PREVENT CANCER NOW

PRE-BUDGET 2026 SUBMISSION

Federal Occupational and Environmental Exposure Information Framework: Department of National Defence Pilot Proposal

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Hazardous exposures from contaminated sites: evidence remains relevant for decades

Government should not pay twice for Exposure Data / Records should not have to be reconstructed from memory.

THE PROBLEM, AND RELEVANCE TO FINANCE

The Department of National Defence has long operated military, aviation, industrial, training and other federal sites, where environmental, occupational, property and remediation information is collected. This data is held across departments, contractors and systems; over time it may not remain readily connected to the worker, CAF member, Veteran, community or property.

Years later, government may have to search for, reconstruct or reinterpret information it already paid to create.

For the Finance Committee, this is both a fiscal-stewardship problem and a fairness problem: fragmented evidence can create duplicate administrative work, weaken the value of Crown-funded information and shift the practical burden of reconstructing an exposure history onto an individual precisely when that evidence may be needed for health, Veterans' adjudication, prevention or federal-property decisions.

Federal Contaminated Sites Inventory[1]
and
DND financial statements [note 5. Environmental liabilities and asset retirement obligations][2]

DND contaminated sites reported	Open DND sites[1]	DND contaminated-site liability
	669	$785 M [1,2]
9,047	Sites with liability[2]	Environmental liabilities and asset retirement
	363 (100 high priority)	$3,627 M [2]

Of the 669 open sites, DND reports 100 high-priority sites requiring remediation or risk management.

THE FAIRNESS GAP

Crown-held contamination records of workplace and property hazardous exposures are not included in a durable work history for a CAF member or other affected individuals, to connect with their medical history. Decades later, an ill Veteran, former worker or family may be asked to identify buildings, dates, activities and possible hazards from memory, while relevant Crown-funded evidence remains elsewhere in government records.

This is UNFAIR: The individual carries the health consequences *and* the causal evidentiary burden, while government holds the evidence. Missing records represent justice denied—absence of proof of exposure or non-exposure.

THE FIX

Do not build another federal mega-database. Establish common exposure-information standards and identifiers, preserve underlying source evidence, and securely connect priority existing systems so authorized users can determine what is known, what remains uncertain and where the supporting evidence resides.

The Budget should fund a phased, Treasury Board-coordinated Federal Occupational and Environmental Exposure Information Framework, beginning with the Department of National Defence and the highest-value DND/CAF-VAC and federal-property use cases. Use existing systems first, fund privacy and ethical design from the outset, measure results, and release later-stage funding only where measurable value is demonstrated.

ONE INVESTMENT — MULTIPLE RETURNS

- **DND/CAF -** better exposure evidence for prevention, health protection and long-term continuity.
- **Veterans -** traceable government-held evidence to support fair, individualized adjudication.
- **Communities & federal lands -** better continuity when contamination extends beyond boundaries or property changes use.
- **Government & taxpayers -** less duplicated searching and reconstruction; better use of publicly funded data.

Collect once. Preserve it. Connect it. Use it again.

A Federal Occupational and Environmental Exposure Information Framework

Protecting workers and Veterans
Improving federal land stewardship
Reducing long-term risks to the Crown

Issue and Recommendation

There is a fundamental fairness gap in how the Government of Canada manages occupational and environmental exposure information. When health concerns emerge, federal workers may not have access to a complete exposure history. Veterans in particular can face the burden of reconstructing decades-old workplace and environmental evidence to support a claim, even when relevant information exists within Government.

The Crown collects, receives and pays for substantial environmental data, including potentially adverse exposures in, on and around federal workplaces and properties. Sources of exposure data include, but are not limited to: environmental testing, occupational exposures related to activities and/or location of work, contractors' findings, records of use of products containing potentially harmful chemicals, and records of development, maintenance, and remediation. Historical environmental information can also become disconnected from federal property as activities are discontinued, structures and facilities are removed, and land is transferred and/or redeveloped. Over time, this information does not consistently remain readily identifiable as being linked to the worker, Veteran or property across departments, contractors and systems. Historical environmental information can also become disconnected from federal property as land is transferred or redeveloped.

Pre-Budget 2026 Recommendations

The Budget should establish and fund a phased Federal Occupational and Environmental Exposure Information Framework so that exposure-relevant Crown evidence remains traceable and applicable to health. Environmental data would meet federal standards to be FAIR (Findable, Accessible, Interoperable and Replicable) and CARE (Respect Indigenous perspectives and Champion ethical stewardship).[1]

Treasury Board of Canada Secretariat (TBS) would serve as the federal coordinating lead, working with National Defence, Veterans Affairs Canada (VAC), Environment and Climate Change Canada (ECCC), Health Canada (HC), Public Services and Procurement Canada (PSPC), Library and Archives Canada and other present-day custodians of environmental research and data. TSB would initially:

- Establish common standards for collection, Crown ownership, retention, provenance, interoperability and appropriate sharing;
- Inventory and connect existing systems of isolated databases across TBS, DND, VAC, ECCC and PSPC, rather than creating a new repository;

1. Canada School of Public Service. Implementing FAIR and CARE Data Principles (DDN3-A12) [education and awareness]. GoC; 2025 [cited 2026 Aug 21]. https://www.csps-efpc.gc.ca/tools/articles/fair-care-eng.aspx

- Strengthen independent environmental-health and exposure-science capacity within DND/CAF Health Protection;
- Enable VAC to obtain reliable, traceable government-held evidence for occupational illness adjudication;
- Require reconciliation before higher-risk federal lands are transferred, marketed, redeveloped or assigned a sensitive new use;
- Review workers' credible concerns, recurring illnesses and potential clusters, without requiring proof of causation before relevant records are assembled; and
- Build privacy, security, health independence, GBA Plus and measurable performance requirements into implementation.

Why Federal Action Is Needed

Environmental data may exist in many places, including: real-property systems; on- and off-site environmental monitoring and assessment; workplace monitoring in occupational health programs; chemical information in procurement, contracting or hazardous material files; remediation records in project systems; health information in protected clinical systems; and personnel histories elsewhere. The result is not necessarily a lack of information, but that this data is not FAIR, so is invisible to those whose exposure histories could shed light on illnesses and disabilities.

Canada already implements federal contaminated-sites policies, inventories and lifecycle processes, including the Federal Contaminated Sites Inventory (FCSI) and Federal Contaminated Sites Action Plan (FCSAP). FCSAP Phase V (2025–2030) has $1.48 billion in approved federal funding, that could support leveraging FCSI, FCSAP and existing real-property and digital-government infrastructure. The proposed Framework should build on these assets and the federal real-property framework by improving/implementing use of common identifiers (particularly when property ownership or responsibilities change hands), exposure-specific metadata, source data preservation and secure links to occupational and service histories, while ensuring interoperability and usability of exposure-relevant evidence. The Framework is intended to improve continuity, interoperability and usability of exposure-relevant evidence; not to replace existing contaminated-sites programs.

One Framework — Four Connected Applications

1. National Defence — Defence Environmental Health under DFHP

Provide dedicated, ongoing funding for a multidisciplinary National Defence Environmental Health capability within Defence Force Health Protection. This capacity would integrate environmental contaminants and occupational exposures evidence for disease prevention, surveillance and clinical support. Health interpretation functions must be independent from organizations responsible for infrastructure delivery, remediation budgets and property transactions. DND would review credible worker concerns, recurring illness signals and potential clusters, without requiring proof of causation before relevant records are assembled.

Assembling exposure evidence, or reviewing a credible illness signal or potential cluster, does not itself establish that an exposure caused an illness. Evidence gathering should precede, and remain distinct from, scientific or legal determinations of causation. Scientific investigations may raise possibilities that would require confirmation, then potential quantification (or generation investigation of alternative hypotheses that may arise).

DND exposure histories and standardized summaries would include site-, occupation-, task- and posting-linked exposures.

- Data sources would include chemical management and hazardous material information, including fuels, solvents, firefighting agents, pesticides, spills/releases, fibres, metals and emerging contaminants, as well as heat, radiation (ionizing and non-ionizing) and noise.
- Data would include standardized DND and contractor evidence, including investigations with sampling locations, analytical results, scope changes, data quality information and data limitations.

2. Treasury Board — Government-wide Exposure Information Standard

Direct TBS to coordinate government-wide information standards, governance and interoperability with federal partners, to establish a common occupational and environmental exposure information standard and secure interoperable architecture. Existing departmental systems should remain in place where practical and connect through common requirements and identifiers. This exercise would not amend or displace existing statutory or departmental responsibilities for occupational health, environmental health, scientific interpretation nor adjudication.

Implementation should explicitly map the roles of deputy heads, Health Canada's Public Service Occupational Health Program, the Labour Program, departmental occupational-health functions and obligations under Part II of the Canada Labour Code.

Minimum Exposure Evidence Record. Every exposure-relevant record funded, generated or received by the Crown should include, where applicable:

- Responsible department, custodian, contractor, project and source-document identifiers.
- Site, building, room, geographic coordinates and property identifier.
- Workplace, occupation, trade, task, posting and employment period.
- Date, time and locations of sampling, monitoring, incident, release, remediation or observation.
- Substance identity, medium, concentration units, mixture, form, analytical method and detection limits.
- Sampling design, detection limits, laboratory credentials, QA/QC results, chain of custody and limitations.
- Exposure pathway, potentially affected population, receptor and uncertainties.
- Remediation or risk-management action, including substances introduced during treatment and post-treatment monitoring.
- Original document, version, author, approval status, corrections, assumptions, exclusions and superseded interpretations.

Crown-funded contracts should deliver machine-readable datasets and supporting metadata—not only final reports—including sample identifiers, coordinates, depths, dates, field measurements, laboratory results, photographs, drawings, monitoring data, analytical methods, QA/QC information and documented deviations from the approved work plan.

Historical continuity and fairness. Records should be corrected and annotated without erasing prior evidence, assumptions or versions. Missing or incomplete Crown records are not evidence that an exposure did not occur, but neither should missing records automatically be treated as evidence that an exposure did occur. Decision-makers should assess the available evidence and uncertainty under the legislation and evidentiary rules governing the particular health, compensation or adjudication decision.

Privacy, consent and access controls. The Framework should be used to implement a focused

purpose, utilize specific data as required, protocols to de-identity exposure data, role-based access, encryption, auditable linkage, retention controls, and documented information-sharing agreements.

Privacy, legal and cybersecurity design should be funded from the first phase rather than be added after technical architecture is built.

Individual-level information should be disclosed only for a defined health-protection, clinical, compensation or adjudication purpose; prevention and trend analysis should use aggregated or de-identified information wherever possible. Before individual-level information is linked across departments, implementation should require privacy impact assessments, data-minimization rules, defined retention schedules, auditable access controls and confirmation of lawful authority for interdepartmental disclosure. Workers and Veterans should be able to request their exposure summary, identify factual errors, provide additional evidence and receive notice of material corrections. These controls should align with Treasury Board privacy requirements.

3. Veterans Affairs Canada — Occupational Illness & Exposure Data

Create dedicated VAC occupational illness and exposure data functions, so that complex claims can utilize government-held evidence rather than requiring ill Veterans and families to reconstruct decades of environmental and workplace history. VAC should receive standardized DND exposure summaries and supporting source evidence through a secure DND-to-VAC bridge, and adjudicators should request evidence according to site, building, occupation and time period.

Exposure summaries should include and distinguish direct measurements, documented observations, validated models, historical reconstruction, expert interpretation and unresolved uncertainty. Each conclusion should be traceable to the underlying record and scientific basis. A claim file need not contain an entire infrastructure database; it needs a concise assessment stating what is known, what remains uncertain, the relevant times and locations, and the source evidence relied upon.

4. Federal Lands — Environmental Information Before Transfer or Redevelopment

Identify potential liability and manage risks of higher-risk federal properties, including military, industrial, transportation, laboratory and other potentially contaminated lands. Require reconciliation before a decision to declare surplus, transfer, market, redevelop or change intended use.

Reconstructing historical contamination may identify previously undocumented uncertainty or potential liabilities. That possibility should not be a reason to avoid better information. Earlier identification can support more accurate disclosure, better risk management, earlier remediation decisions, more defensible stewardship of federal property, and overall harm prevention.

- Reconcile FCSI/FCSAP records, custodian files, historical assessments, contractor and laboratory data with samples' identification, remediation records, real-property datasets and the actual geographic footprint of contamination.
- Document contaminants investigations' scope and limits, including affected media, pathways, receptors, remediation or risk-management measures, material movement, monitoring obligations and followup, land-use restrictions and any remaining uncertainty.
- Preserve underlying evidence rather than relying solely on a current classification or closure label.
- Provide a clear environmental hand-off package to the receiving custodian, redevelopment entity and, where appropriate, local authorities.

For higher-risk properties, the hand-off package should include a current conceptual site model showing sources, contaminants, affected media, transport pathways, exposure routes, receptors, data gaps and uncertainties. A central reference version should be updated when new sampling, remediation, monitoring, land-use change or scientific information becomes available. Escalate conflicting records, material gaps or sensitive long-duration uses such as housing, schools or childcare for independent environmental-health review.

Implementation — Phased, Disciplined and Measurable

Population of this framework with data should be managed and prioritized in the context of digitization of all federal environmental records, in the interest of streamlining and optimizing processes and costs. Priority should be given to military, industrial, laboratory, transportation and other higher-risk properties, and to the connections most likely to improve harm prevention, access and retrieval, adjudication and property stewardship.

Implementation should recognize unions, workplace health-and-safety committees and employee representatives, consistent with the participatory structure of Part II of the Canada Labour Code. Their participation should support evidence stewardship and prevention without controlling scientific findings or compensation decisions.

Phase	Priority	Key deliverables
1. Design & inventory	Use existing authorities and systems first	**Map** FCSI/FCSAP systems for real-property, chemical, occupational, contractor, health-protection and personnel; **Define** baselines, minimum data standards, identifiers, privacy controls, preservation protocols, costs and milestones.
2. Priority implementation	Build highest-value connections	**Establish** DND capabilities: DND-to-VAC summaries; Data clauses in contracts **Prioritize interoperability** and Worker/Veteran process for access to information; **Pilot** conceptual site models and land-reconciliation packages.
3. Evaluate & scale	Tie expansion to evidence of value	**Measure** completeness, data quality, retrieval time, claims use, privacy compliance, land-transfer readiness, pattern detection and prevention feedback; **Scale** permanent funding against results.

Governance and Accountability

Establish an interdepartmental Exposure Information Steering Committee chaired by TBS and including DND/CAF health protection, VAC, ECCC, PSPC, Library and Archives Canada, privacy and information-management officials, departmental occupational-health representatives and independent exposure-science expertise. The committee should publish an annual progress report and maintain a public record of standards, milestones, major gaps and corrective actions.

An independent scientific and worker/Veteran advisory function should review contested interpretations, material data gaps and emerging hazards without controlling compensation decisions.

Performance Baselines, Targets and Reporting

Measure	Required accountability
Record completeness	- Baseline and annual percentage of complete information for: priority sites, occupations and postings with linked records to source documents; and - Documented gaps in the process of data retrieval for claims support. Lead: DND/TBS
Retrieval and claims support	Median time to produce a traceable summary; Percentage of eligible VAC requests answered using Crown evidence. Lead: VAC/DND.
Data quality and completeness	Percentage and numbers of higher-risk land transfers or redevelopments with completed reconciliation, conceptual site model and hand-off package. Lead: custodian/ECCC/PSPC.
Land stewardship	Percentage and numbers of higher-risk land transfers or redevelopments with completed reconciliation, conceptual site model and hand-off package. Lead: custodian/ECCC/PSPC.
Fairness, privacy and prevention	Worker/Veteran access and correction response times; privacy incidents and corrective actions; concerns reviewed; prevention actions completed; findings disaggregated through GBA Plus where appropriate.

Framework-wide Safeguards

- One evidence chain with privacy boundaries preserved.
- Government ownership and usability of exposure-relevant data generated with public funds.
- Historical continuity: correct and annotated records without erasing prior evidence or assumptions.
- Health independence from project-delivery and remediation organizations.
- GBA Plus and sex/gender-disaggregated analysis, including work patterns, physiology, pregnancy, occupation, employment status and access to documentation.
- Annual public reporting with baselines, targets, responsible departments, results and corrective actions.
- Evidentiary basis: In the interest of administrative fairness, adverse claim-related inferences should not rely on absence of data resulting from missing or incomplete Crown records.

What Canadians Receive in Return

- Earlier recognition of exposure concerns and recurring patterns.
- Faster, and more reliable and defensible health, compensation, adjudication and property decisions.
- Less burden on ill Veterans and families to reconstruct information already held by government.
- Stronger federal land stewardship and continuity of environmental obligations through transfer or redevelopment.
- Reduced duplication, loss of institutional knowledge and long-term financial, legal and reputational risk to the Crown.
- Better value from environmental, occupational-health, laboratory and contractor evidence already purchased with public funds.

Why Budget 2026

This proposal is to utilize information the Government of Canada already creates, receives and pays for. The fiscal principle is straightforward: preserve and reuse Crown-funded data rather than paying to locate and/or reconstruct it years later. This initiative would include modern governance and ethical guidelines for sharing health information, to supplement and populate present day databases. The Framework requires common standards, targeted expertise, secure interoperability, and enforceable contract requirements and accountability, so credible exposure evidence remains usable. This includes workplace and property management, health protection and Veterans' adjudication, and land transfer or redevelopment.

Core principle: When the Government of Canada creates or receives credible evidence about an occupational or environmental exposure, that data must be FAIR, CARE, and remain identifiable when relevant details regarding a worker, contractor, department, database or property change.

Potential implementation costing (privately estimated)

We share an external estimate, suggesting a planning figure of approximately $75 million over five years, with a prudent range of $60–90 million. It assumes that the Framework connects and improves existing systems rather than creating a new national database, and that contaminated sites investigations and remediation, and Veterans' compensation, remain funded by existing authorities.

Potential cost phasing:
Year 1 — $8M for design, inventory, legal/privacy architecture, common standards and governance;
Year 2 — $14M for DND/VAC and TBS pilot projects to implement contract clauses, databases' interoperability, and priority digitization;
Year 3 — $18M for priority implementation, exposure-science capacity and federal-land pilots;
Year 4 — $19M for risk-ranked expansion, historical reconstruction and evaluation.
Year 5 — $16M to scale successful components, complete independent evaluation and transition proven functions to steady state.

This estimate assumes approximately 30–40 FTEs in the design year, rising temporarily to roughly 75–95 FTEs during implementation across information architecture, privacy/ATIP, cybersecurity, data engineering, occupational hygiene, epidemiology, toxicology, environmental science, records management, legal/policy and DND/VAC analyses. An explicit Year-3 evaluation gate would allow TBS to slow, redirect or withhold later-stage expansion where measurable advancements are not demonstrated or are deemed unlikely to materialize.

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