



Cool North Shore Presentation

**Dr. Mark Lysyshyn,
Medical Health Officer**

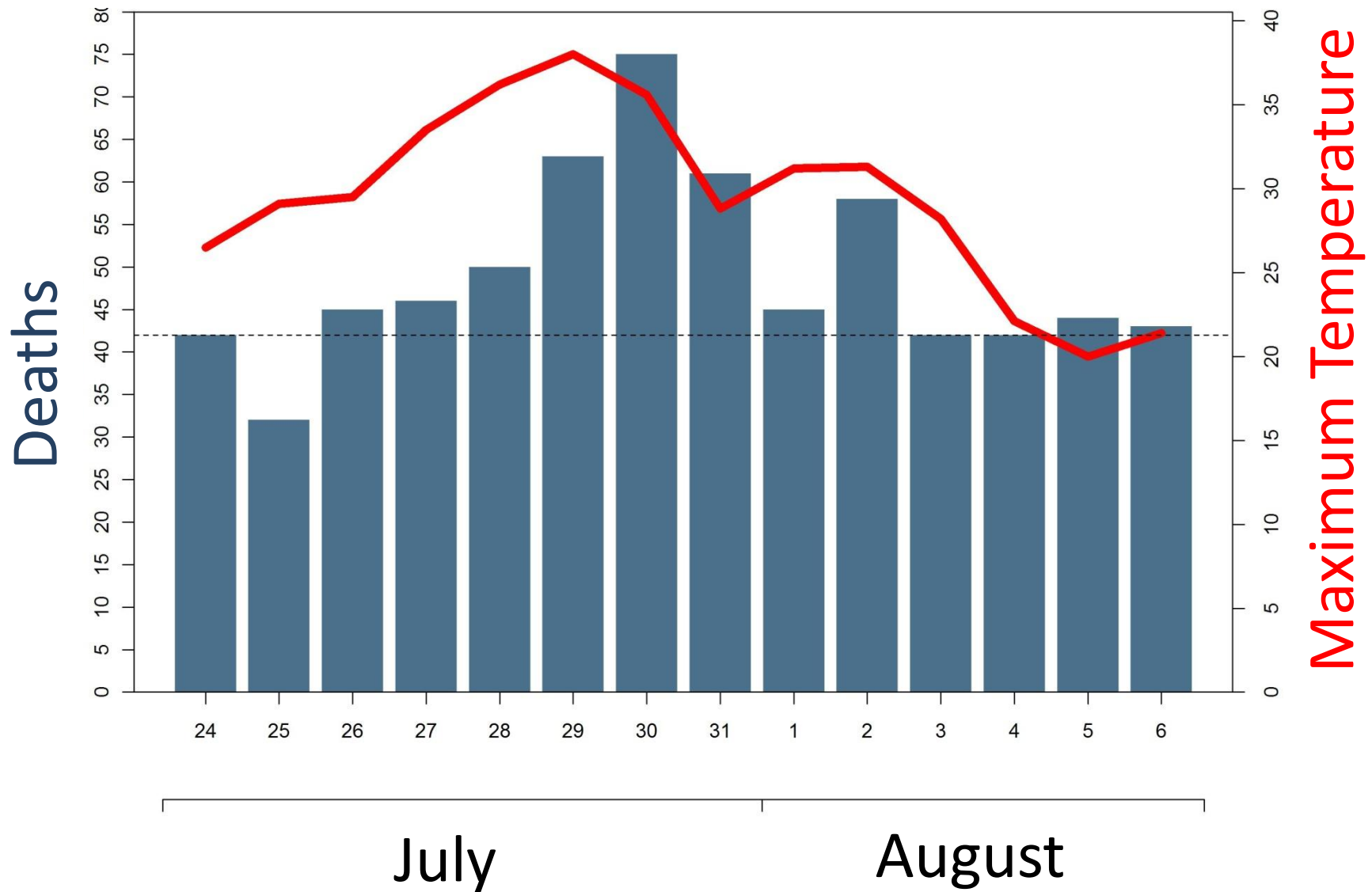
November 25, 2014

Outline

- Extreme Heat Surveillance and Response
- Forest Fire Smoke Surveillance
- Upgrading Water Treatment Systems
- Improving the Built Environment
- Collaborating on Food Security

Extreme Heat Surveillance and Response

Summer 2009



Recommendation:

A heat health emergency should be called for tomorrow when the average of today's 14:00 *measured temperature* and tomorrow's *forecast high* equals or exceeds:

34°C at **Abbotsford airport**

OR

29°C at **Vancouver airport**

The emergency should be sustained for as long as either criterion persists.

Heat Alert System

If temp is projected to exceed 32C:

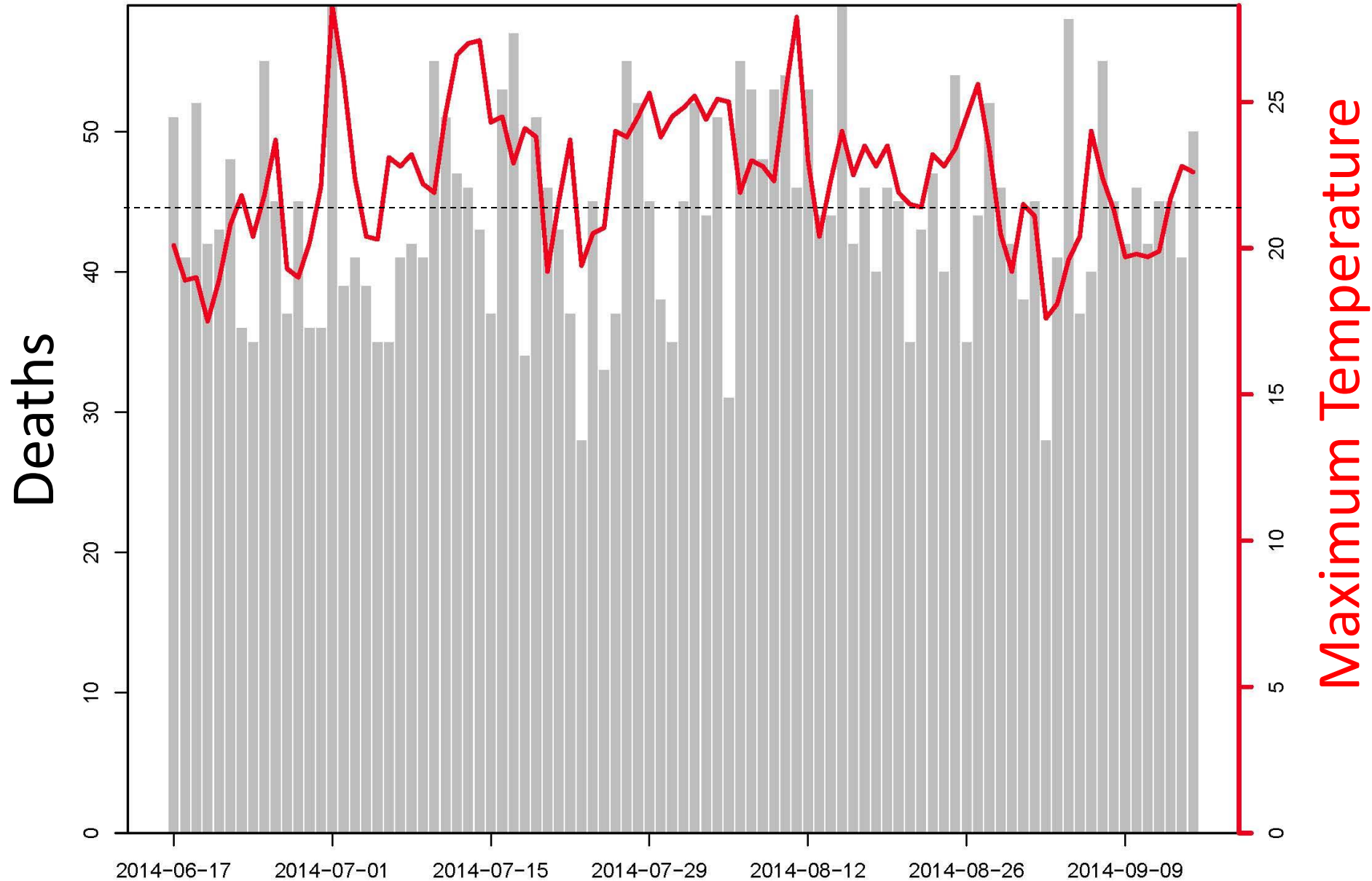
- Environment Canada issues a Special Weather Statement
- VCH and FH Medical Health Officers issue a hot weather news release which includes tips the public can use to beat the heat

If temp is projected to exceed 34C:

- Environment Canada issues a Heat Warning
- Municipal heat response plans are activated
- Plans include education for the public and vulnerable populations, information about cooling centres and water stations, considerations for outdoor events including water availability and schedule changes

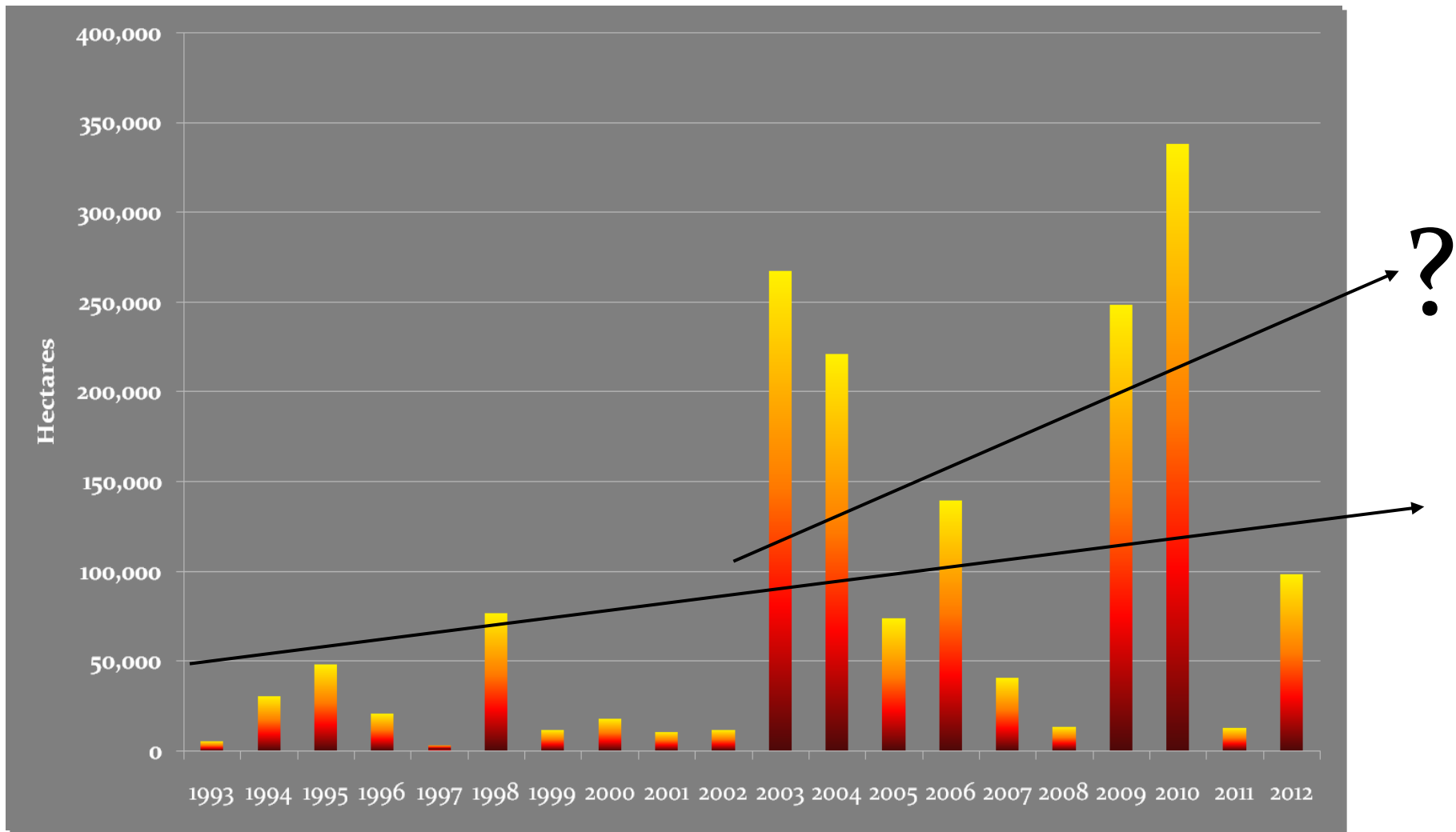


Lower Mainland 2014

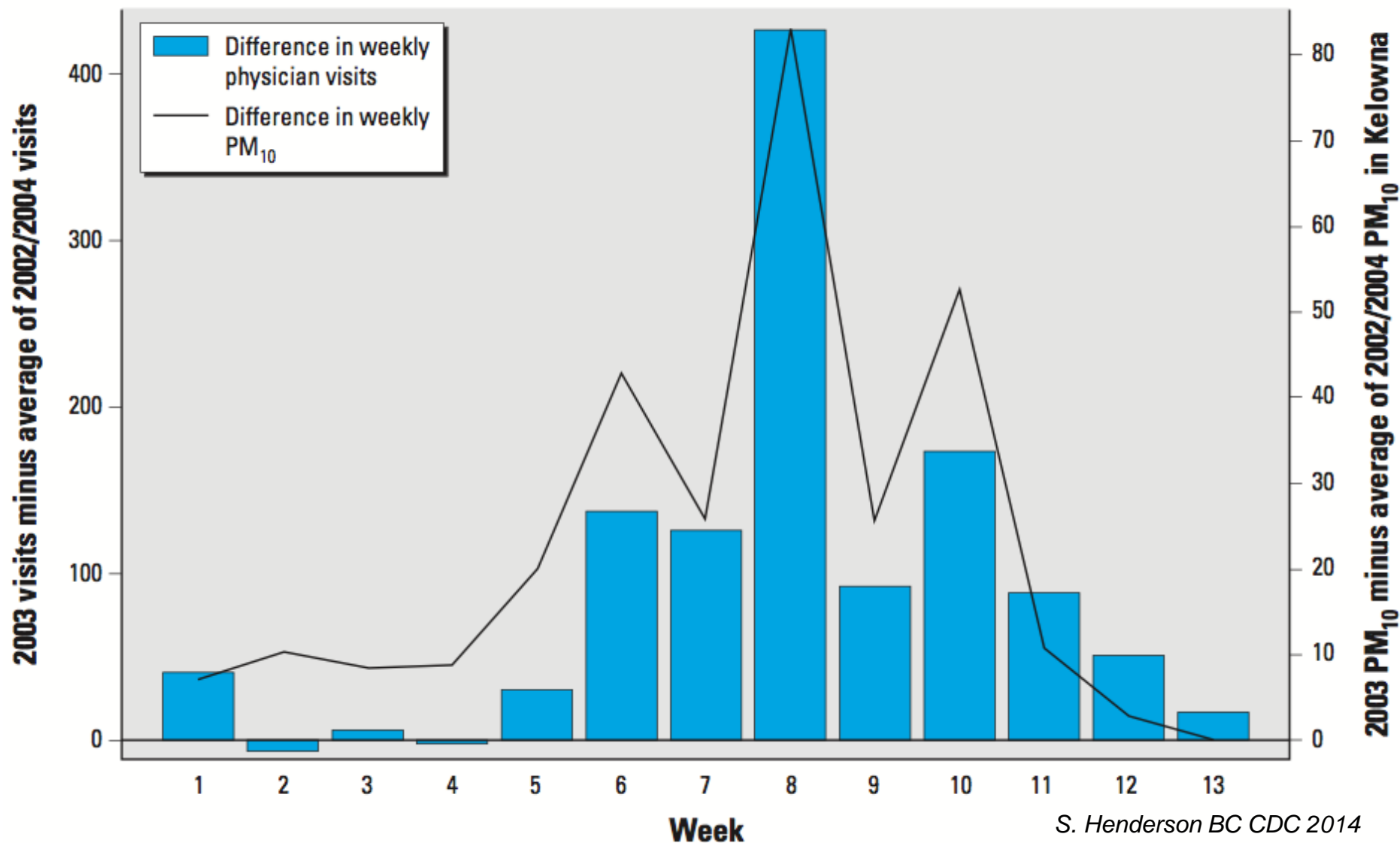


Forest Fire Smoke Surveillance

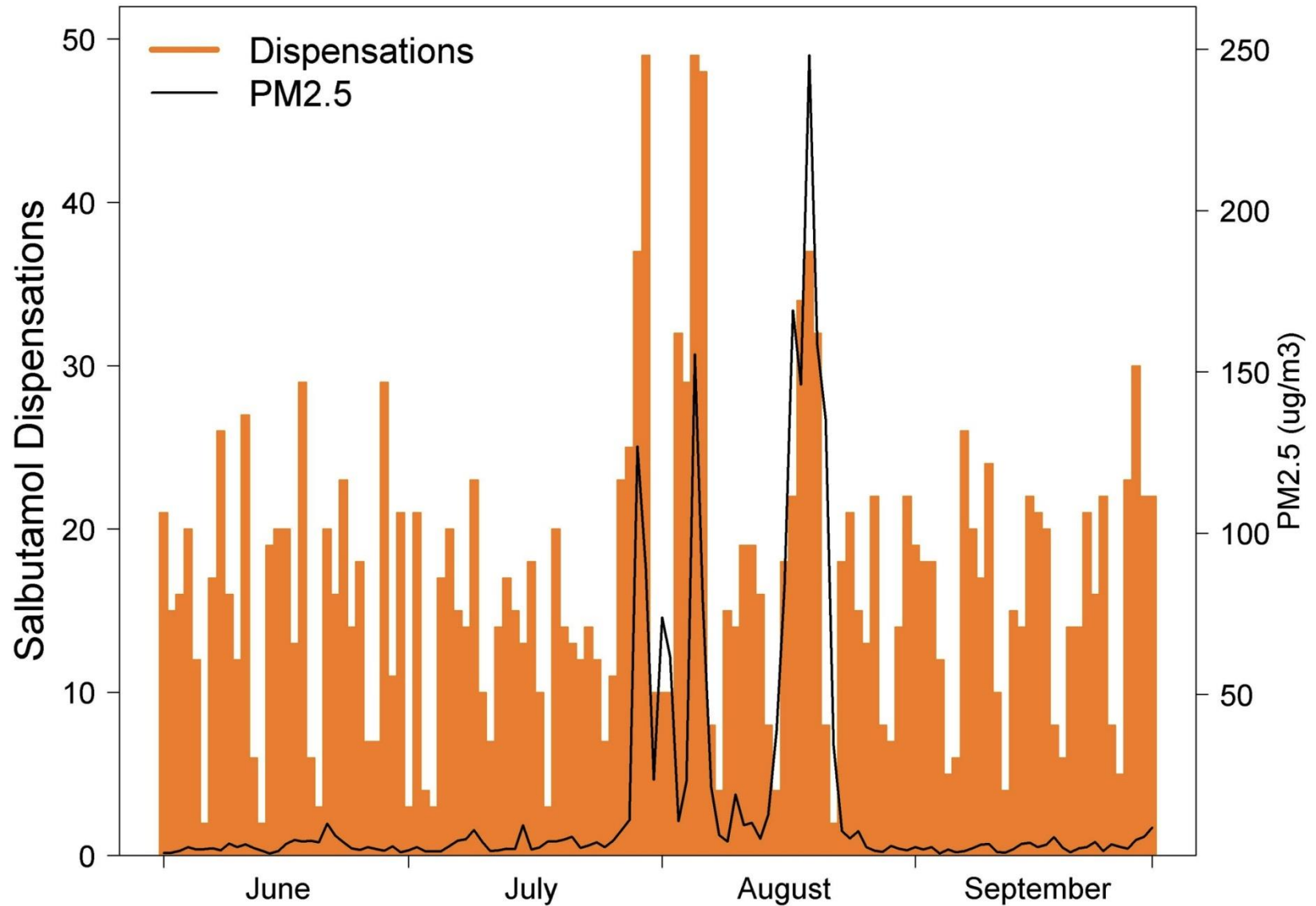
Forest Fires Trends



Asthma Physician Visits 2003



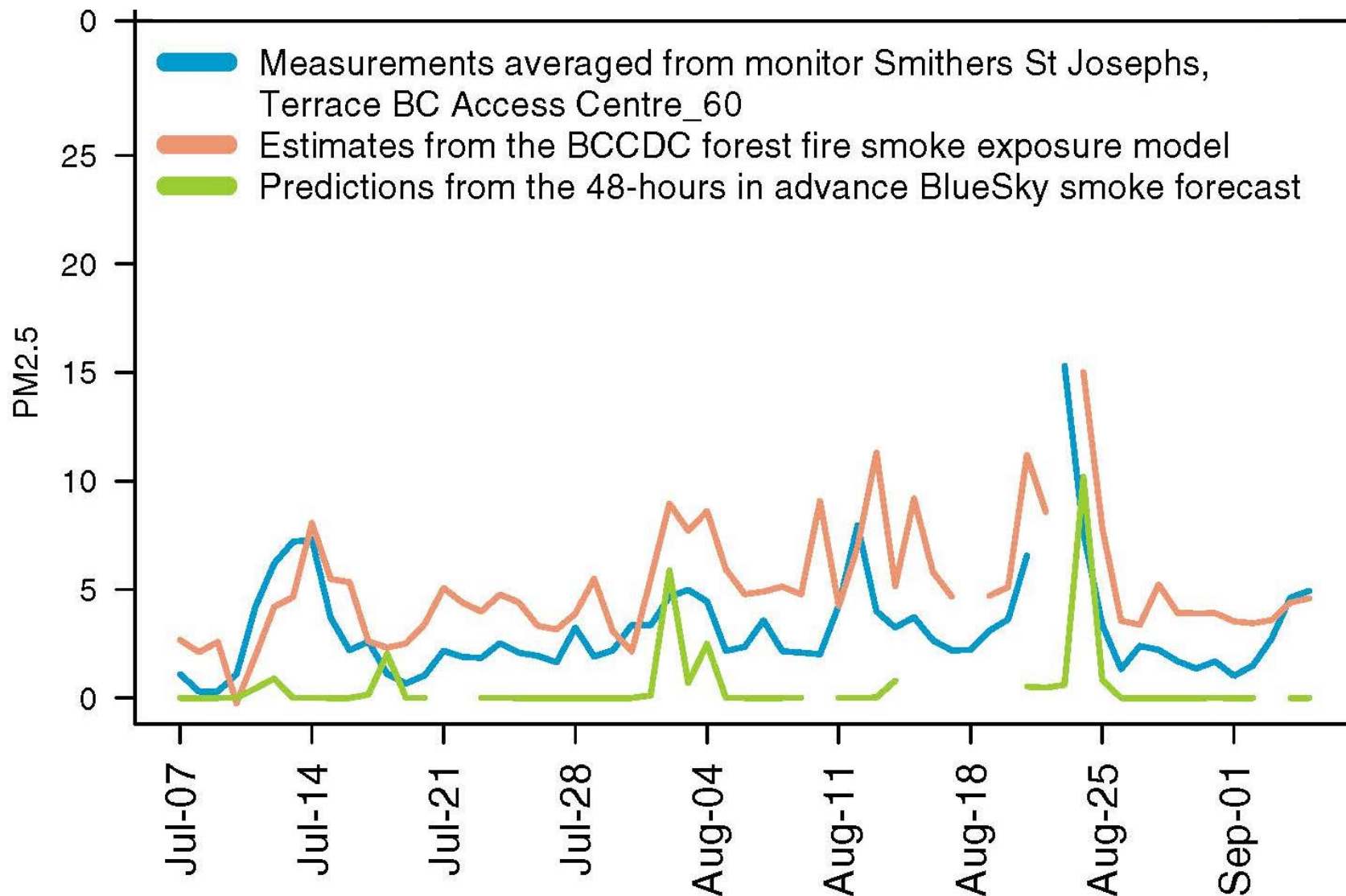
Salbutamol Dispensations 2010



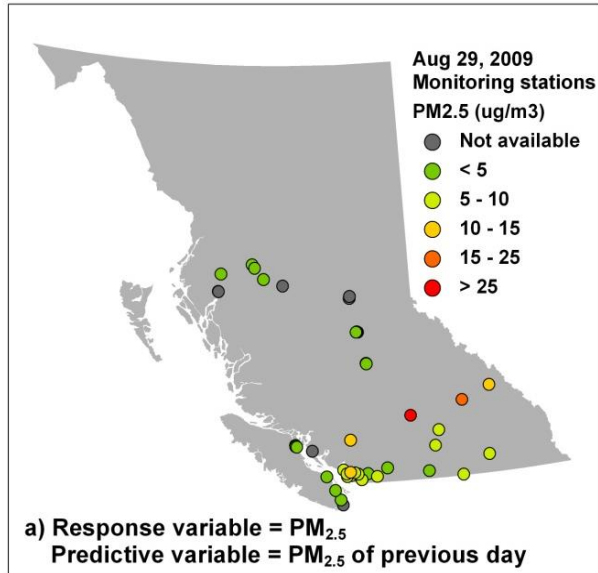
2010

S. Henderson BC CDC 2014

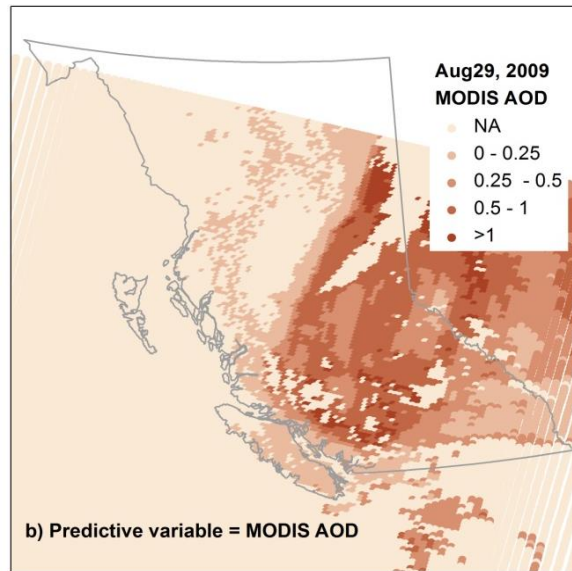
Exposure Metrics



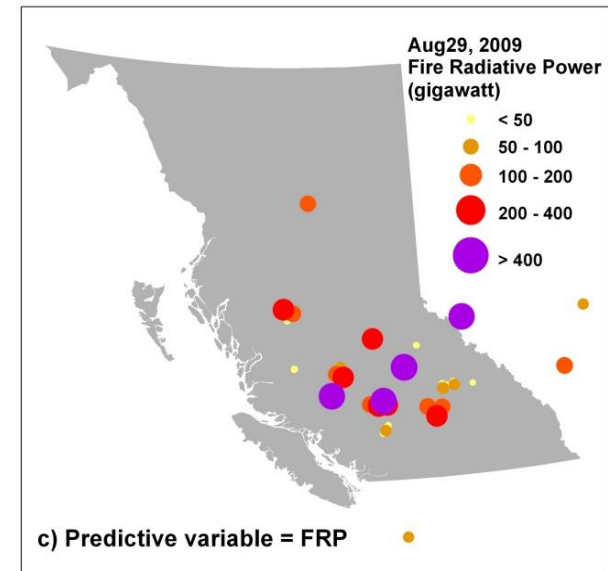
Monitor PM



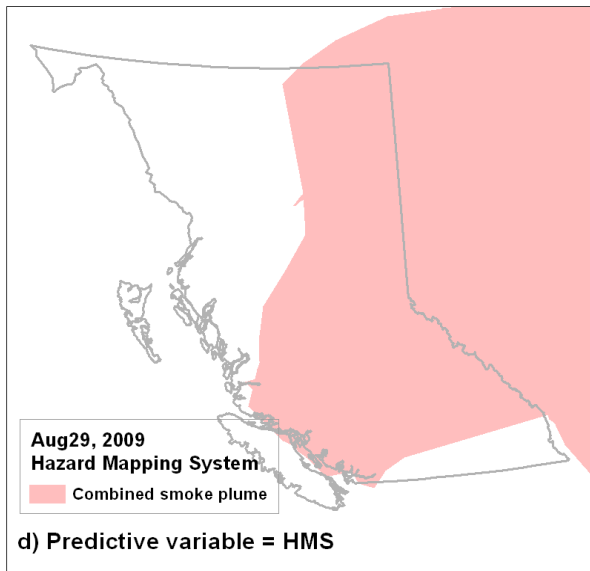
Remote sensing aerosol



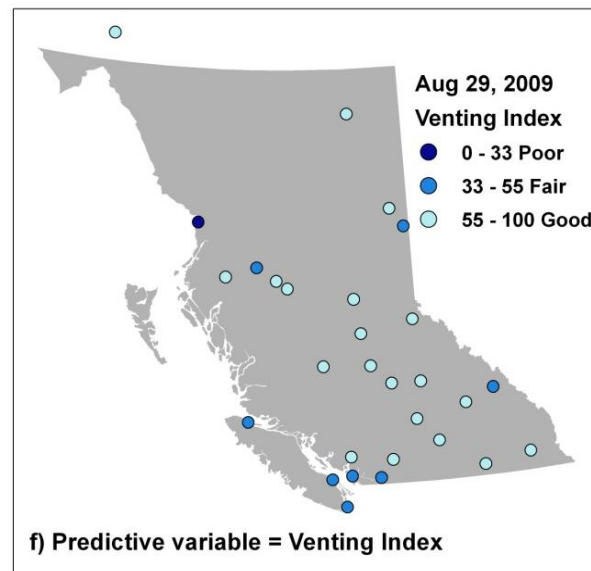
Remote sensing fire



Remote sensing smoke



Venting index

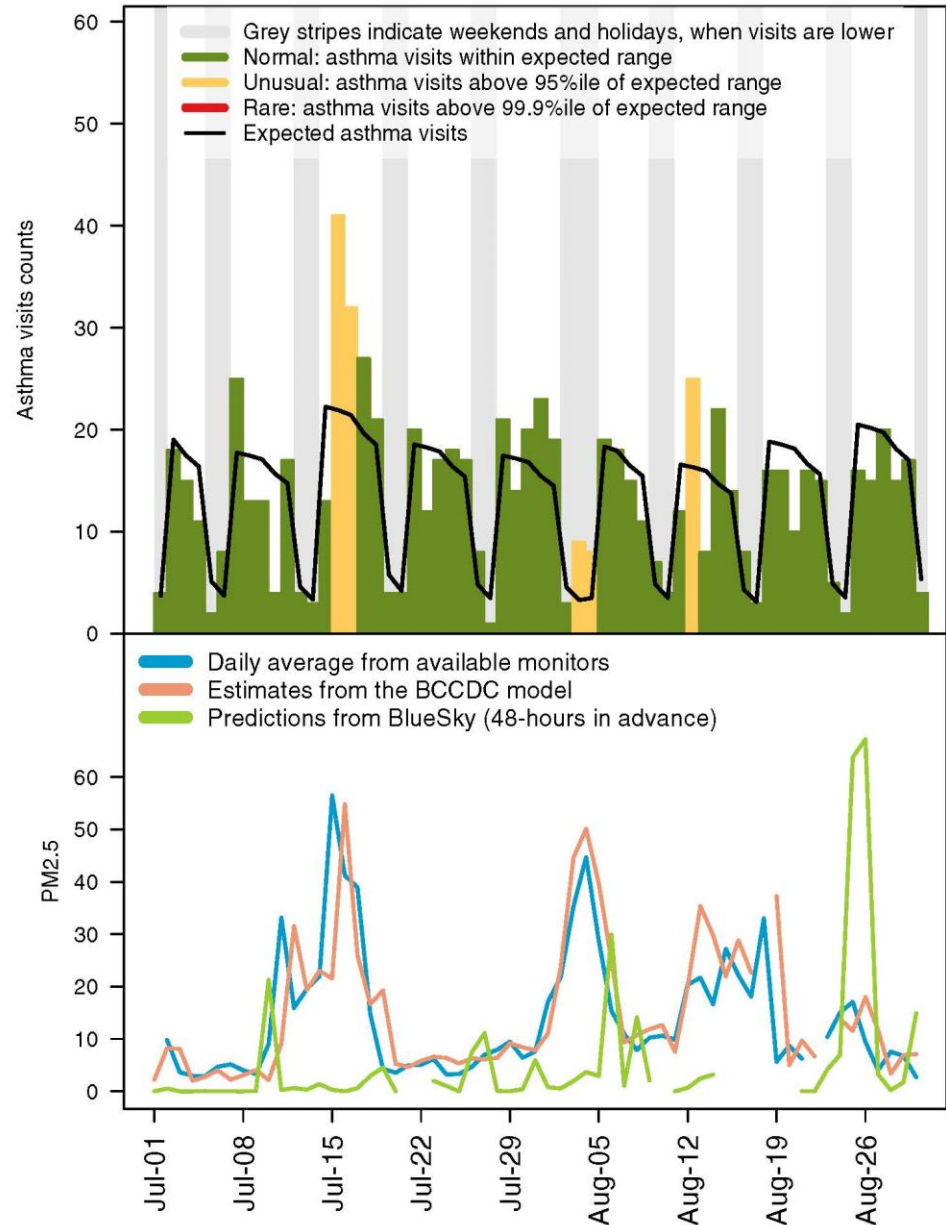


BCCDC Model

BC Asthma Monitoring System (BCAMS)

Asthma Physician Visits for HSDA Northern Interior (#52)

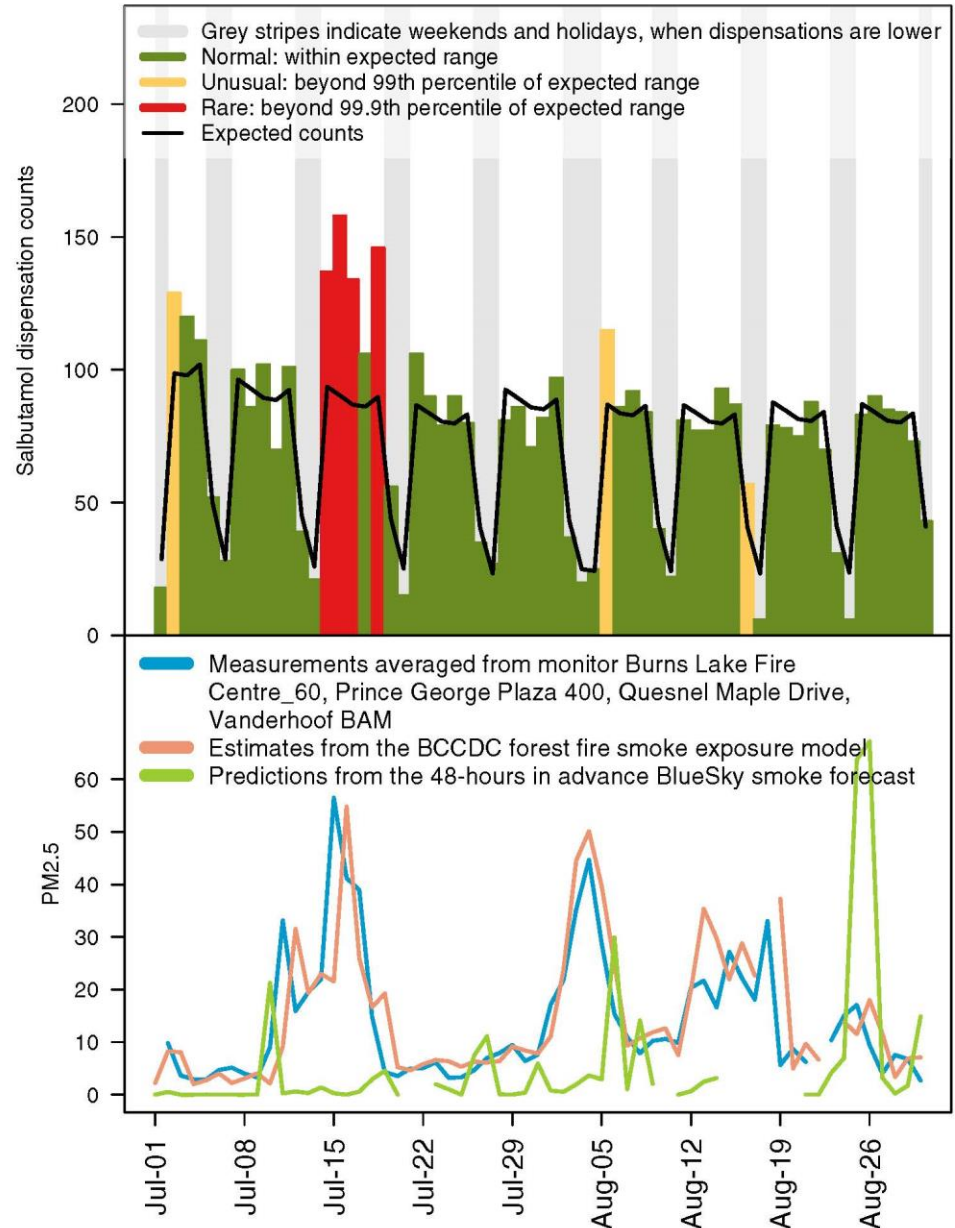
Update for week of Aug 23 to Aug 30, 2014



BC Asthma Monitoring System (BCAMS)

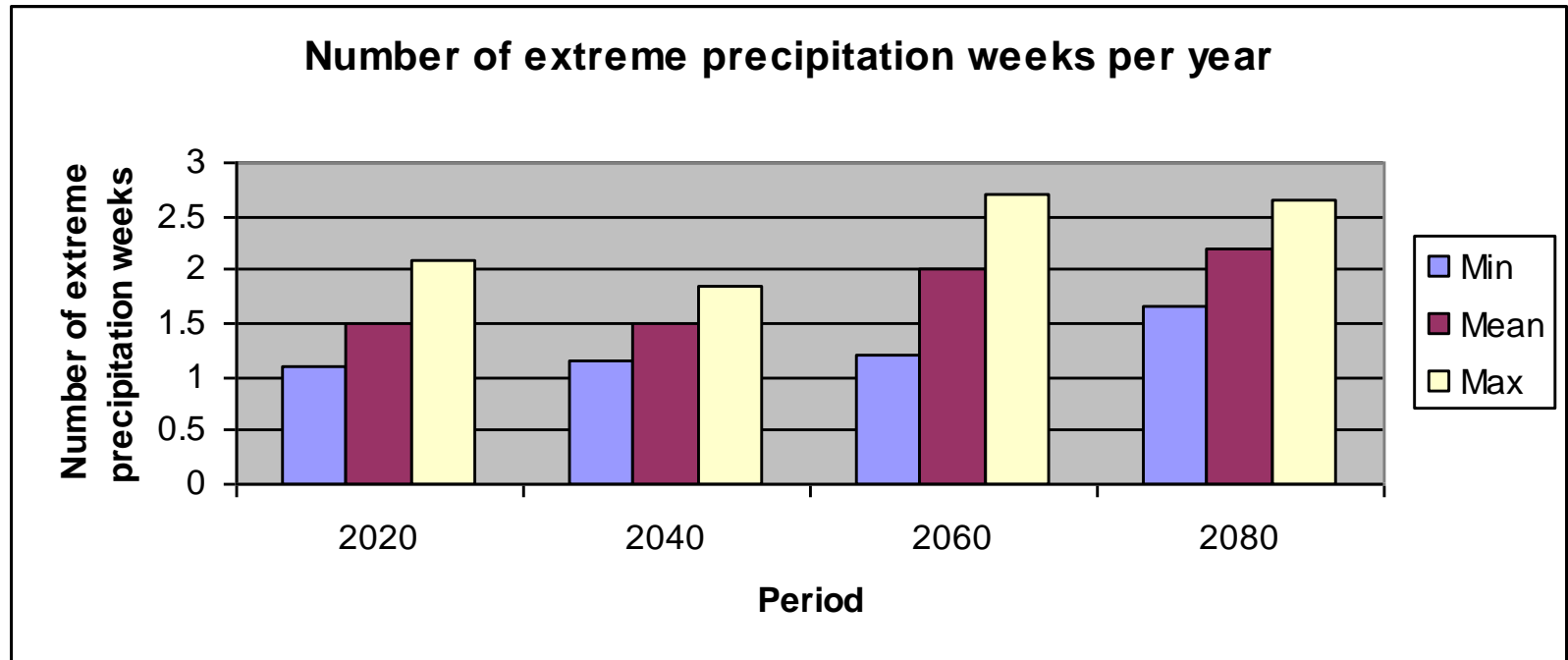
Salbutamol Dispensations for HSDA Northern Interior (#52)

Update for week of Aug 23 to Aug 30, 2014



Upgrading Water Treatment Systems

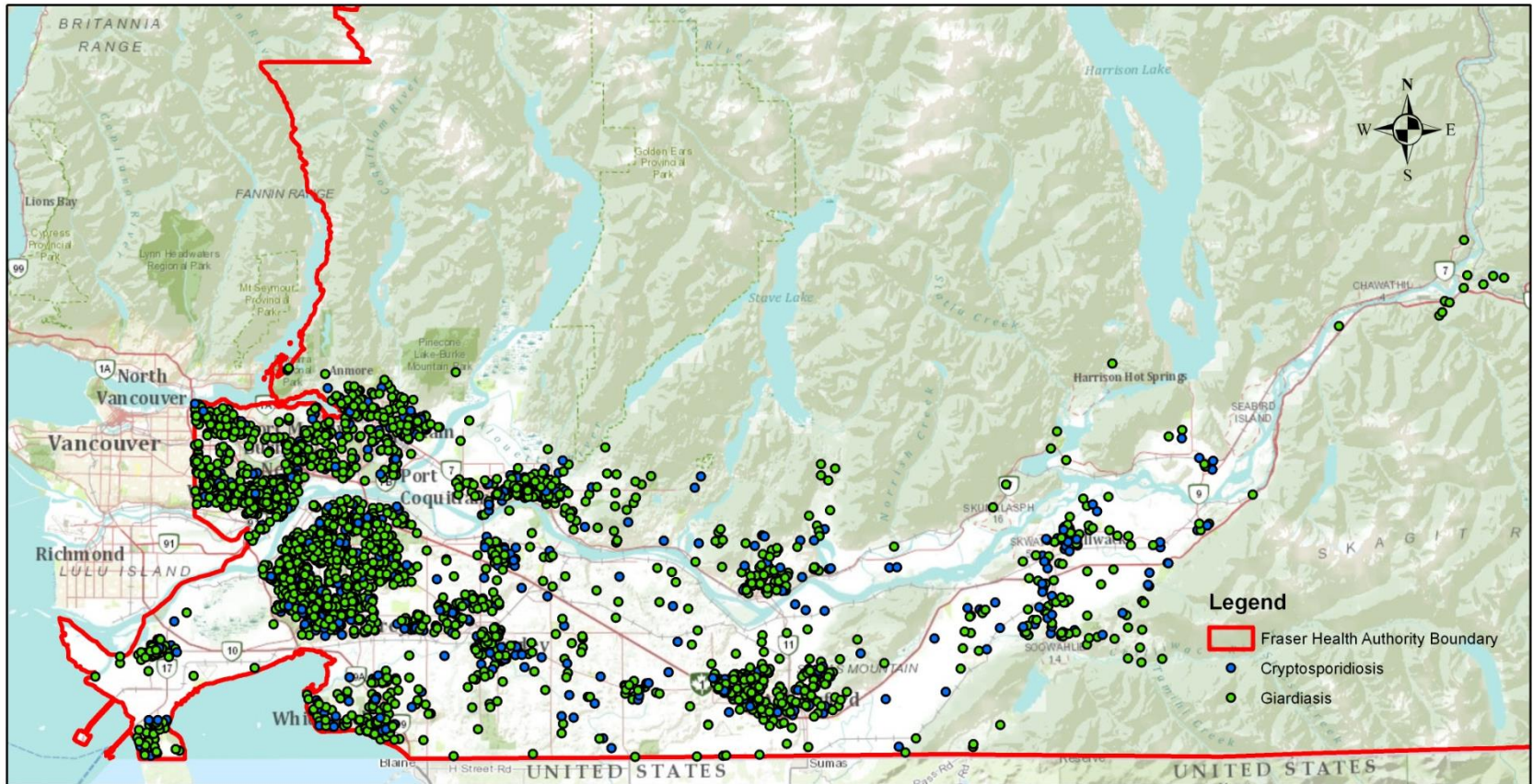
Extreme Precipitation



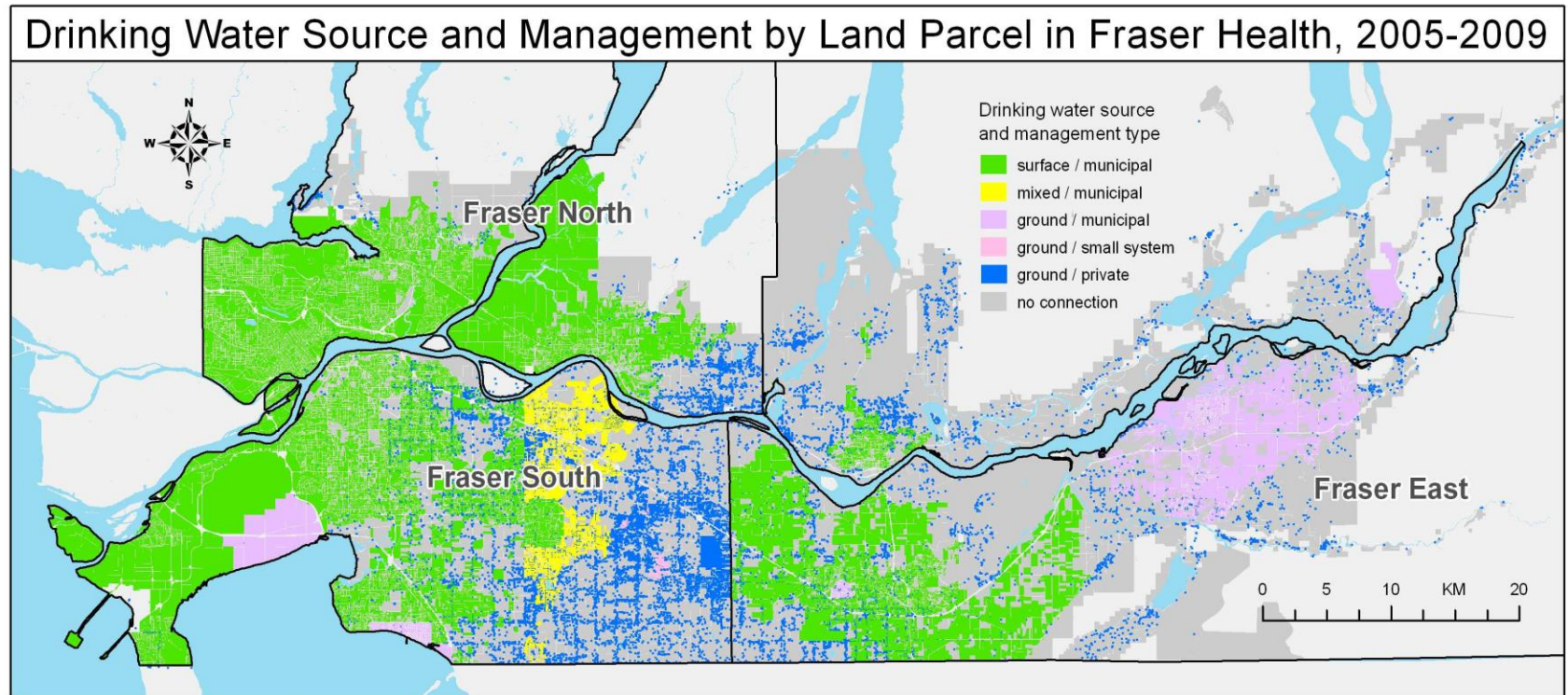
Number of weeks in a year with precipitation > 90th percentile of historical (176 mm/week) based on RCP 8.5.

Gastrointestinal Illness

Reported Cases of Giardiasis and Cryptosporidiosis in Fraser Health Authority, 2000-2012

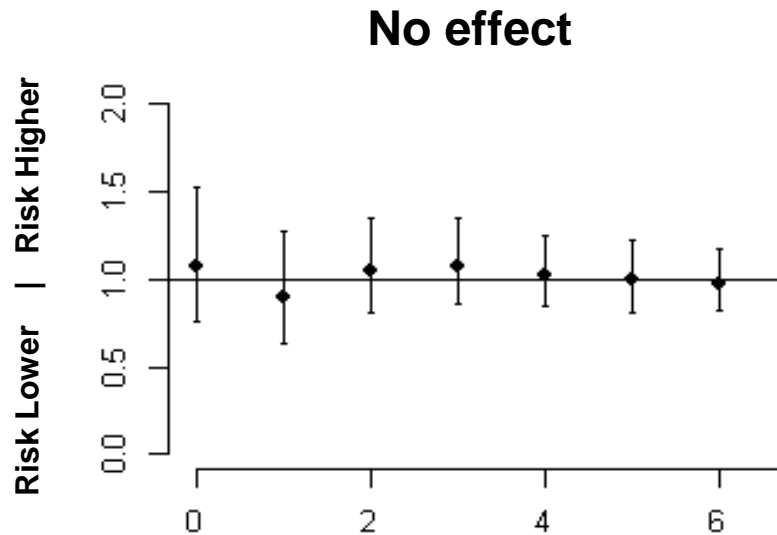


Drinking Water Systems



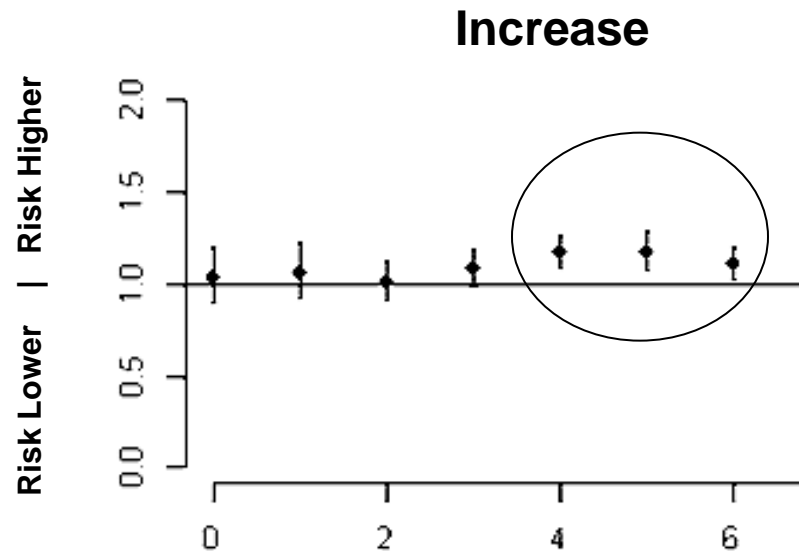
➤ Source = home tap water

Results: Non municipal and municipal systems



Weeks since heavy precipitation

Non-municipal drinking
water systems

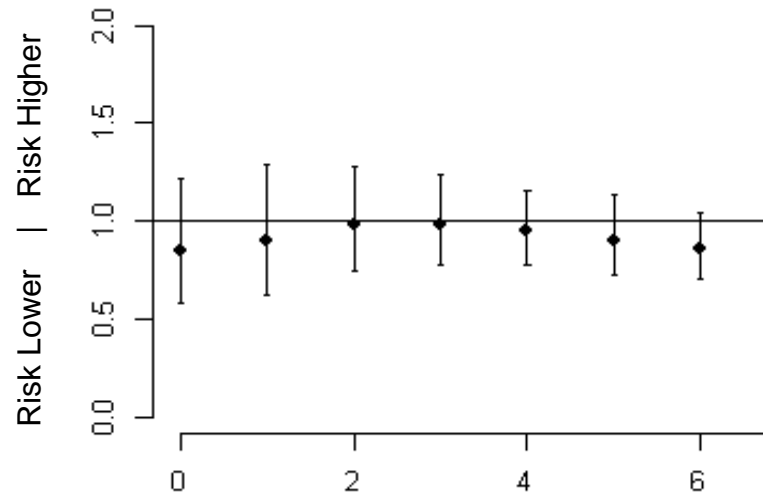


Weeks since heavy precipitation

Municipal drinking
water systems

Results : Non Metro Vancouver and Metro Vancouver

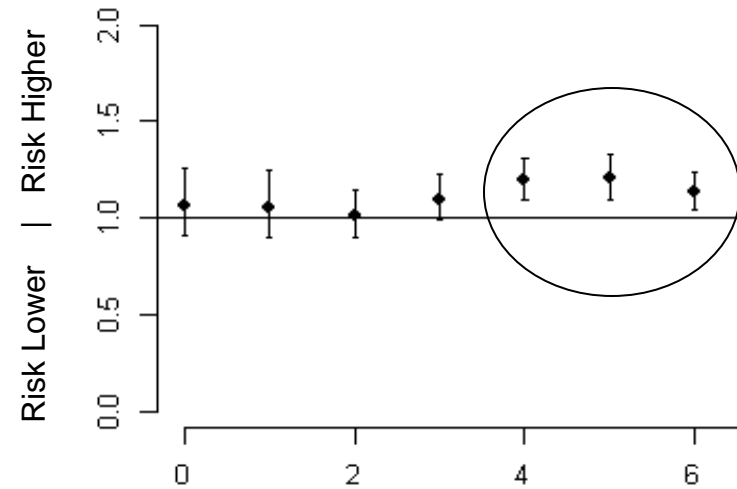
No effect



Weeks since heavy precipitation

Non Metro Vancouver
municipal systems

Increase



Weeks since heavy precipitation

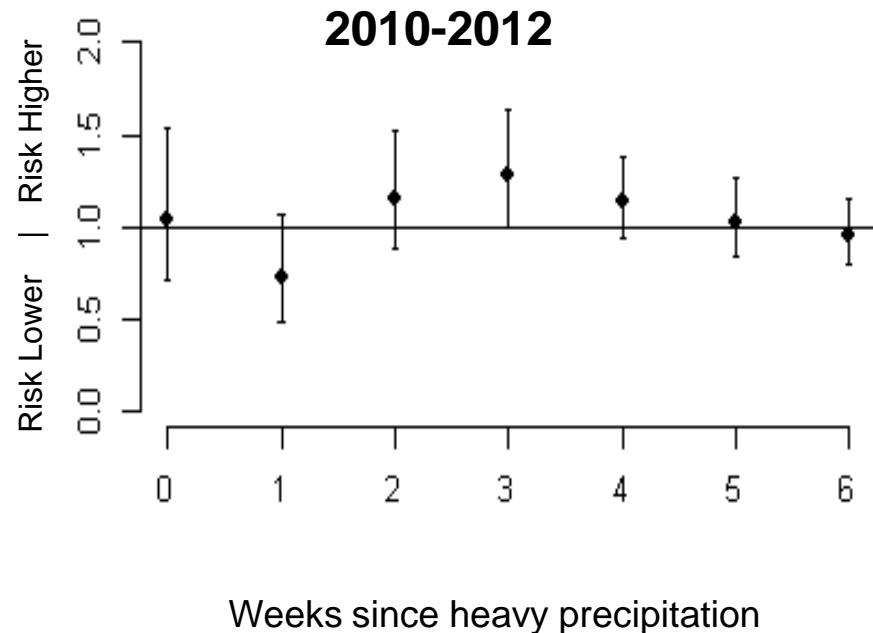
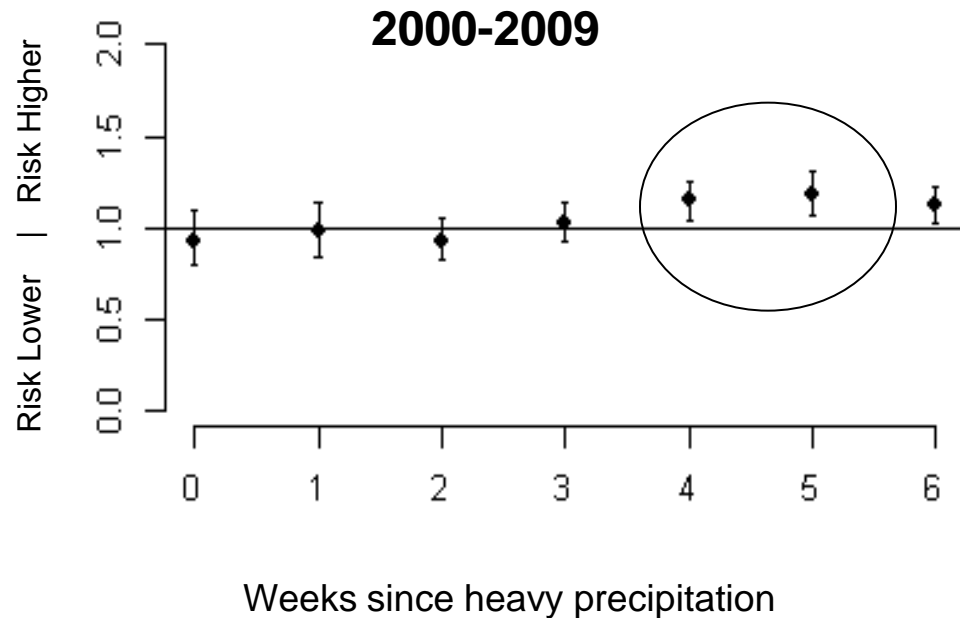
Metro Vancouver
system

Seymour- Capilano Filtration Plant

AERIAL OVERVIEW



Results: Metro Vancouver System



Metro Vancouver drinking water system

Improving the Built Environment

A body of research and evidence links the places people live with health outcomes.

Vancouver Coastal Health and municipalities on the North Shore have agreed to work together to ensure health is considered in the community planning process.



Planning Principle 1: Healthy Neighbourhood Design

Healthy
Neighbourhood
Design



Guiding principles:

- Enhance neighbourhood walkability
- Create mixed land use
- Build complete and compact neighbourhoods
- Enhance connectivity with efficient and safe networks
- Prioritize new developments within or beside existing communities

EVIDENCE-BASED HEALTH IMPACTS

- Increased physical activity and productivity at work
- Improved mental health, social cohesion and quality of life
- Decreased obesity and premature mortality

Planning Principle 2: Healthy Transportation Networks

Healthy
Transportation
Networks



Guiding principles:

- Enable mobility for all ages and abilities
- Make active transportation convenient and safe
- Prioritize safety
- Encourage use of public transit
- Enable attractive road, rail, and waterway networks

EVIDENCE-BASED HEALTH IMPACTS

- Increased physical activity
- Improved social connectivity, mental health and quality of life
- Decreased injuries, obesity, respiratory disease and premature mortality

Planning Principle 3: Healthy Natural Environments

Healthy Natural
Environments



Guiding principles:

- Reduce urban air pollution
- Mitigate urban island heat effect
- Expand natural elements across the landscape
- Preserve and connect open space and environmentally sensitive areas
- Maximize opportunities to access and engage with the natural environment

EVIDENCE-BASED HEALTH IMPACTS

- Improved physical health, cognitive health, exposure to vitamin D, social wellbeing and spiritual wellbeing
- Decreased heat related illness and mortality, cardiovascular and respiratory illness and mortality

Planning Principle 4: Healthy Food Systems

Healthy Food
Systems



Guiding principles:

- Enhance agricultural capacity
- Increase access to healthy foods in all neighbourhoods
- Improve community-scale food infrastructure and services

EVIDENCE-BASED HEALTH IMPACTS

- Improved diet quality and, food and coping skills
- Increased social skills and social supports, enjoyment of food and community empowerment
- Decreased obesity and diet-related illness

Planning Principle 5: Healthy Housing

Healthy
Housing



Guiding principles:

- Ensure adequate housing quality for all segments of society
- Increase access to affordable housing through provision of diverse housing forms and tenure types
- Prioritize housing for the homeless, elderly, low income groups, and people with disabilities
- Site and zone housing developments to minimize exposure to environmental hazards

EVIDENCE-BASED HEALTH IMPACTS

- Improved general health, food security, mental health and quality of life
- Decreased stress & depression, exposure to environmental hazards and mortality

Planning Principle 6: Healthy Communities



Guiding principles:

- Apply an equity and inclusion lens to all planning
- Consider and address the social determinants of health, such as education, income, social supports, health services, among many others
- Support capacity building in individuals, organizations, and sectors
- Work collaboratively on activities that lead to the integration of efforts to strengthen community health, well-being and development

EVIDENCE-BASED HEALTH IMPACTS

- Improved general health, mental health, community engagement, social cohesion, social connectedness and quality of life for all
- Decreased illness and mortality

Collaborating on Food Security

North Shore Food Charter

- Outlines a vision for creating an integrated food system for the North Shore
- Articulates shared community principles related to food production, distribution, access, consumption, processing and waste handling
- Principles:
 - Health, Access and Equity
 - Environmental Responsibility
 - Government Leadership and Collaboration
 - Economic Vitality
 - Community Culture and Education



NORTH SHORE COMMUNITY FOOD CHARTER

This Charter outlines a vision and principles around an integrated food system for the North Shore. It articulates shared community principles related to food production, distribution, access, consumption, processing and waste handling.

VISION

The North Shore will be a place where:

- Food is considered as a valuable resource at every stage of the food system continuum
- All people are able to access food, in a dignified manner, that is nutritious, safe and personally acceptable
- The environment is valued and protected from adverse impacts of the food system; and
- Food and food cultures are celebrated.

PRINCIPLES

The North Shore Food Charter identifies five (5) principles generated through community consultation which capture the values held by communities around the role of food. As signatories to this Food Charter we, citizens, community based organizations, local businesses and government bodies, commit to engaging in ongoing dialogue leading to action based on the following principles:

1. Health, Access and Equity
2. Environmental Responsibility
3. Government Leadership and Collaboration
4. Economic Vitality
5. Community Culture and Education

1. HEALTH, ACCESS AND EQUITY

Health is vitally connected to the food we consume. Healthy communities are built, in part, when healthy choices are available and everyone has access to a safe, personally acceptable, nutritious diet that maximizes healthy choices and prevents disease.

We strive for everyone to have access to food choices that are:

- Safe, whole, fresh, minimally processed and not unnecessarily modified
- Of high quality across all North Shore jurisdictions
- Affordable for everyone
- Available with dignity and without barriers in all North Shore jurisdictions

2. ENVIRONMENTAL RESPONSIBILITY

The "food system" comprises a complex continuum from seed to plate and back to the earth that has a significant impact on the environment. We have a responsibility to reduce the collective environmental footprint of the food system while promoting community self-reliance.

We strive to:

- Support practices that protect or enhance natural ecosystems (land and water) through all stages of the food system
- Reclaim, recycle and repurpose food to the greatest extent possible
- Minimize the harmful environmental impact of food production and consumption (including transportation, packaging, processing etc.) whenever possible

3. GOVERNMENT LEADERSHIP AND COLLABORATION

Food security is an issue that crosses jurisdictional boundaries and cannot be addressed by a single governing entity on its own. North Shore communities will collaborate with regional, provincial and national governments in advocating on issues that affect community food security.

We strive to:

- Inform the public about food security initiatives and support initiatives being pursued in other jurisdictions
- Advocate around food system issues regionally, provincially and nationally
- Consider and promote food security in the development of regulations and policies

4. ECONOMIC VITALITY

Local food enterprises enhance the local economy. Every step of the food system from food production to processing, retail, preparation, consumption, composting and repurposing presents opportunities to strengthen the economy.

We strive to:

- Strengthen the local food sector's growth and development
- Attract and promote innovative and viable food-centered enterprises
- Create jobs in our community by encouraging local food enterprise

5. COMMUNITY CULTURE AND EDUCATION

Food brings people together and creates opportunities for people to share their food skills, traditions and knowledge contributing to a vibrant community.

We strive to:

- Promote the connection between food and mental, physical and spiritual health
- Celebrate and support food cultures
- Support information sharing, education and training for children and adults that builds awareness, skills and capacity for food literacy

Questions?