

About

Lead health surveillance is a critical component of occupational health and safety, specifically on worksites where exposure to lead may occur; either through inhalation, ingestion, or skin contact.

Lead is a highly toxic metal that can accumulate in the body over time, causing serious health effects, including neurological damage, kidney dysfunction, cardiovascular issues, and reproductive problems. Because lead exposure often occurs incrementally, the symptoms can remain undetected until significant harm has occurred, underscoring the necessity of proactive monitoring programs.

In Canada, workplace health and safety regulations emphasize the need to protect workers from hazardous substances like lead. Regular health monitoring allows employers to detect early signs of lead exposure, assess the effectiveness of existing control measures, and implement timely interventions to prevent long-term harm.



Lead health surveillance programs support compliance with legal standards such as those outlined in provincial occupational health and safety acts and guidelines, helping organizations maintain safe work environments while safeguarding employee well-being.

An important concept to remember is that a lead health surveillance program is a requirement for employers to establish in many jurisdictions; however, the testing itself is not mandatory and employees may choose to opt-out of the program. If they do so, this should be communicated to the employer in writing for record keeping purposes by the employee.

Testing Requirements by Jurisdiction

Jurisdiction	Test(s)
British Columbia	<ul style="list-style-type: none"> • Lead Exposure Medical Questionnaire • Blood Lead Levels • Physician Review - Lung/Lead Health
Alberta	<ul style="list-style-type: none"> • Lead Exposure Medical Questionnaire • Blood Lead Levels • Physician Review - Lung/Lead Health
Saskatchewan	<ul style="list-style-type: none"> • N/A (testing in Saskatchewan not legislated at this time)
Manitoba	<ul style="list-style-type: none"> • Physician Assessment - SureHire Paperwork • Lead Exposure Medical Questionnaire • Blood Lead Levels • Physician Review - Lung/Lead Health
Ontario	<ul style="list-style-type: none"> • Inorganic Lead: <ul style="list-style-type: none"> • Physician Assessment - SureHire Paperwork • Lead Exposure Medical Questionnaire • Blood Lead Levels • Physician Review - Lung/Lead Health • Organic Lead: <ul style="list-style-type: none"> • Physician Assessment - SureHire Paperwork • Lead Exposure Medical Questionnaire • Urine Lead Levels • Physician Review - Lung/Lead Health
Quebec	<ul style="list-style-type: none"> • N/A (testing in Quebec not available at this time)
Newfoundland & Labrador	<ul style="list-style-type: none"> • Blood Lead Levels • Physician Review - Lung/Lead Health
Nova Scotia	<ul style="list-style-type: none"> • Physician Assessment - SureHire Paperwork (Baseline job type only) • Lead Exposure Medical Questionnaire (Baseline job type only) • Creatinine (Baseline job type only) • Blood Lead Levels • CBC & Differential • Urinalysis • Physician Review - Lung/Lead Health
New Brunswick	<ul style="list-style-type: none"> • N/A (testing in New Brunswick not legislated at this time)
Prince Edward Island	<ul style="list-style-type: none"> • N/A (testing in Prince Edward Island not legislated at this time)

Testing Requirements by Jurisdiction

Jurisdiction	Test(s)
Yukon Territories	<ul style="list-style-type: none"> • Inorganic Lead: <ul style="list-style-type: none"> • Physician Assessment - SureHire Paperwork • Lead Exposure Medical Questionnaire • Blood Lead Levels • Urine Lead Levels • Physician Review - Lung/Lead Health • Organic Lead: <ul style="list-style-type: none"> • Physician Assessment - SureHire Paperwork • Lead Exposure Medical Questionnaire • Urine Lead Levels • Physician Review - Lung/Lead Health
Northwest Territories	<ul style="list-style-type: none"> • N/A (testing in Northwest Territories not legislated at this time)
Nunavut	<ul style="list-style-type: none"> • N/A (testing in Nunavut not legislated at this time)

For jurisdictions that do not have defined codes of practice, please defer to Alberta testing requirements as best practice. The frequency of testing is determined by the tests results completed.

Inorganic Lead: refers to lead found in non-living things. Inorganic lead is generally considered less toxic and is primarily found in the body through inhalation and ingestion. Metallic lead, lead (II) chloride, and lead oxides are examples of inorganic lead.

Organic Lead: refers to lead found in living things. Organic lead compounds are highly toxic and can be found in the body through absorption, inhalation, and ingestion. Tetraethyl lead and Tetramethyl lead are examples of organic lead.