence of disablement, WorkSafeNB uses the date of diagnosis as the date of accident. For more information, please see Policy 21-106 Accident Reporting and Application for Benefits.	For other occupation diseases, other than occupational hearing loss, the date of accident is the date when disablement as a result of the occupational disease first occurred. When there is no evidence of disablement, WorkSafeNB uses the date of diagnosis as the date of accident.	<ul style="list-style-type: none"> Added a reference to Policy 21-106 Accident Reporting and Application for Benefits to provide guidelines for reporting occupational diseases
	LEGAL AUTHORITY	<ul style="list-style-type: none"> See page 1 for Authority in keeping with current policy format

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	REFERENCES	
	Policy-related Documents	
	Politique 21-011 – Agents de l'État	
	Politique 21-100 – Critères d'admissibilité – Principes généraux	
	Politique 21-104 – Critères d'admissibilité – Critères relatifs à l'heure, à l'admissibilité et à l'activité	
	Politique 25-014 – Décisions relatives à l'aide médical	
Appendix		
<ul style="list-style-type: none"> Appendix A – List of Occupational Diseases 		<ul style="list-style-type: none"> Reference to newly created appendix added
Previous versions	RESCINDS	
<ul style="list-style-type: none"> Policy 21-111 Conditions for Entitlement – Occupational Diseases release 3, effective January 17, 2019 		
<ul style="list-style-type: none"> Policy 21-111 Conditions for Entitlement – Occupational Diseases release 2, effective 20/02/2013 	Policy 21-111 Conditions for Entitlement – Occupational Diseases, release 002, approved 20/02/2013:	
<ul style="list-style-type: none"> Policy 21-111 Conditions for Entitlement – Occupational Diseases, release 1, effective February 28, 2008 		
	HISTORY	

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	1. This document is release 003 and replaces release 002. Date of disablement has been aligned with the Policy 21-112 Occupational Hearing Loss.	
	2. Release 002, approved and effective 20/02/2013, replaced release 001. It was updated for consistency in terms of the <i>exposure</i> causing the disease, rather than the <i>occupation</i> .	
	3. Release 001, approved and effective 28/02/2008, was the original issue. It included WorkSafeNB's method of gathering and weighing evidence to determine if the occupational disease arose out of and in the course of employment. It replaced Policy 21-140 (10-13-05) Industrial Diseases, which included a list of known industrial diseases and was an internal document which was not externally releasable.	
	RELEASE CRITERIA	
	Available for public release.	
	REVISION	
	60 MONTHS	
Approval date	APPROVAL DATE	
	January 20, 2020	

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List of Occupational Diseases		Effective:	Release 1

Purpose

This appendix lists diseases that WorkSafeNB considers occupational diseases for the purposes of section 1 of the policy.

Interpretation

1. WorkSafeNB periodically reviews medical and scientific literature to gather the highest quality of evidence available to determine known occupational diseases, as defined in section 1 of the [Workers Compensation Act](#).
2. To help determine the existence of a causal relationship between a specific exposure and the disease, WorkSafeNB may consult reputable sources, including:
 - The Canadian Center for Occupational Health and Safety (CCOHS);
 - Research from other workers’ compensation boards;
 - Research and reports from reputable agencies such as:
 - CAREX Canada;
 - Canada Occupational Cancer Research Centre (OCRC);
 - The National Institute for Occupational Safety and Health (NIOSH);
 - The American College of Occupational and Environmental Medicine (ACOEM);
 - International Agency for Research on Cancer (IARC);
 - The Association Workers Compensation Board of Canada (AWCBC);
 - The World Health Organization (WHO); and
 - Health Canada; and
 - A combination of studies and evidence.
3. WorkSafeNB accepts the diseases in the appendix to be known occupational diseases. Their inclusion in this appendix confirms an occupational disease at the population level (please see section 1 of the policy). These are not presumptive occupational diseases and Policy 21-111 Conditions for Entitlement – Occupational Diseases must be fully applied to determine eligibility on a case-by-case basis.

- [Ammonia poisoning or its sequelae](#)
- [Anthrax](#)
- [Arsenic poisoning or its sequelae](#)
- [Asbestosis](#)
- [Brass, nickel and zinc poisoning](#)
- [Brucellosis \(undulant fever\)](#)
- [Bursitis of the prepatellar or of the olecranon bursa due to the nature of employment](#)
- [Carbon bisulphide poisoning or its sequelae](#)
- [Carbon monoxide poisoning](#)
- [Carbonic acid gas poisoning \(carbon dioxide\)](#)
- [Conjunctivitis and retinitis due to electro and oxy-welding and cutting](#)
- [Chronic solvent toxic syndrome](#)
- [Decompression illness](#)
- [Dermatitis](#)
- [Infection caused by the handling of sugar](#)
- [Lead poisoning or its sequelae](#)
- [Mercury poisoning or its sequelae](#)
- [Phosphorus or its sequelae](#)
- [Pneumoconiosis](#)
- [Primary cancer of the nasal cavities or of paranasal sinuses](#)
- [Primary malignant neoplasm of the mesothelium of the pleura of peritoneum](#)
- [Silicosis](#)
- [Sulphur poisoning or its sequelae](#)

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Non-presumptive occupational diseases	Exposure / agent	High-risk occupations	Key references	Date recognized as OD & source
Ammonia poisoning or its sequelae	Any process involving the use of ammonia or its preparations or compounds	Farms: <ul style="list-style-type: none">• Compost piles on mushroom farms generate ammonia gas.• Manure pits and any indoor or confined spaces where farm animals are kept can contain ammonia gas. Refrigeration systems: <ul style="list-style-type: none">• Ice rinks and ice manufacturing plants use liquid ammonia. If it leaks, it becomes a gas. Fertilizers and cleaners: <ul style="list-style-type: none">• Liquid ammonia is often diluted and combined with other chemicals. (WorkSafeBC)	CCOHS	1921 (NB Reg 84-66)
Anthrax	Transmitted by the handling of wool, hair, bristles, hides and skins	<ul style="list-style-type: none">• Animal breeders• Slaughterhouse workers• Trappers and hunters,• Fur industry workers,• Tanning and leather industry workers• Veterinarians, or wildlife, agricultural, and laboratory workers who handle infected animals or animal products can also be at risk for the infection (CCOHS)• Working in a laboratory that handles anthrax• Working with animals or handling animal products (such as veterinarians, farmers, livestock producers)• Traveling in certain parts of the world• Welding or metalworking• In the event of a	Human anthrax is unusual in North America. The British Columbia Centre for Disease Control reported: "The latest BC case was seen in 2001. More recently, 2 people were infected in 2006 in Saskatchewan during an outbreak among animals (mainly cattle). All these people developed skin infections and recovered. Human cases of digestive and lung anthrax have never been reported in Canada." (CCOHS Anthrax)	1921 (NB Reg 84-66)

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		bioterrorist attack, handling mail, working for the military, and supporting emergency response activities (CDC)		
Arsenic poisoning or its sequelae	Any process involving the use of arsenic or its preparations or compounds	<ul style="list-style-type: none"> • Construction trades helpers and labourers • Carpenters • Machinists and machining and tooling inspectors • Contractors and supervisors, carpentry trades (CAREX)	<p>Approximately 22,000 Canadians are currently exposed to arsenic at work. Of these, 92% are male.</p> <p>The industries with the highest number of exposed workers are foundation, structure, and building exterior contractors; non-residential building construction; and farms. Exposure in these groups primarily occurs through contact with arsenic-containing CCA wood preservatives. Workers may also be exposed to arsenic in the workplace in industries other than wood preservation. For example, exposure to arsenic occurs in the non-ferrous metal production and processing industry, as well as in iron and steel mills, where arsenic is produced as a by-product of the processing of other metals</p> CAREX	1921 (NB Reg 84-66)
Asbestosis	Inhalation of asbestos fibres	<ul style="list-style-type: none"> • Mining of asbestos occurring from natural mineral deposits • Processing of asbestos minerals (millers) • Manufacture of asbestos-containing products 	There is strong and consistent scientific evidence that, in virtually every case, the disease occurrence is linked to a single cause and that cause is associated with an occupational risk	2025 (WSIB)

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Non-presumptive occupational diseases	Exposure / agent	High-risk occupations	Key references	Date recognized as OD & source
		<ul style="list-style-type: none">• Construction industry - disturbing asbestos-containing materials during building renovations or demolitions• Mechanics - vehicle brake and clutch repairs• Marinas - renovating or demolishing ships constructed with asbestos-containing materials• Insulation workers and heating trades• Sheet metal workers, plumbers and pipe fitters• Workers responsible for disposing of asbestos waste, and waste workers• Cement workers• Custodial workers - contact with deteriorating asbestos-containing materials in buildings	factor. (WISB)	
Brass, nickel and zinc poisoning	Brass, nickel and zinc	Welding or metalworking processes		1948 (NB Reg 84-66)
Brucellosis (undulant fever)			Canada initiated an eradication program for bovine brucellosis in livestock in the 1940s, and was declared free of the disease in 1985. Several isolated cases of bovine brucellosis in livestock were subsequently identified, with the last known case occurring in a cattle herd in Saskatchewan in 1989. Porcine brucellosis and caprine/ovine brucellosis have never been reported in livestock or wildlife in Canada.	1964 (NB Reg 84-66)

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			Gov't of Canada CCOHS	
Bursitis of the prepatellar or of the olecranon bursa due to the nature of employment	Common causes of bursitis are repetitive motions, overuse, injury, or infection. (CCOHS)	<ul style="list-style-type: none">• Knee bursitis (prepatellar): occupations that require kneeling, jumping, or squatting (e.g., carpet and floor layers, gardeners, carpenters, plumbers, wrestlers, runners)• Elbow (Olecranon) bursitis: occupations that require leaning on or movement of the elbows (e.g., plumbers, heating, ventilation and air conditioning (HVAC) technicians,, musicians) (CCOHS)		1948 (NB Reg 84-66)
Carbon bisulphide poisoning or its sequelae	Any process involving the use of carbon bisulphide		EPA	1921 (NB Reg 84-66)
Carbon monoxide poisoning	<ul style="list-style-type: none">• All fuel-burning equipment powered by propane, gasoline or diesel emits some carbon monoxide,• Processes, such as welding, foundries, coke ovens and metal hardening, can also be a source of carbon monoxide exposure.• Carbon monoxide tends to build up in pockets, in poorly		CCOHS WorkSafeBC	1933 (NB Reg 84-66)

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Non-presumptive occupational diseases	Exposure / agent	High-risk occupations	Key references	Date recognized as OD & source
	ventilated areas of workplaces. This can happen even in semi-enclosed workplaces, where tarps and plastic sheeting are used for shelter. Gov't of Ontario			
Carbonic acid gas poisoning (carbon dioxide)	Caused by any process involving the use of carbonic acid gas			1921 (NB Reg 84-66)
Conjunctivitis and retinitis associated with welding operations	UV radiation exposure during electro- and oxy-welding and cutting	Gas or arc welding or use of lasers	<p>Certain types of UV radiation can produce an injury to the surface and mucous membrane (conjunctiva) of the eye called "arc eye," "welders' eye," or "arc flash." These names are common names for "conjunctivitis" - an inflammation of the mucous membrane of the front of the eye. The symptoms include:</p> <ul style="list-style-type: none">• pain - ranging from a mild feeling of pressure in the eyes to intense pain in severe instances• tearing and reddening of the eye and membranes around the eye (bloodshot)• a sensation of "sand in the eye"• abnormal sensitivity to light• inability to look at light sources (photophobia)	1933 (NB Reg 84-66)

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Non-presumptive occupational diseases	Exposure / agent	High-risk occupations	Key references	Date recognized as OD & source
			<p>The amount of time required to cause these effects depends on several factors, such as the intensity of the radiation, the distance from the welding arc, the angle at which the radiation enters the eye, and the type of eye protection that the welder or bystander is using. However, exposure to just a few seconds of intense UV light can cause arc eye. These symptoms may not be felt until several hours after exposure.</p> <p>(CCOHS)</p>	
Chronic solvent toxic syndrome	Exposure to chemicals used in the painting industry		A diagnostic toolkit for physicians and primary health providers. IHSA.pdf	1948 (NB Reg 84-66)
Decompression illness	Caused by any process carried on in compressed air	Adverse effects related to commercial diving and compressed air work (WSIB)		1921 (NB Reg 84-66)
Dermatitis	Short, heavy exposure or a repeated or prolonged, low exposure to a substance CCOHS	<ul style="list-style-type: none">• Agriculture workers• Artists• Automobile and aircraft industry workers• Bakers and confectioners• Bartenders• Bookbinders• Butchers• Cabinet makers and carpenters• Cleaners• Coal miners• Construction workers• Cooks and caterers• Dentists and dental technicians• Dry cleaners• Electricians• Electroplaters• Electroplaters	Dermatitis, Irritant Contact CCOHS Dermatitis, Allergic Contact CCOHS	1984 (NB Reg 84-66)

APPENDIX A				
List of Occupational Diseases				
Non-presumptive occupational diseases	Exposure / agent	High-risk occupations	Key references	Date recognized as OD & source
		<ul style="list-style-type: none">• Embalmers• Floor-layers• Florists and gardeners• Foundry workers• Hairdressers• Hospital workers• Homemakers• Jewellers• Mechanics• Medical personnel• Metal workers• Office workers• Painters• Photography industry workers• Plastic workers• Printers• Rubber workers• Shoemakers• Tannery workers• Textile workers• Veterinarians and slaughterhouse workers (CCOHS)		
Glanders contracted during the care of any equine animal suffering from glanders or during the handling of the carcass of any such animal			<p>Glanders has been eliminated in North America, Australia, Japan and Europe.</p> <p>The Canadian Food Inspection Agency (CFIA) imposes strict regulations on the import of animals and animal products from countries where glanders occurs. These regulations are enforced through port of entry inspections done either by the Canada Border Services Agency or the CFIA.</p> <p>Glanders is an immediately notifiable disease in Canada. All suspected cases must be reported to the CFIA. Government of Canada</p>	1921 (NB Reg 84-66)
Hearing loss caused by industrial trauma or noise induced due to excessive			Adjudicated according to Policy 21-112 Occupational	1984 (NB Reg 84-66)

APPENDIX A				
List of Occupational Diseases				
Non-presumptive occupational diseases	Exposure / agent	High-risk occupations	Key references	Date recognized as OD & source
levels of noise in the workplace			Hearing Loss	
Respiratory infection associated with sugar dust exposure	Handling or processing of sugar producing airborne sugar dust			1921 (NB Reg 84-66)
Lead poisoning or its sequelae	Caused by any process involving the use of lead or its preparation or compounds	<ul style="list-style-type: none"> • Metalwork • Working with batteries • Demolition and abatement • Manufacturing • Working with scrap metal WorkSafeBC	CCOHS	1921 (NB Reg 84-66)
Mercury poisoning or its sequelae	Caused by any process involving the use of mercury or its preparations or compounds	<ul style="list-style-type: none"> • Construction • Recycling • Health care and social services • Oil and gas • Agriculture (WorkSafeBC)	<p>Mercury was once commonly found in medical equipment. It was also used in construction, agriculture, and other industries. Today, the use of mercury has been significantly reduced due to its extreme toxicity. Workers may still encounter it in equipment such as electrical switches or fluorescent lamps. Older pesticides and fungicides containing mercury compounds are also a source of exposure. The risk exists whether these products are in use or in storage. If a container that holds elemental mercury or a mercury compound breaks, workers may be at risk.</p> (WorkSafeBC)	1921 (NB Reg 84-66)
Phosphorus or its sequelae	Any process involving the use of phosphorus or its preparations or compounds	Most phosphorus is used in the production of phosphoric acid and phosphates, which are used in the fertilizers industry.		1921 (NB Reg 84-66)

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List of Occupational Diseases

Non-presumptive occupational diseases	Exposure / agent	High-risk occupations	Key references	Date recognized as OD & source
		(EPA)		
Pneumoconiosis (other than asbestosis and silicosis)	Exposure to airborne dusts known to produce pulmonary fibrosis (coal, beryllium, tungsten carbide, aluminum) fibrosis of the lungs. (MB Regulation)		CCOHS	1964 (NB Reg 84-66)
Chronic solvent toxic syndrome	Exposure to chemicals used in the painting industry		A diagnostic toolkit for physicians and primary health providers. IHSA.pdf	1948 (NB Reg 84-66)
Primary cancer of the nasal cavities or of paranasal sinuses	Examples of High-risk substances or cancer-causing agents: Chromium (hexavalent) compounds; Formaldehyde; Selected nickel compounds including combinations of nickel oxides and sulfides in the nickel refining industry; Wood dust. (Nasal cavities and paranasal sinuses CCOHS)	<ul style="list-style-type: none">• Boot and shoe manufacturing and repair• Carpenters• Construction workers• Furniture and cabinet making• Isopropanol manufacture (strong acid process)• Miners• Plumbers• Pulp and paper mill workers• Textile workers• Welders• Wood workers (CCOHS) Elevated risk of sinonasal cancer was observed among workers with potential exposure to wood dust, nickel compounds, chromium (VI) compounds, and formaldehyde. Given the rarity of this type of cancer, many groups had a relatively small number of cases and results should be interpreted with caution. Sinonasal Cancer -	There is strong and consistent scientific evidence that, in virtually every case, the disease occurrence is linked to a single cause and that cause is associated with an occupational risk factor. (WISB)	2025 (WSIB)

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List of Occupational Diseases				
Non-presumptive occupational diseases	Exposure / agent	High-risk occupations	Key references	Date recognized as OD & source
		Occupational Cancer Research Centre		
Primary malignant neoplasm of the mesothelium of the pleura of peritoneum	80-85% of mesothelioma cases are attributable to occupational asbestos exposure (Occupational Cancer Research Centre)	<ul style="list-style-type: none">Any mining, milling, manufacturing, assembling, construction, repair, alteration, maintenance or demolition process involving the generation of airborne asbestos fibres (Ontario regulation)	There is strong and consistent scientific evidence that, in virtually every case, the disease occurrence is linked to a single cause and that cause is associated with an occupational risk factor. (WISB)	2025 (WSIB)
Silicosis	Inhalation of dust that contains free crystalline silica (CCOHS)	<ul style="list-style-type: none">Construction trades labourersHeavy equipment operatorsPlasterers and drywallersMiningAgricultureManufacturing <p>Workers who are exposed to workplace activities such as abrasive blasting, cutting, sawing, demolishing, drilling, grinding, jackhammering, milling, mixing, polishing, roofing, sanding, and sweeping can also be at risk of developing silicosis.</p> (Silicosis CCOHS)	<p>The time from initial exposure to when symptoms first appear (the latency period) depends on duration and intensity of exposure. Higher exposures result in shorter latency periods and faster disease development. There are different types of silicosis. The type with the quickest onset is acute silicosis. This can occur after a few weeks or months of exposure to very high levels of silica. Acute silicosis causes parts of the lung fill with fluid typically causing severe illness or death.</p> <p>Accelerated silicosis occurs after high levels of exposure and typically occurs after 5 to 10 years. Chronic silicosis is the most common type. It occurs after 10 or more years of exposure to lower levels of silica. Both accelerated and chronic types of silicosis have the same radiographic appearance and are set apart based on their different</p>	1948 (NB Reg 84-66)

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List of Occupational Diseases

Non-presumptive occupational diseases	Exposure / agent	High-risk occupations	Key references	Date recognized as OD & source
			latency periods. (Timeline CDC)	
Sulphur poisoning or its sequelae	Caused by any process involving the use of sulphur or its preparations or compounds	<ul style="list-style-type: none">• To make sulfuric acid,• intermediate in bleaching processes,• in food processing (CCOHS)	<ul style="list-style-type: none">• Inhalation: VERY TOXIC, can cause death. Can cause severe irritation of the nose and throat. At high concentrations: can cause life-threatening accumulation of fluid in the lungs (pulmonary edema). Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest. A single exposure to a high concentration can cause a long-lasting condition like asthma. If this occurs, many things like other chemicals or cold temperatures can easily irritate the airways. Symptoms may include shortness of breath, tightness in the chest and wheezing. [Reactive Airways Dysfunction Syndrome (RADS)].• Effects of Long-Term (Chronic) Exposure: May harm the respiratory system. Can irritate and inflame the airways. (CCOHS)	1921 (NB Reg 84-66)

Previous version

This is the original release.

Approval date