

# Public health preparedness and response readiness: FIFA and beyond

Prepared for Health Officers Council

May 22, 2026



BC Centre for Disease Control  
Provincial Health Services Authority



*We gratefully acknowledge that we are gathered on the unceded, traditional, and ancestral lands of First Nations in this place currently known as British Columbia where we work, play and live.*

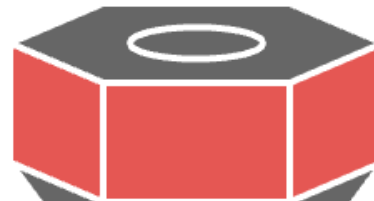
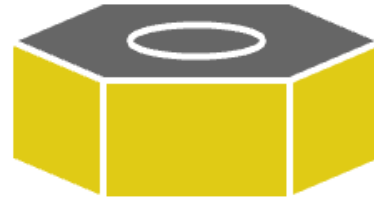
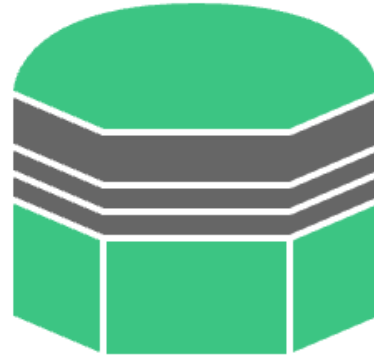
*First Nations have been responsible for stewarding this land for all time and we give thanks as uninvited guests on these lands.*

*We recognize the historic and ongoing colonial impacts on all First Nations, Métis Peoples and Inuit that call this land home.*

# The trinity of public health intelligence

## Surveillance and Detection

Analyzing multiple sources to understand epidemiology



## Early Warning

Disseminating information, taking action to minimize harm and notifying stakeholders



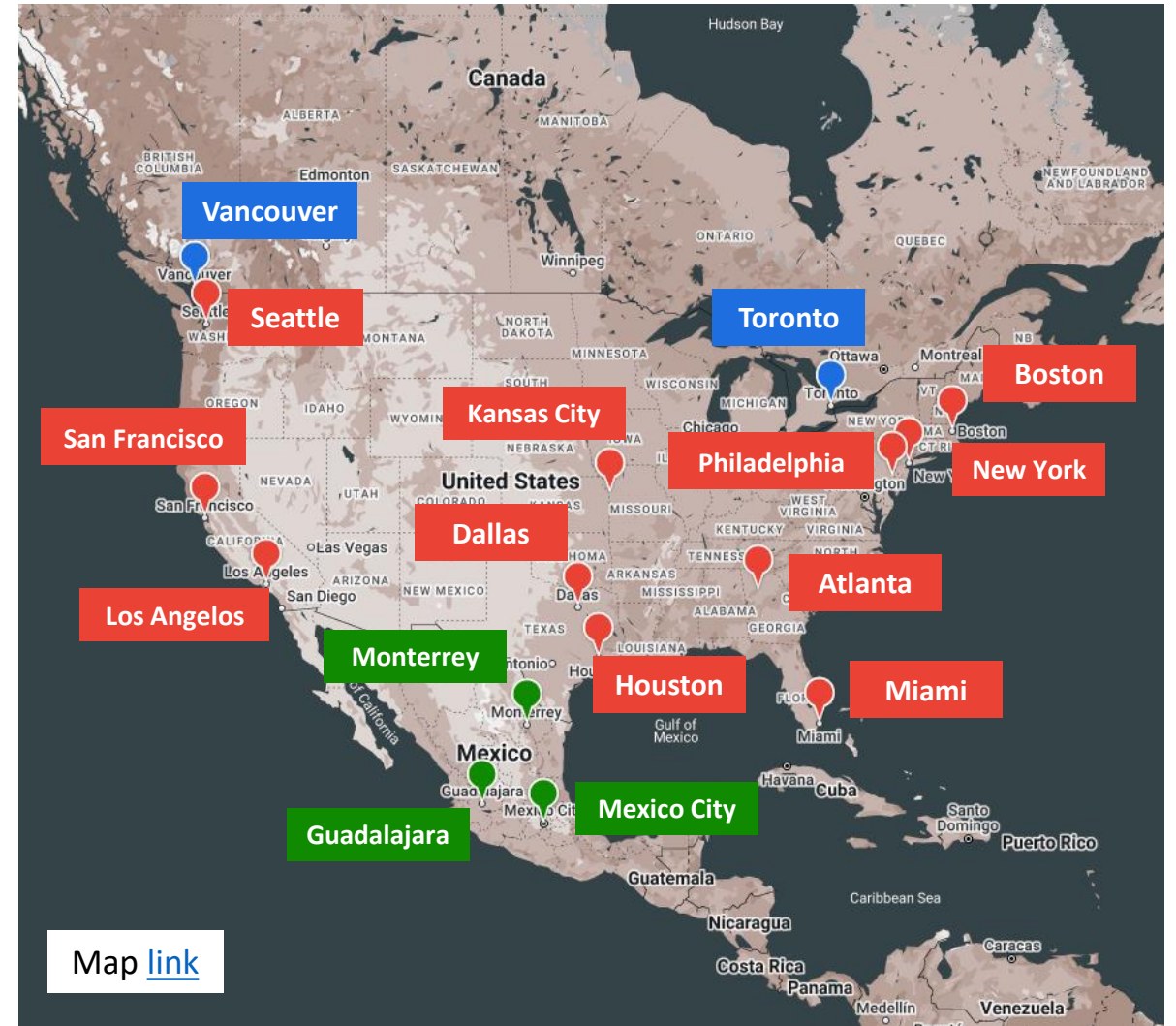
## Threat Risk Assessment

Understanding context, assessing emerging information and subject matter expert judgement

**Public Health Response**

# FIFA World Cup 2026 – Geography and Matches

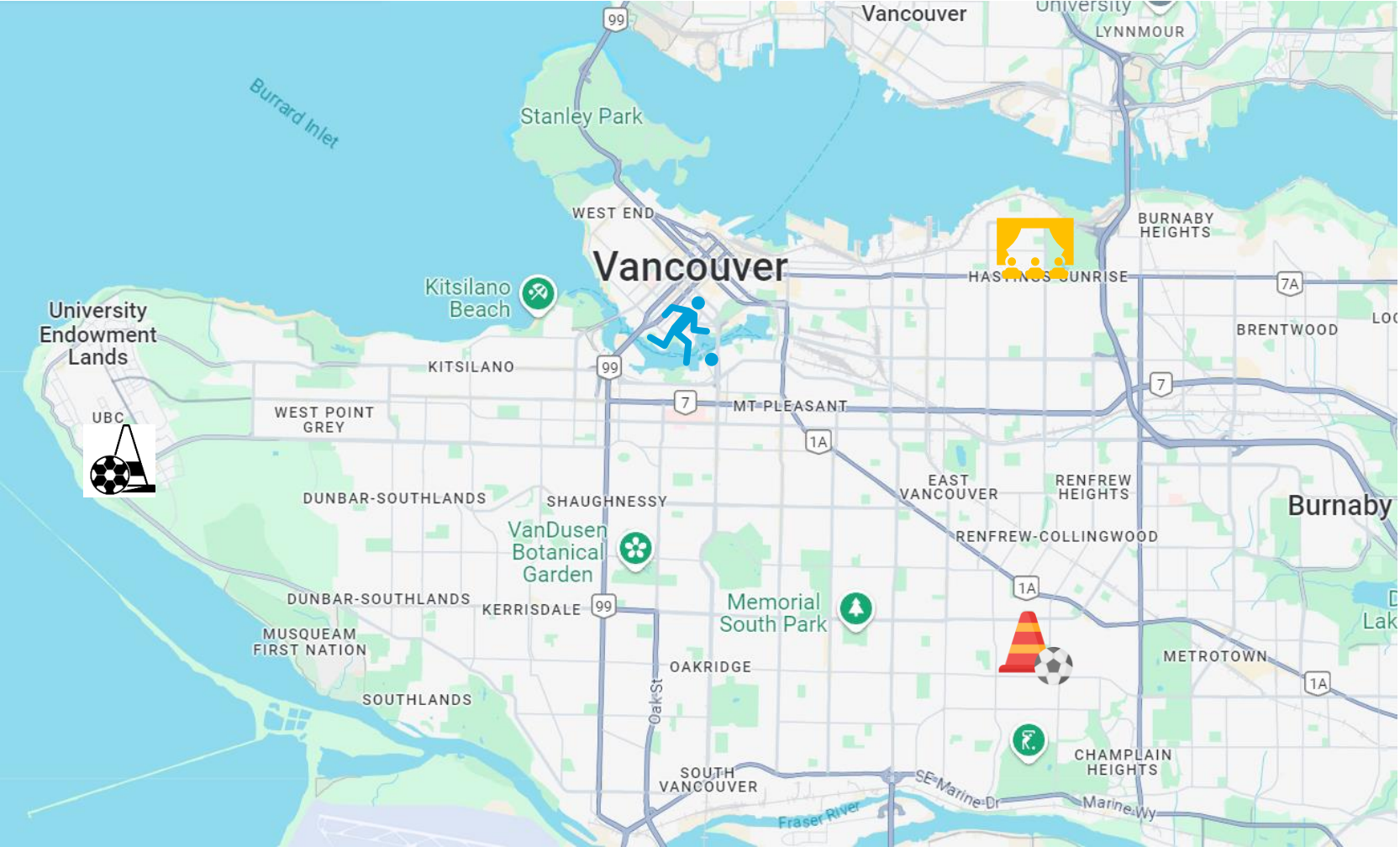
- Opening match **11 of June 2026** and closing match **19 of July 2026**
- **3** host countries (USA, Canada, and Mexico), including 16 host cities.
  - 11 cities in the USA
  - 2 cities in Canada
  - 3 cities in Mexico
- **48** teams participating (16 more teams than usual), with **104** matches.
- In FIFA World Cup 2022, the total number of spectators was **3.4 million** with an average attendance capacity of 96%.
- Expecting **5.5 million ticketed** fans to attend FIFA World Cup 2026.







# Brief Event Background

<b>Host By</b>	<b>Musqueam, Squamish, Tsleil-Waututh First Nations; City of Vancouver; Province of British Columbia</b>
<b>Fan Festival Dates</b>	June 11 – July 19
<b>Fan Festival Locations</b>	Hastings Park; Pacific National Exhibition (PNE)
<b>Match Dates</b>	June 13 – July 7
<b>Match Venue</b>	BC Place (7 matches)
<b>Estimated Attendance</b>	350,000 spectators
<b>Confirmed Teams</b>	Australia, Belgium, Canada, Egypt, New Zealand, Qatar, Switzerland, Türkiye
<b>Additional Teams</b>	TBD (Round of 32 and Round of 16)

# FIFA Sites in Vancouver



-  National Soccer Development Centre
-  Killarney Park
-  BC Place Stadium
-  PNE Fan Fest

# FIFA Medical Requirements

- FIFA Venue Medical Lead [Dr. Jim Bovard](#): Clinical services for players, FIFA staff and VIP ticket holders
- City of Vancouver Medical Lead [Dr. Erik Vu](#): Liaise between FIFA Medical Lead and health authority, ensuring continuity plans for all FIFA sites
- Game days at BC Place will include:
  - 2 BCEHS ambulances
  - Special event medical team
  - BC Place first aid team
  - Team Physicians
  - FIFA Medical Lead
- VGH will be preferred hospital for players/officials and has a designated Protected Persons unit



# Mass Gathering Events & Emergency Department Volumes Analysis

## Scope of Analysis

- 27 mass gathering events (2010–2024) examined, including four sporting events and twenty-three festivals
- 24 were multi-day events and 3 single-day events

## Key Findings

- No consistent trend was observed in emergency department (ED) arrivals or admissions during mass gatherings compared to pre- and post-event volumes
- Some spikes were noted at certain sites and in specific years, but patterns were highly variable
- Chief complaints did not consistently align with volume spikes
- In some instances, ED arrivals were lower during the event period than in the pre-event period

## Operational Considerations

- While mass gatherings can lead to increases in ED arrivals, the impact is highly variable across sites and events
- Given the potential for occasional surges (e.g., the 2011 Stanley Cup Riot at SPH), maintaining operational readiness during major events is recommended to manage unexpected spikes in demand

# Vancouver Integrated Safety and Security Unit Threat and Risk Assessment



## Top 20 Hazards

- ADT – Vehicle Incursion
- Air Quality
- Cyber Attack by Hostile State Actor
- Cyber Attack by Non-State Actors or Hacktivists
- Drought – Water Shortages
- Earthquake inc. Liquefaction
- Extreme Heat
- Improvised Explosive Device (IED) – Vehicle
- Intentional Aviation Incident at Venue – RPAS
- Malicious Aviation Incident
- Outbreak of Comm. Disease
- Overcrowding
- Public Order Incident
- Road Incident
- Simultaneous Loss of Fixed & Mobile Forms of Communications
- Strategic and Local Roads Traffic Build Up
- Structure Failure
- Structure Fire
- Urban Area – Radiological Incident
- Wildfire

## Priority Hazards

- Active Deadly Threat
- CBRN
- Cyber Attack
- Extreme Heat
- Hazmat
- Improvised Explosive Devices
- Major Transportation Incident
- Public Order Incident
- Structure Fire and Wildfire
- Utility Failures
- Remotely Piloted Aircraft System
- Traffic Congestion
- Union Strikes
- Earthquake/Tsunami
- Health
- Structural Failure

## Capabilities Requiring Refinement

- CBRN(e) Monitoring & Response
- Cyber Security & Business Continuity
- Emergency Messaging & Communication
- Evacuation & Displacement Supports
- Event Transport Planning
- Extreme Heat & Air Quality Preparedness
- Interoperability
- Last Mile Planning
- Mass Casualty & Fatality Response

Managed through existing working groups

Managed through Business As Usual+

# Western Region and Toronto Matches (PST)

<b>Vancouver – BC Place (7 matches)</b>	<b>Toronto - Toronto Stadium (6 matches)</b>	<b>Seattle – Lumen Field (6 matches)</b>	<b>San Francisco – Levi’s Stadium (6 matches)</b>	<b>Los Angeles – SoFi Stadium (8 matches)</b>
Sat, Jun 13 – 9:00 PM Australia vs UEFA PO C	Fri, Jun 12 – 6:00 PM Canada vs TBD	Mon, Jun 15 – 12 :00 PM Belgium vs Egypt	Sat, Jun 13 – 12:00 PM Qatar vs Switzerland	Fri, Jun 12 – 6:00 PM USA vs Paraguay
Thu, Jun 18 – 3:00 PM Canada vs Qatar	Wed, Jun 14 – 10:00 PM Ghana vs Panama	Fri, Jun 19 – 12 :00 PM USA vs Australia	Tue, Jun 16 – 9:00 PM Austria vs. Jordan	Mon, Jun 15 – 6:00 PM Iran vs New Zealand
Sun, Jun 21 – 6:00 PM New Zealand vs Egypt	Sat, Jun 20 – 7:00 pm Germany vs Cote D’ivoire	Wed, Jun 24 – 12 :00 PM Qatar vs TBD	Fri, Jun 19 – 9:00 PM UEFA PO C vs Paraguay	Thu, Jun 18 –12:00 PM Switzerland vs. UEFA PO A
Wed, Jun 24 – 12:00 PM Switzerland vs Canada	Tue, Jun 23 – 10:00 PM Panama vs Croatia	Fri, Jun 26 – 8:00 PM Egypt vs Iran	Mon, Jun 22 – 8:00 PM Jordan vs. Algeria	Sun, Jun 21 – 12:00 PM Belgium vs Iran
Fri, Jun 26 – 8:00 PM New Zealand vs Belgium	Fri, Jun 26 – TBD TBD vs Senegal	Wed, Jul 01 – 1:00 PM TBD Round of 32	Thu, Jun 25 – 7:00 PM Paraguay vs Australia	Thu, Jun 25 – 7:00 PM UEFA PO C vs USA
Thu, Jul 2 – 8:00 PM Round of 32	Thu, Jul 02 – 10:00 PM TBD	Mon, Jul 06 – 5:00 PM TBD Round of 16	Wed, Jul 1 – 5:00 PM TBD Round of 32	Sun, Jun 28 – 12:00 PM TBD Round of 32
Tue, Jul 7 – 1:00 PM Round of 16				Thu, Jul 2 – 12:00 PM Round of 32
				Fri, Jul 10 – 12:00 PM TBD Quarter-final

# Risk Assessment



# BCCDC Risk Assessment Framework

## Communicable Disease

- Vaccine preventable diseases
- GI/foodborne illness
- STIs
- Respiratory illness
- Vectorborne illness
- Emerging pathogens

## Non-Communicable Disease

- Alcohol and substance use disorders (toxic drug overdose).
- Injuries (crowd crush events and others)

## Environmental Health and Natural Disasters

- Extreme weather events/advisory (heat, poor air quality)

## Chemical, Biological, Radiological, & Nuclear (CBRN)

- Weaponized radioactive, chemical, and biological agents.



# Overall Summary of Public Health Risk Assessment

## Medium Risk

Enteric disease (foodborne)

Resp viruses (COVID, influenza)

Substance use, alcohol

Transport-related injuries

Extreme heat events

## Low Risk

VPD's (including measles)

TB

STBBI's

Vector-borne

Other CD's

Other types of injury (cuts, falls, drowning)

Poor air quality

## Low Likelihood / High Consequence

Bioterror agents

High threat pathogens

Intentional food poisonings, chemical spills

# PHAC Assessment of Importation of Infectious Disease Pathogens Related to the 2026 FIFA World Cup

Pathogen	Likelihood	Spread Scenario	Individual Impact	Population Impact	Overall Risk
<b>Mpox clade I</b>	Clade Ia: very low	Close contacts, including household or sexual contacts	Clade Ia: moderate	Minor	Clade Ia: Low risk
	Clade Ib: moderate		Clade Ib: minor		Clade Ib: Moderate risk
<b>Measles virus</b>	High	Limited transmission to susceptible community and close contacts	Susceptible individual: moderate  Immunized individual: minor	Moderate	High risk

**Risk Assessment Question:** For each pathogen of interest, what is the likelihood and impact of an infected traveler entering Canada into a host city between May 23 and August 1, 2026

**Higher likelihood of importation and broader transmission**

# PHAC Assessment of Importation of Infectious Disease Pathogens Related to the 2026 FIFA World Cup

Pathogen	Likelihood	Spread Scenario	Individual Impact	Population Impact	Overall Risk
<b>Corynebacterium spp. (toxigenic strains causing diphtheria)</b>	Low	Limited transmission to close contacts	Moderate	Minimal	Low risk
<b>Hyperinvasive meningococcus</b>	Low	Transmission to susceptible close contacts	Individual who becomes an asymptomatic carrier: minor & individual who develops invasive disease: major	Minor	Low risk
<b>Poliovirus (wild and vaccine-derived)</b>	Low	Limited transmission to close contacts	Moderate	Minimal	Low risk
<b>Mpox clade I a</b>	Very low	Transmission to close contacts, including household or sexual contacts	Minor	Minor	Low risk

**Risk Assessment Question:** For each pathogen of interest, what is the likelihood and impact of an infected traveler entering Canada into a host city between May 23 and August 1, 2026

**Lower likelihood of importation and/or broader transmission**

# PHAC Assessment of Importation of Infectious Disease Pathogens Related to the 2026 FIFA World Cup

Pathogen	Likelihood	Spread Scenario	Individual Impact	Population Impact	Overall Risk
<b>Crimean-Congo Hemorrhagic Fever Virus</b>	Very low	No further spread	Major	Minimal	Low risk
<b>Lassa virus</b>	Very low	No further spread	Major	Minimal	Low risk
<b>MERS-CoV</b>	Very low	Limited transmission to close contacts	Major	Minimal	Low risk
<b>Marburg virus</b>	Very low	Limited transmission to close contacts	Severe	Minimal	Low risk
<b>Orthoebolaviruses (EBOV/SUDV)</b>	Very low Subject to change	Limited transmission to close contacts	Severe	Minimal	Low risk
<b><i>Yersinia pestis</i> (pneumonic plague only)</b>	Very low	Limited transmission to close contacts	Severe	Minimal	Low risk
<b>Currently circulating avian influenza (in animals)</b>	Very low	No further spread	Minor to Major	Minimal	Low risk
<b>Current circulating swine influenza (in animals)</b>	Very low	No further spread	Minor	Minimal	Low risk
<b>Nipah virus</b>	Very low	No further spread	Severe	Minimal	Low risk

**Risk Assessment Question:** For each pathogen of interest, what is the likelihood and impact of an infected traveler entering Canada into a host city between May 23 and August 1, 2026

**Very Low likelihood of importation and no/limited broader transmission**

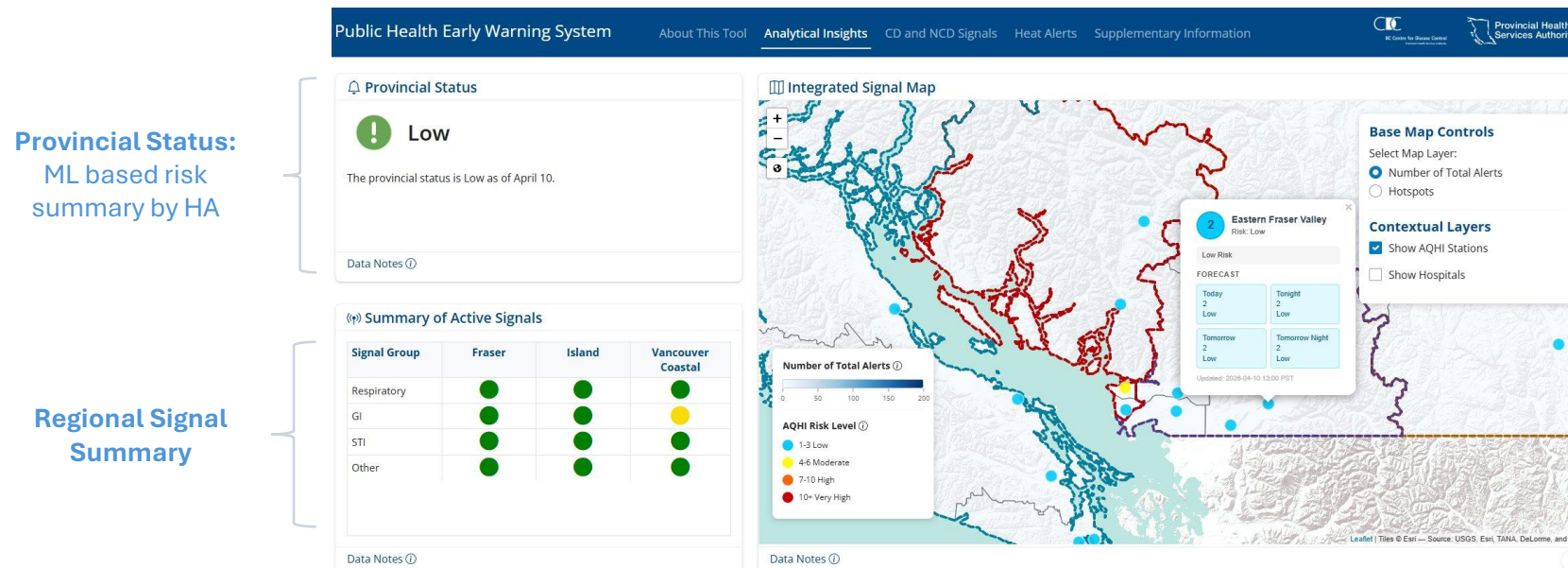
# Enhanced Surveillance and Coordination



# Surveillance and analytics

## Early Warning Surveillance Approach:

- Integration of existing routine surveillance
  - Enhanced data streams and frequency support situational awareness.
  - Anomaly detection methods with geospatial analysis provide alerts and hotspots
- Breadth of data and geographic coverage will evolve over time; initial computational intensity prioritizes VCH, FHA and ISLH



# BCCDC Plans For Enhanced Coordination

## **FIFA-Med Micro Table:**

- Monthly check-in prior to FIFA, and weekly + ad hoc check in during games

## **Reporting Products:**

- **Pre-event bulletin** – May 25
- **SitStat** (Daily from June 8 – July 10)
- **SitRep** (Weekly every Tuesday from June 09 - July 21)

## **Public Health Response Coordinating Committee (PHRCC)**

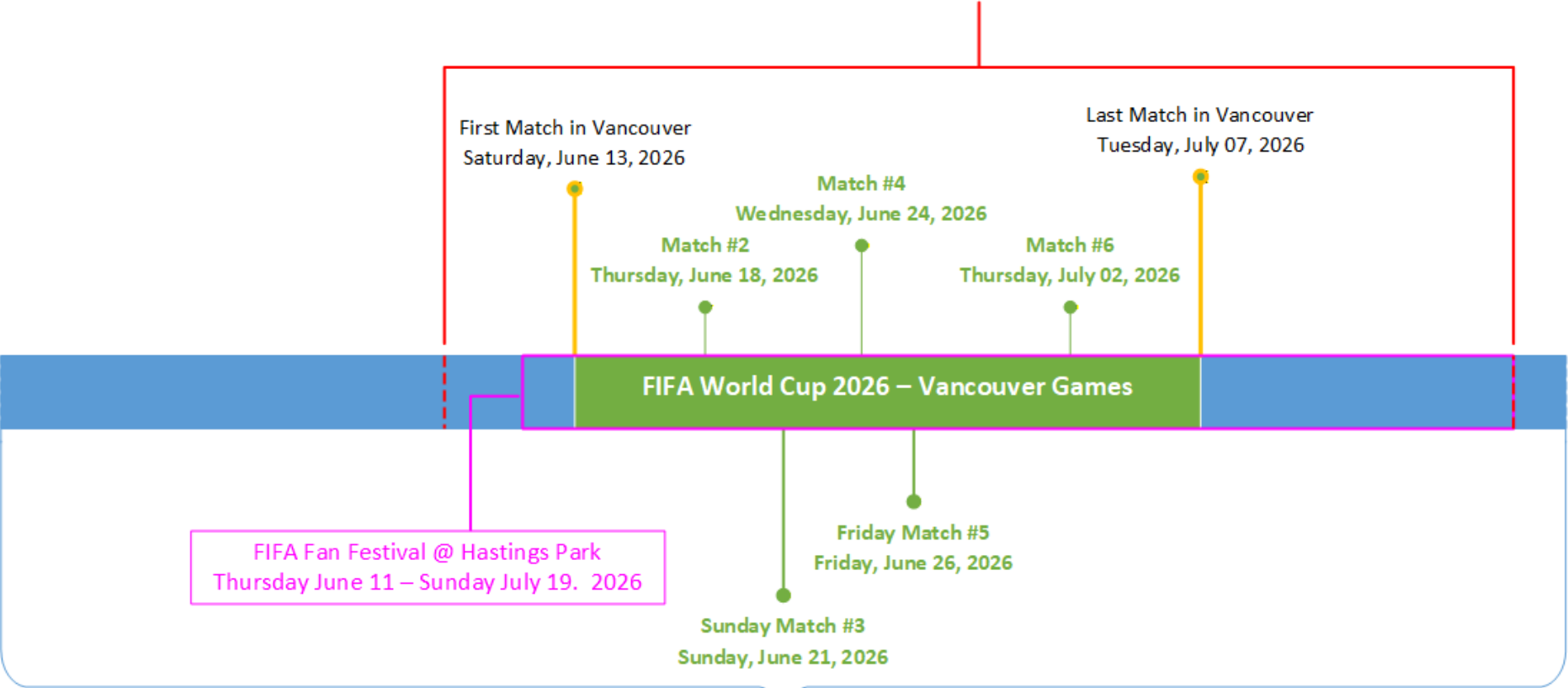
Standing up virtual **PHRCC** June 8 – July 10 (weekdays only for now):

- Daily review of enhanced warning system signals
- Daily 1 pm coordination call during the event to assess signals, agree on proportional public health response with decision-makers
- Brief daily situation status (SitStat) via email (including if no signal)
- Weekly situation reports (SitRep)



# Heightened Surveillance Phase

Heightened Surveillance Phase  
Monday, June 08, 2026 - Sunday, July 19, 2026

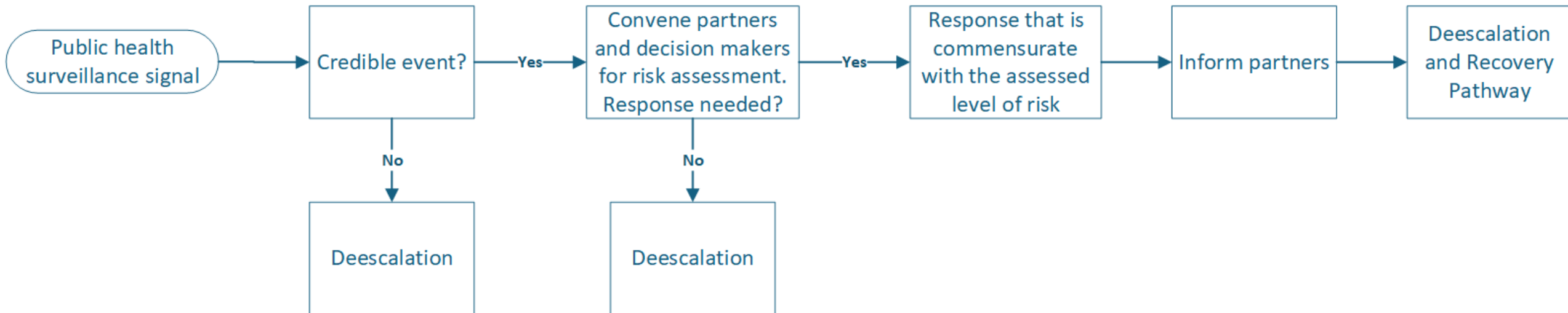


Friday, May 22, 2026

Tuesday, July 21, 2026

Pre- and post-implementation period (±2 weeks)

# Public Health Signal Response Workflows



# Enhanced Surveillance and Coordination

Surveillance	Provincial Routine	Provincial Enhanced	Regional
<b>CD, NCD via syndromic surveillance, and EH indicators through an integrated surveillance dashboard</b>	As usual	BCCDC Public Health Response and Coordination Committee review and assess signals daily	As usual
<b>Cross-jurisdictional sharing</b>	As appropriate	Multiple enhanced communication channels  Regular communication (including no signal)	VCH – TPH ad hoc

# Enhanced Coordination (cont'd)

## VCH

- Participation in Lower Mainland Health System Operations Working Group Teams channel
- Daily 9 am VCH Public Health call (weekdays only) during the event to review urgent and emerging issues
- Contribute to BCCDC daily situation status emails (as appropriate)
- Contribute to weekly situation reports (sit reps)

## BCCDC / OPHO

- Pre-event bulletin – May 25
- Standing up virtual Public Health Response Coordinating Committee (**PHRCC**) June 8 – July 10 (weekdays only for now):
  - Daily review of enhanced warning system signals
  - Daily 1 pm coordination call during the event to assess signals, agree on proportional public health response with decision-makers
  - Brief daily situation status (sit stat) via email (including if no signal)
  - Weekly situation reports (sit reps)

# Roles and responsibilities

## VCH (Regional / Local)

Local/regional coordination via **CoV EOC** and Lower Mainland **Health EOC**

Daily review of surveillance & intelligence signals

Local incident management & response

Front-line public health operations

Local media, social media, and rumor response

## BCCDC / OPHO (Provincial)

Provincial coordination via **PHRCC**

Daily review of surveillance & intelligence signals

Cross-provincial, national & cross-border coordination

Decision support for significant / non-routine events (e.g. high consequence pathogen, CBRNE event)

Provincial risk communication & escalation

# Low Likelihood / High Consequence Events



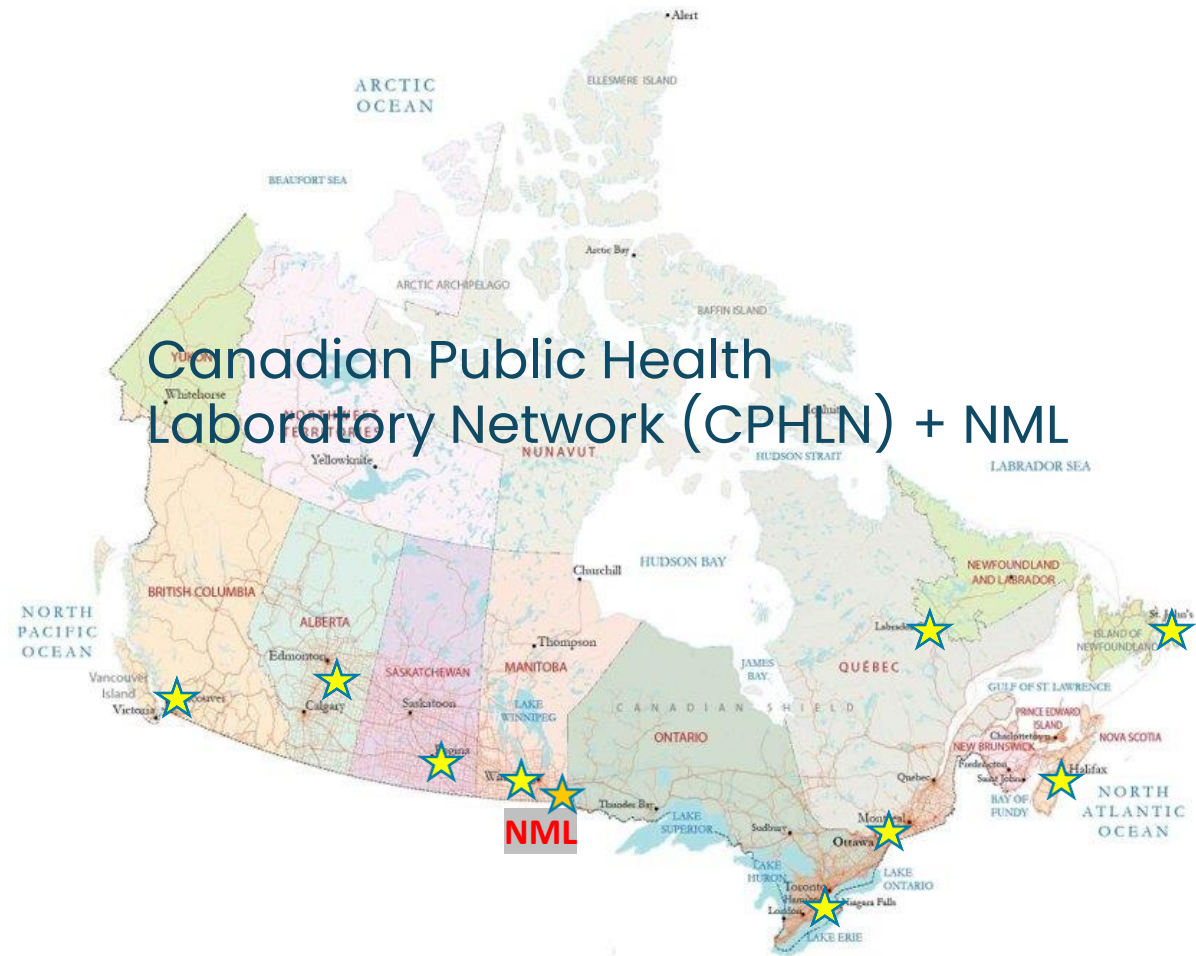
# Public Health Laboratory: Bioterrorism Preparedness

## Canadian Bioterrorism Lab Response Network (CLRN)

- National Microbiology Laboratory --> hub
  - Containment Level 4 laboratory
- Provincial public health labs --> spokes
  - Containment Level 3 laboratories
  - Standardized protocol (CLRN)
  - CLRN trained staff, national security cleared
  - Biosafety Officer, ERAP spill response
- Risk Group 3 targets: *Bacillus anthracis*, *Francisella Tularensis*, *Brucella species*, *Yersinia Pestis*

## Canada-wide network

- Goal: ensure local, provincial and federal labs can quickly test and identify unknown agents.



# Testing

## Evidentiary samples

### PCR test (CBLRN targets)

- *Bacillus anthracis*
- *Francisella tularensis*
- *Yersinia pestis*
- *Brucella species*



## Clinical samples

### 1) PCR test (CLRN targets)

- *Bacillus anthracis*
- *Francisella tularensis*
- *Yersinia pestis*
- *Brucella species*
- Other pathogens once RG3 ruled out

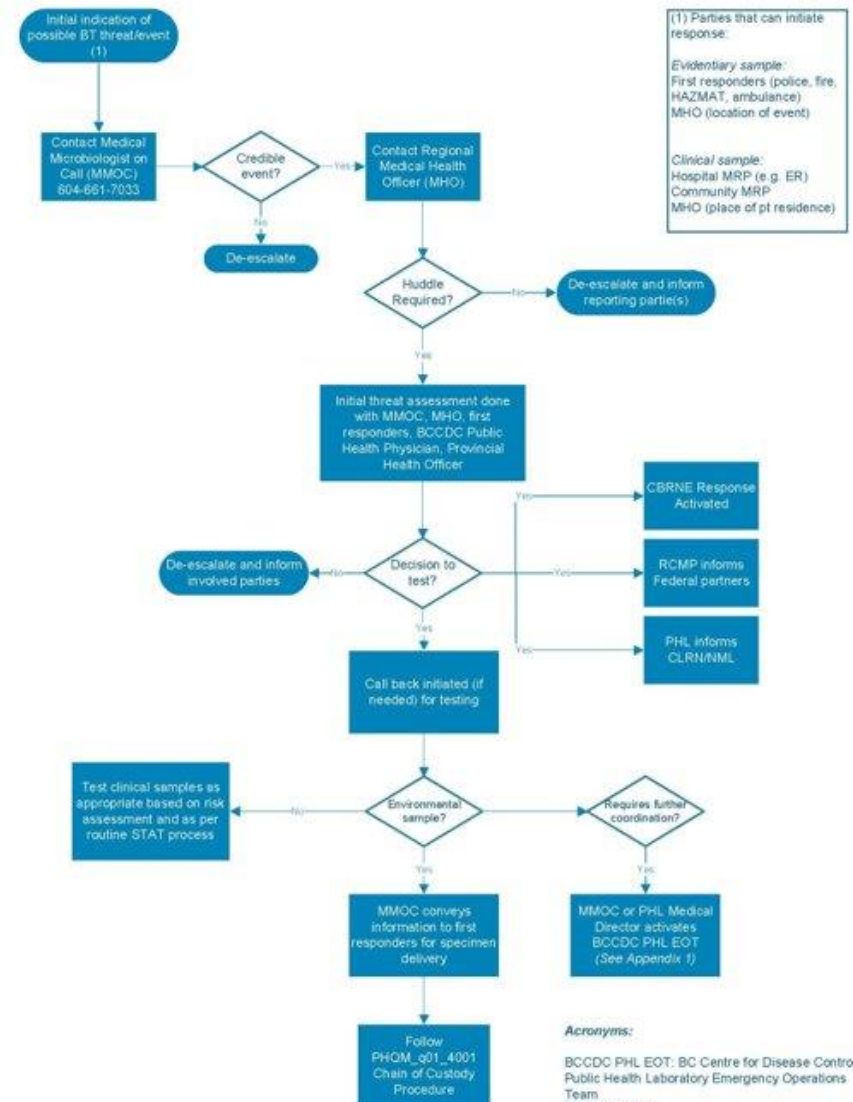
### 2) Culture

- Isolate organism for susceptibility testing and other characterizations



- Risk assessment
  - Credible threat
  - Immediate public safety
  - Ongoing risks to individuals and to population
- Who is involved
  - First responder Incident Commander/RCMP (provincial)
  - Local Med Micro and MRP (if clinical case)
  - Regional Medical Health Officer
  - Provincial Health Officer and BCCDC Public Health Physician
  - Provincial Public Health Laboratory: Laboratory Physician (Medical Microbiologist)
  - National Microbiology Laboratory
  - CBRNE RCMP (federal)

Biologic Event Initial Assessment and Response Protocol



# RCMP exercise Feb 2026



# Collection and Delivery





BC Centre for Disease Control  
Provincial Health Services Authority

# BCCDC Containment Level 3 Laboratory



# BC RCMP-BCCDC exercise



BC Centre for Disease Control  
Provincial Health Services Authority



# Chemical and Radiological Events



# Provincial Drug and Poison Information Centre

- Provides 24-hour access to poison specialists and medical toxicologists
- Supports the public and clinicians in identifying and managing poisonings
- Can facilitate access to antidotes
- Important surveillance function
  - Works closely with public health
  - Part of national poison surveillance network



> JMIR Public Health Surveill. 2018 Feb 23;4(1):e17. doi: 10.2196/publichealth.8944.  
Near-Real-Time Surveillance of Illnesses Related to Shellfish Consumption in British Columbia: Analysis of Poison Center Data

> Toxins (Basel). 2025 Mar 7;17(3):125. doi: 10.3390/toxins17030125  
Learnings from Separate *Aconitum* Poisonings in British Columbia and Ontario, Canada in 2022



BC Centre for Disease Control  
Provincial Health Services Authority

# BRITISH COLUMBIA HAZARDOUS MATERIAL RESPONSE PLAN

***Mission:***  
**Exemplary Environmental  
Emergency Management through  
Leadership, Organization, Team Work,  
and Shared Responsibility**



Ministry of  
Environment



## British Columbia Chemical, Biological Radiological, Nuclear and Explosives Response Plan

Emergency Management BC  
Ministry of Public Safety and Solicitor General



Emergency  
ManagementBC

# British Columbia NUCLEAR EMERGENCY PLAN 2020



Ministry of  
Health



BC Centre for Disease Control  
Provincial Health Services Authority

## 6 CORE COMPONENTS of TOXICOVIGILANCE CANADA



1

### MULTIDISCIPLINARY/ JURISDICTIONAL COLLABORATION

Promote a secure and trusted environment to collaborate across jurisdictions and disciplines.



### SURVEILLANCE AND EPIDEMIOLOGY

Enhance timely detection of drug and poison public health exposure events and generate statistics through the Canadian Surveillance System for Poison Information (CSSPI) and other data sources.

2



### TOXICOLOGY LABORATORY RESPONSE NETWORK

Foster mutual aid and knowledge exchange across clinical and forensic toxicology laboratories for the analysis, method development and data sharing of public health exposure events.

3



### EMERGENCY SITUATIONAL ASSESSMENT AND RESPONSE COORDINATION

Inform partners and collectively assess public health exposure events to support a coordinated multijurisdictional response.

4



### ANTIDOTE REGISTRY AND TREATMENT GUIDE

Develop and promote a national antidote registry and harmonize treatment guides recognizing regional variances.

5



### PUBLIC OUTREACH, EDUCATION AND AWARENESS

Develop outreach and communication products to enable Canadians to make well-informed decisions to protect and maintain their health.

6

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# High Consequence Pathogens



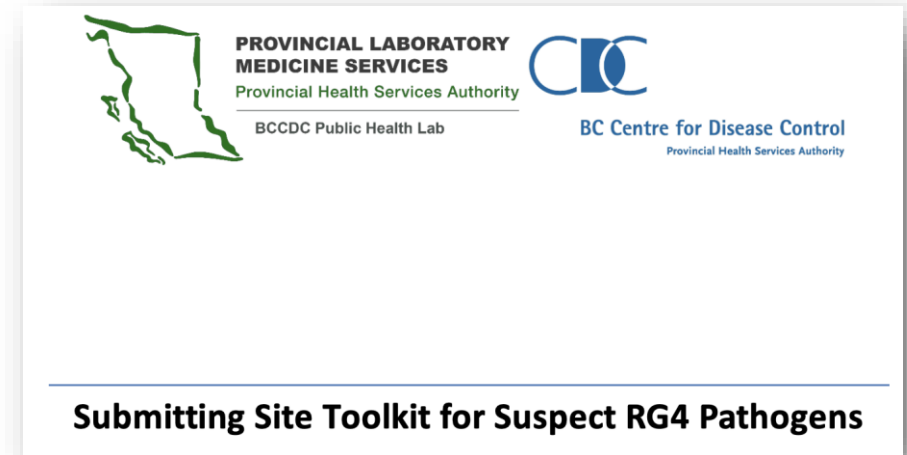
# High Consequence Pathogens

- BC must be ready to respond to the first 72 hours of an event:
  - Patient transport
  - Diagnostics and routine labs
  - Biocontainment activation and staffing



# High Consequence Pathogens

- E.g. Ebola, Lassa, Marburg etc (RG4 viruses)
- PICNet protocol
- BCCDC
  - Updated response protocol
  - Updated laboratory testing protocol
  - Updated medical and technical staff readiness
  - Biofire platforms validation
- Overlapping processes as CLRN
- Coordination with NML and Public Health Agency of Canada



**FilmArray® Global Fever Panel - RUO**  
DETECTION OF 19 TARGETS IN ONE TEST

BACTERIA	VIRUSES	PROTOZOA
<i>Bacillus anthracis</i>	Chikungunya virus	<i>Leishmania</i> spp.
<i>Francisella tularensis</i>	Crimean-Congo hemorrhagic fever virus	<i>Plasmodium</i> spp.
<i>Leptospira</i> spp.	Dengue virus	<i>Plasmodium falciparum</i>
<i>Salmonella enterica</i> serovar Typhi	Ebolavirus spp.	<i>Plasmodium vivax/ovale</i>
<i>Salmonella enterica</i> serovar Paratyphi A	Lassa virus	
<i>Yersinia pestis</i>	Marburg marburgvirus	
	West Nile virus	
	Yellow fever virus	
	Zika virus	

NOT FOR  
DIAGNOSTIC USE  
FOR RESEARCH  
USE ONLY

Sample Type: Whole Blood

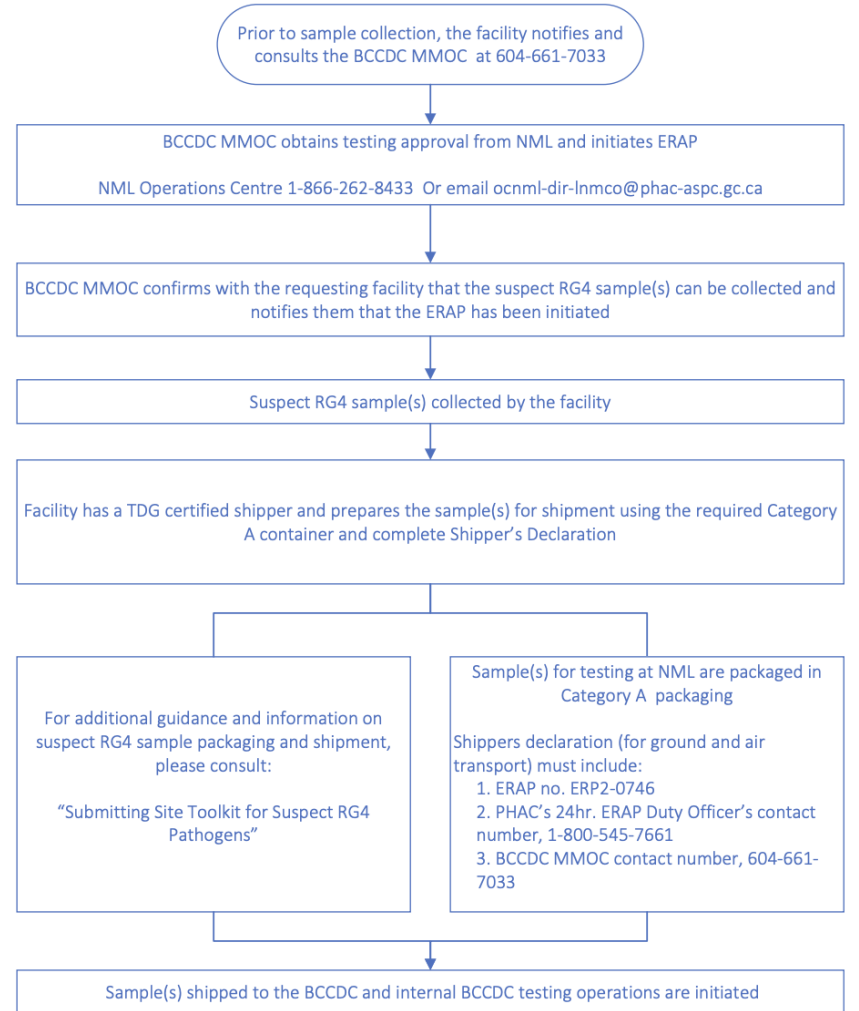


# Provincial Emergency Response Activation Plan (ERAP) for shipping RG4 samples - protocol and process



<http://www.elabhandbook.info/PHSA/Default.aspx>

## Provincial ERAP Activation—RG4 Shipment Workflow



# Federal/Provincial/Territorial Public Health Response Plan for Biological Events (PHRPBE)

DRAFT: February 24, 2026 for Jurisdictional Review



PAN-CANADIAN PUBLIC  
HEALTH NETWORK



RÉSEAU PANCANADIEN  
DE SANTÉ PUBLIQUE

## Viral Hemorrhagic Fever Concept of Operations

Communicable and Infectious Disease Steering Committee (CIDSC)

February 17, 2026

[For discussion](#)

# Thank you

