



V2010 Olympic and Paralympic Games: Through A Health Lens

Great Lakes Border Health Initiative
Annual Conference
Plymouth MI

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Outline

- Background and planning
- Impact of Olympic and Paralympic Games
- Lessons learned



Background and Planning

Where

- Metro Vancouver
- Resort Municipality of Whistler



When

- Olympic Games February 12 - 28
- Paralympic Games March 12 - 21

2010 Games by the Numbers...

- Number of Olympic athletes and team officials - 5,500
- Number of Paralympic athletes and team officials - 1,350
- Number of participating countries (Olympics) - 80+
- Number of participating countries (Paralympics) - 40+
- Number of event tickets - 1.8M



2010 Games by the Numbers...

- Accredited media - 10,000
- Games volunteers - 25,000
- Television viewers - 3 billion
- Visitors - 1.5 million





Vancouver Venues





Whistler Venues





Olympic Theatre Medical/Health Services




Health Services Challenges

Three features distinguish an Olympic Games from other large events hosted by major cities – and they need to be considered in all planning.

1. The global media lens will be on 2010 Games → even a minor delay or interruption in the provision of health services (to competitors, media, IOC Family, or spectators) during the six week Olympic and Paralympic period will receive global attention.
2. The Olympic Games are not a single site/venue event – the Games take place simultaneously at multi-sites (approx. 20 venues for 2010)
3. The International Olympic Committee (IOC) prescribes standards for health and medical services to the host Games Organizing Committee (VANOC).

Games Resources

VANOC Medical Services

- Venue Clinics¹ - 18
- Polyclinics - 2
- Ambulances (Ground)² - 45
- Ambulances (Air)² - 2
- Medical Volunteers - ~1200

¹Separate athlete and spectator clinics are provided at competition venues

²Dedicated BC Ambulance Service resources





Urban Domain Resources

Health Services

- Service Providers - 3
 - Vancouver Coastal Health
 - Fraser Health
 - Provincial Health Services
- Hospitals - 19
- Beds (Acute) - 377
- Beds (Critical Care) - 229
- ORs - 117




Urban Domain Resources

Emergency Medical Services

- Service Provider¹ - 1
- Ambulances (Ground) - 145
- Bike Squads (2 man) - 8
- Air Ambulances (Rotary) - 2
- Air Ambulances (Fixed) - 3
- Medical Support Units - 5
- CBRN Technical Advisors - 8
- Paramedics - 490



¹British Columbia Ambulance Service (BCAS)

Urban Domain Resources

Contingency Response Modules

- Disaster Responder - 26¹
- Emergency Treatment - 2
- Medical Staging - 1
- Mass Casualty Management - 3²

¹ Includes three (3) mobile units
² Fully mobile

National Emergency Stockpile

- Casualty Collection - 24
- Emergency Hospital (200-bed) - 2



Public Health Planning

- Disease and injury surveillance
- Prevention
- Health Protection
- Emergency Management
- Health Promotion

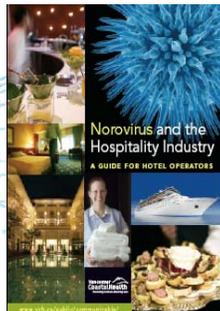
Surveillance System Components

- Emergency department data
- Reportable communicable diseases
- Laboratory data
- Facility outbreaks
- Foodborne illness complaints
- ILI surveillance
- HealthLink BC (811)
- BC Ambulance Service
- Medical Services Plan data
- VANOC Polyclinic/Venue Medical Services encounters

Communication links
with key partners

Prevention Initiatives

- Vaccination recommendations for athletes, visitors
- Influenza mitigation strategy
- Norovirus
- Bedbugs
- VCH public health nurses located within Polyclinics
 - ILI and enteric disease testing
 - Case and contact management



Influenza Mitigation Strategies

- Vaccination (H1N1/seasonal flu):
 - VANOC staff and volunteers
 - Vaccine available for athletes upon arrival
- Hand washing facilities, alcohol-based hand sanitizer in venues
- Surveillance for influenza-like illness
- Influenza testing available in Polyclinics
- Antiviral stockpile (Tamiflu™) in Polyclinics
- Public health management of clusters/outbreaks

Health Protection

- Food Safety and Quality
 - Inside and outside the fence
- Drinking Water
 - Development of new systems near Whistler
- Air Quality
- Pools and Spas

Health Promotion

- IOC/VANOC/VCH Partnerships
 1. Tobacco-Free Sports
 2. HIV/AIDS Awareness
 - 100,000 condoms



remember. HIV
doesn't discriminate-
people do.

Border Health Initiatives

- Agreements
- Coordination
- Catastrophic Emergencies
- Cross Border Movement

Agreements

PNWBHA Multi-Jurisdiction Collaboration MOU

WA-BC Public Health Preparedness Collaboration MOU

WA-BC MOU Information Sharing and Protection MOU

WA-BC Public Health Laboratory Services Resource Sharing Mutual Aid MOU

<http://pnwbha.org>

Coordination

V2010 Border Health Coordination Committee

Catastrophic Emergency Response

CANCOM-USNORTHCOM-BC Joint Planning Group

- CBRNE Response
- Strategic Patient Movement

EMS Cross Border Movement

Operational Plan for Moving Emergency Medical Services Staff and Resources Across the Washington and British Columbia Border

<http://www.doh.wa.gov/phepr/WA-BC-EMSagreement.pdf>



Plan Positive Affects

- Created Procedures for Processing Emergency Medical Services Staff and Resources
- Expedites EMS border crossing following
 - Declared emergency following a catastrophic event or
 - A localized Mass Casualty Incident (MCI) that overwhelms the EMS capacity of a border jurisdiction

V2010 Positive Effects

- Identified ambulance response capability within 5 hours from call to the border:
 - 17 ALS, 27 BLS and a 45 passenger medical transport bus
- coordinate with port of entry (POE): pre-identify staff and equipment list
- Interoperable Communications between British Columbia Ambulance Services (BCAS) and Washington EMS agency staff within BC

V2010 Positive Effects - Continue

- Phase II
 - Interoperable communications
 - Hospital plan cross-walk
 - Mutual Aid Agreements

Games-Time Impact - *What Happened*



VANOC Overview

	OLYMPICS	PARALYMPICS
Accredited Medical Encounters	8,198	2,590
Spectator Medical Encounters	840	127
Athlete Encounters	2,732 (33%)	657 (25%)

Public Health Impact

- Communicable diseases
 - Gastrointestinal illness
 - Influenza-like illness
 - Imported communicable diseases
- Health protection
- Public health emergencies

Gastrointestinal Illness

- Norovirus "season"
- Evidence of widespread community transmission pre-Games
- Outbreak within a temporary housing facility for Olympic workforce
- No spread within Athletes' Villages

Influenza-Like Illness

- No evidence of influenza during the Games
- Other respiratory viruses in circulation:
 - Respiratory syncytial virus
 - Rates highest in Coastal (North Shore, Whistler)

H1N1 Vaccine?

- Very few requests for vaccination
 - 19 doses given at Polyclinics

Imported Communicable Diseases

- Measles importation coincidental in time with the Olympic Games
- One out-of-country visitor infected
- No known cases among Olympic athletes
 - 2 doses of MMR recommended by VCH for all athletes before the Games

Food Safety

- Inspection of all 7,000 food service establishments in VCH prior to Games
- Temporary food facilities:
 - Food safety plans
 - Daily Olympic venue inspections
 - Food sampling and testing
- Daily reporting of closures
 - An unapproved food preparation area in Russia House was shut down

Reporting: 2010 Health Watch

- Public Health Olympic Updates
 - Regular newsletters (17) produced from Jan. 2008 to Dec. 2009
 - Public health planning activities
- 2010 Health Watch
 - Produced daily (41) during the Olympic and Paralympic Games
 - Distributed to: Games organizers, public health partners, public

Health System Impact

- Emergency Department Visits
 - Higher than usual number of visits at city core hospitals
 - Less than usual number of visits at suburban hospitals, including whistler
 - No change at rural hospitals
- Impact of Olympic crowds in downtown Vancouver
- Admission rate from Emergency Departments
 - No change

Emergency Department Contingency Plan

- Designated Hospitals (4)
 - Based on experience
- Extra physician funding:
 - On-call
 - Call-back if volumes high over a 2-hour period
- Anticipated: 20 call backs
- Actual: 22 call backs
- Increased ED volume expected, well-managed

Lessons Learned

Planning

- Integrate public health planning with health systems planning
 - Event organizers
 - Hospitals
 - Other health services
- Health protection requires most resources
- Prevention recommendations important
 - Vaccine recommendations to attendees

Planning (cont)

- Surveillance
 - Routine communicable disease notifications may be of limited value
 - Consider legacy systems
 - Emergency departments utilized by visitors
 - Rich source of surveillance data
 - Historical comparisons essential
 - Use chief complaint/discharge diagnoses
 - Work with stakeholders to improve data quality

Lessons Learned

Response

- Routine public health protocols for follow-up and response
- Avoid administrative barriers



Lessons Learned

Legacies

- Enhanced surveillance systems
- Higher, broader public health profile
 - Opportunities for health promotion
 - Better use of surveillance data
- New partnerships
- Enhanced infrastructure
- Knowledge sharing

