

Ontario's Public Health E-Health Strategy - Supporting Public Health Renewal

Dr. George Pasut

Executive Lead, Public Health System Transformation
Ministry of Health and Long Term Care

University of Waterloo
May 24, 2006

Seminar Sponsors:



Ontario's Public Health E-Health Strategy – Supporting Public Health Renewal

Dr. George Pasut

Executive Lead

Public Health System Transformation

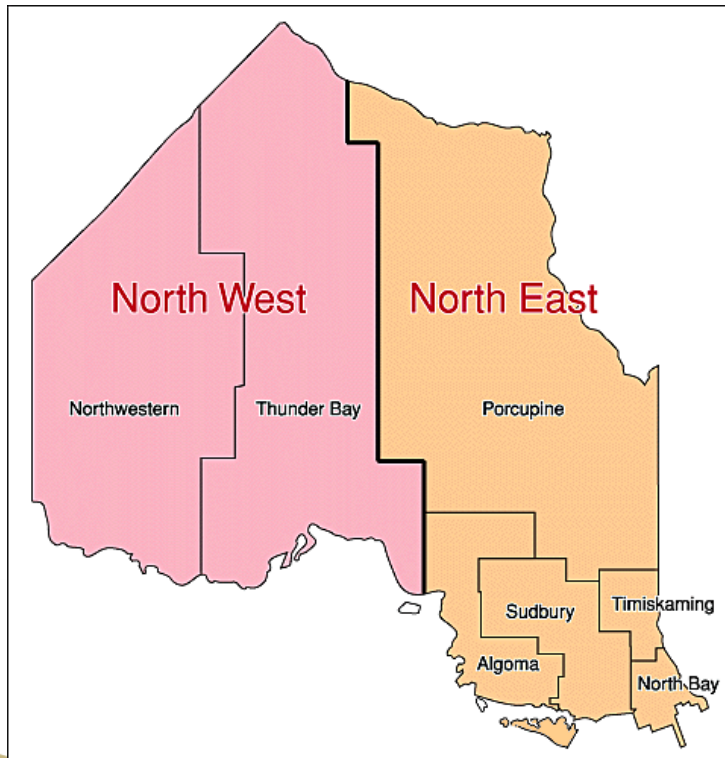
May 24, 2006

Objectives

- To better understand the public health system in Ontario
- To better understand public health programs
- To better understand the contribution of e-Health to public health transformation

Overview of the Public Health System

- 36 areas of the province called health units, each with a board of health
- each board of health has medical officer of health

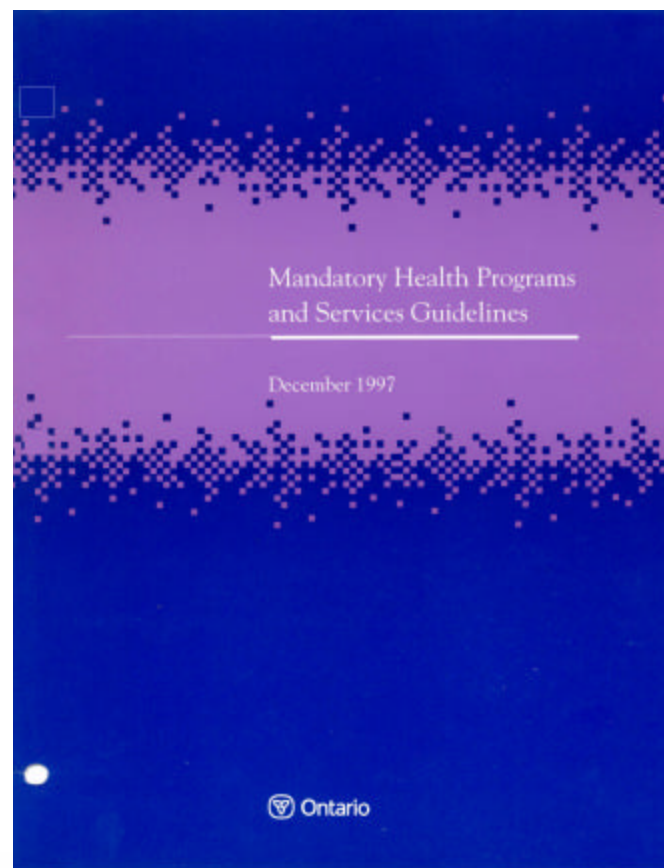


Comparison of Health Units

Characteristic	Smallest	Largest
Geographic area covered	880 sq km Toronto	650,000 sq km Thunder Bay
Population Served	38,000 Timiskaming	2,600,000 Toronto
Budget (2004 Public Health Division Approved Budgets)	\$2.5M (Timiskaming)	\$34.0M Peel \$124.0M Toronto
Number of Program Staff	38 Huron County	1,762 Toronto

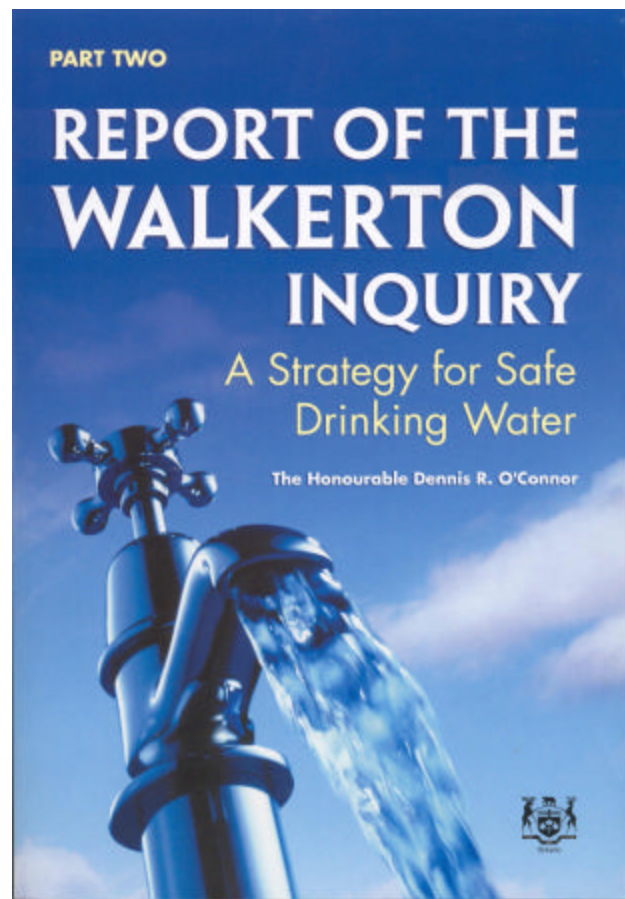
Program Mandate

- Mandatory Health Programs and Services Guidelines
 - General Standards
 - Family Health
 - Infectious Disease
 - Chronic Diseases and Injuries



Walkerton Inquiry

- Many recommendations addressing the safeguarding of our drinking water sources and supply



Naylor Expert Panel

- **Renewal of Public Health in Canada**

*A report of the National Advisory Committee
on SARS and Public Health*

October 2003

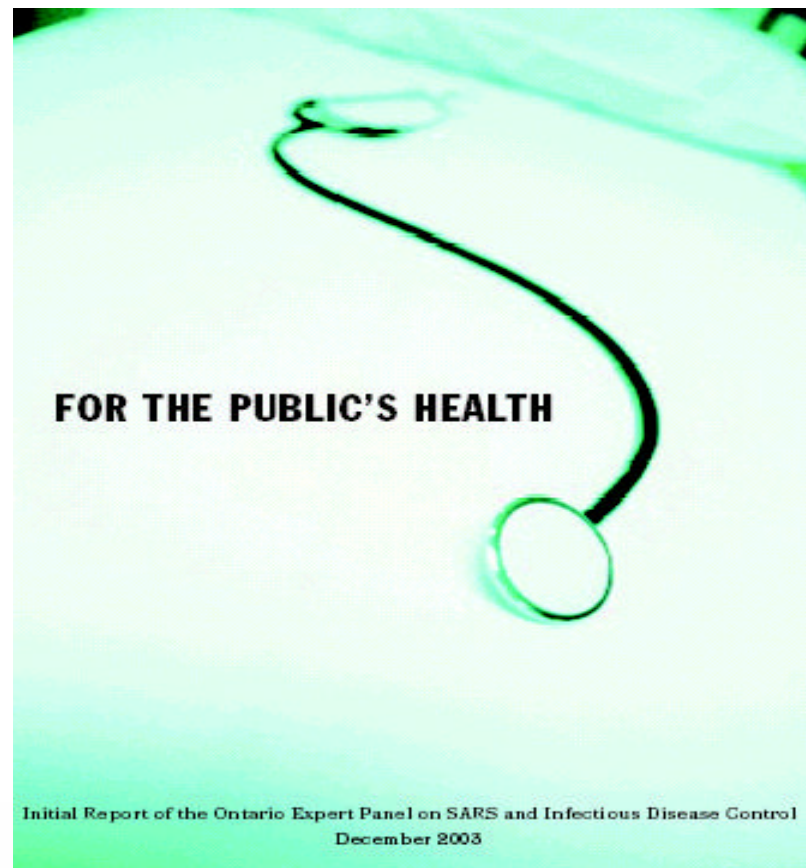


Walker Expert Panel

For the Public's Health

**Initial Report of the Ontario Expert Panel
on SARS and Infectious Disease Control**

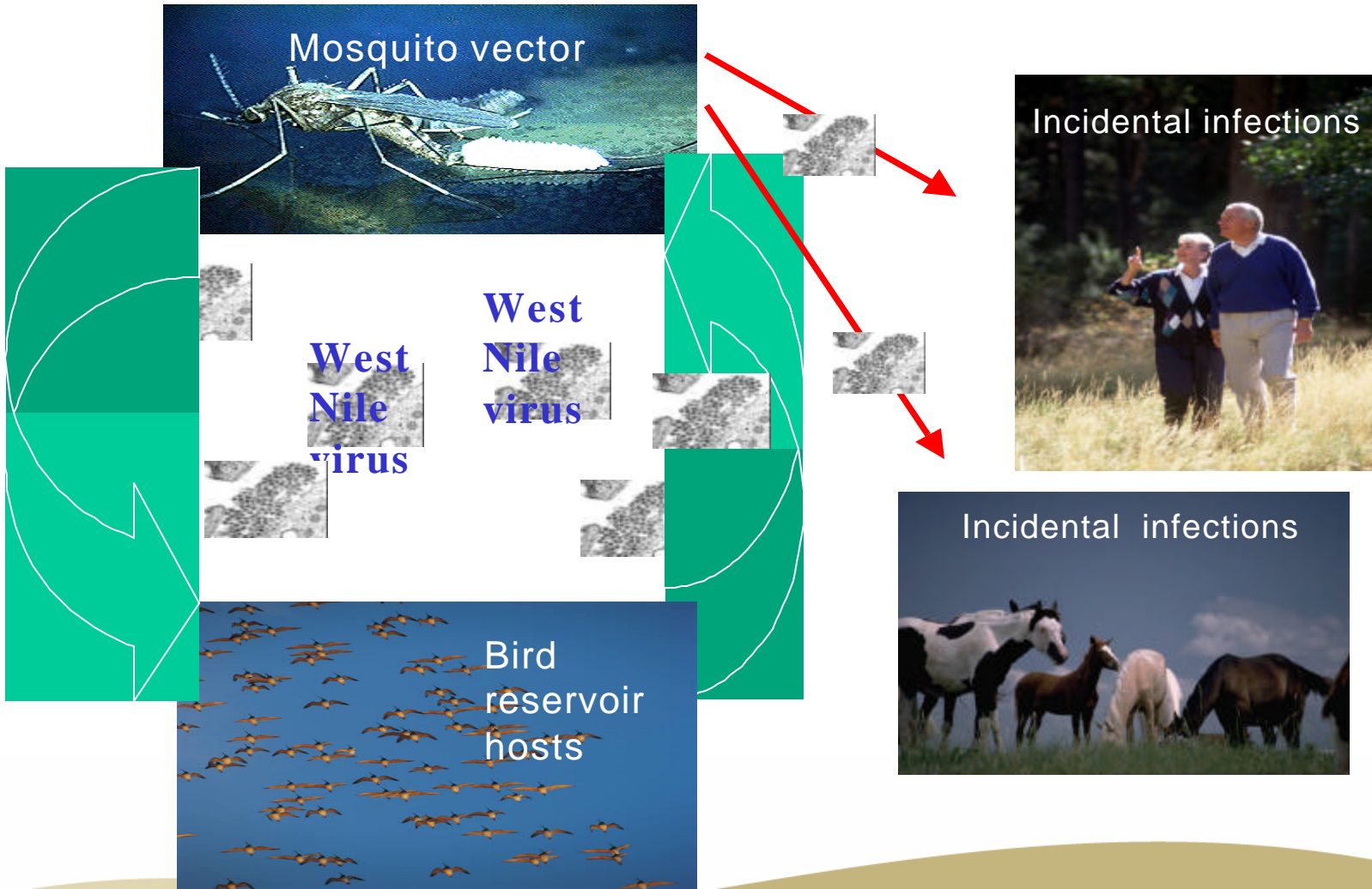
December 2003



Examples of Public Health in Action

- West Nile virus – GIS and mapping
- Influenza – Electronic health records
- Safe water – place based information systems

West Nile Virus





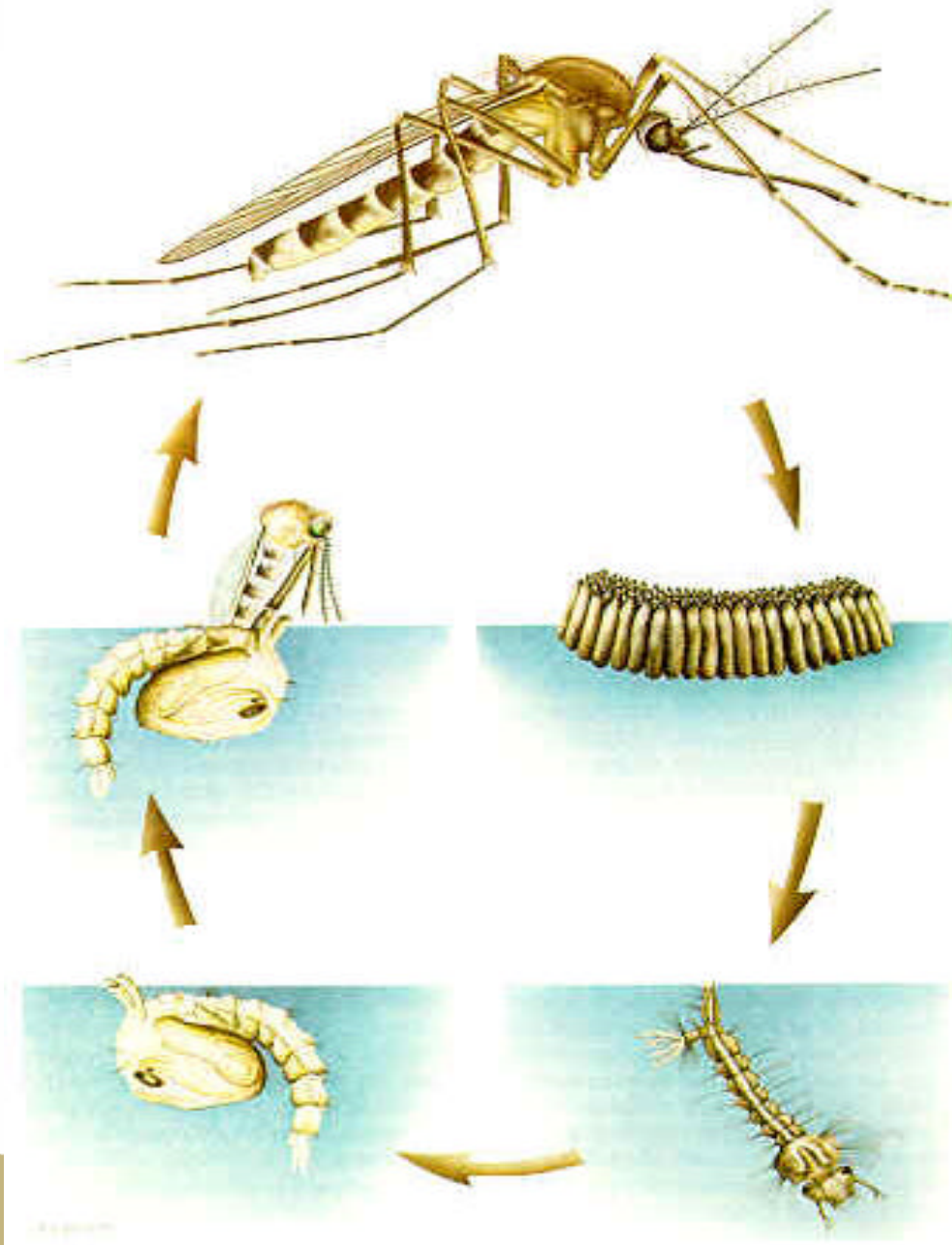
WNV Dissemination by Migratory Birds

MIGRATION CORRIDORS



To Central and South America

Culex pipiens



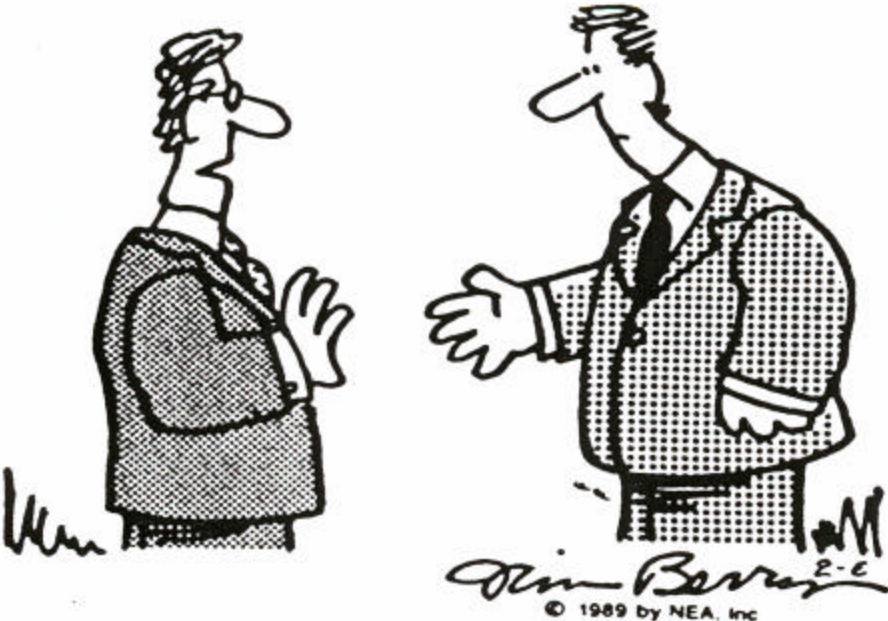
ECORC Research Branch
Agriculture and Agri-Food Canada





Influenza

YOU'VE GOT TO
BE KIDDING!
SHAKE HANDS?
AT THE HEIGHT OF
THE FLU SEASON?



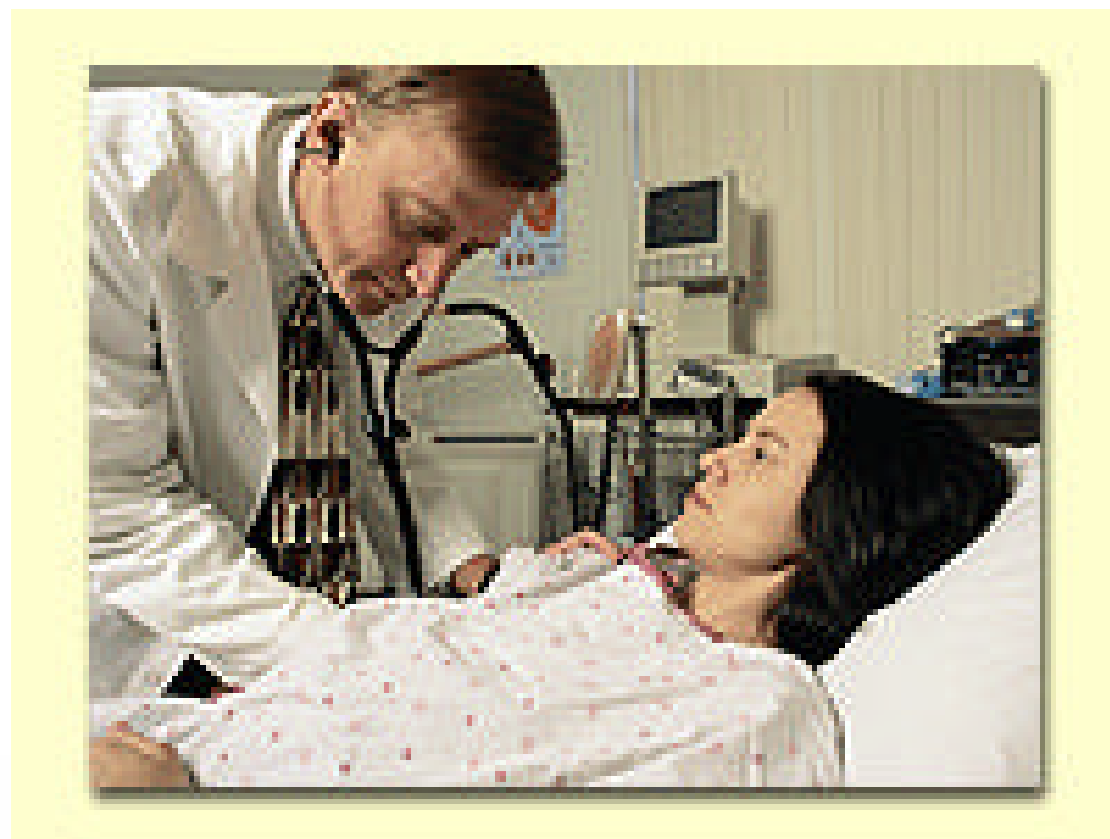
What is influenza?



From Birds Around the World...

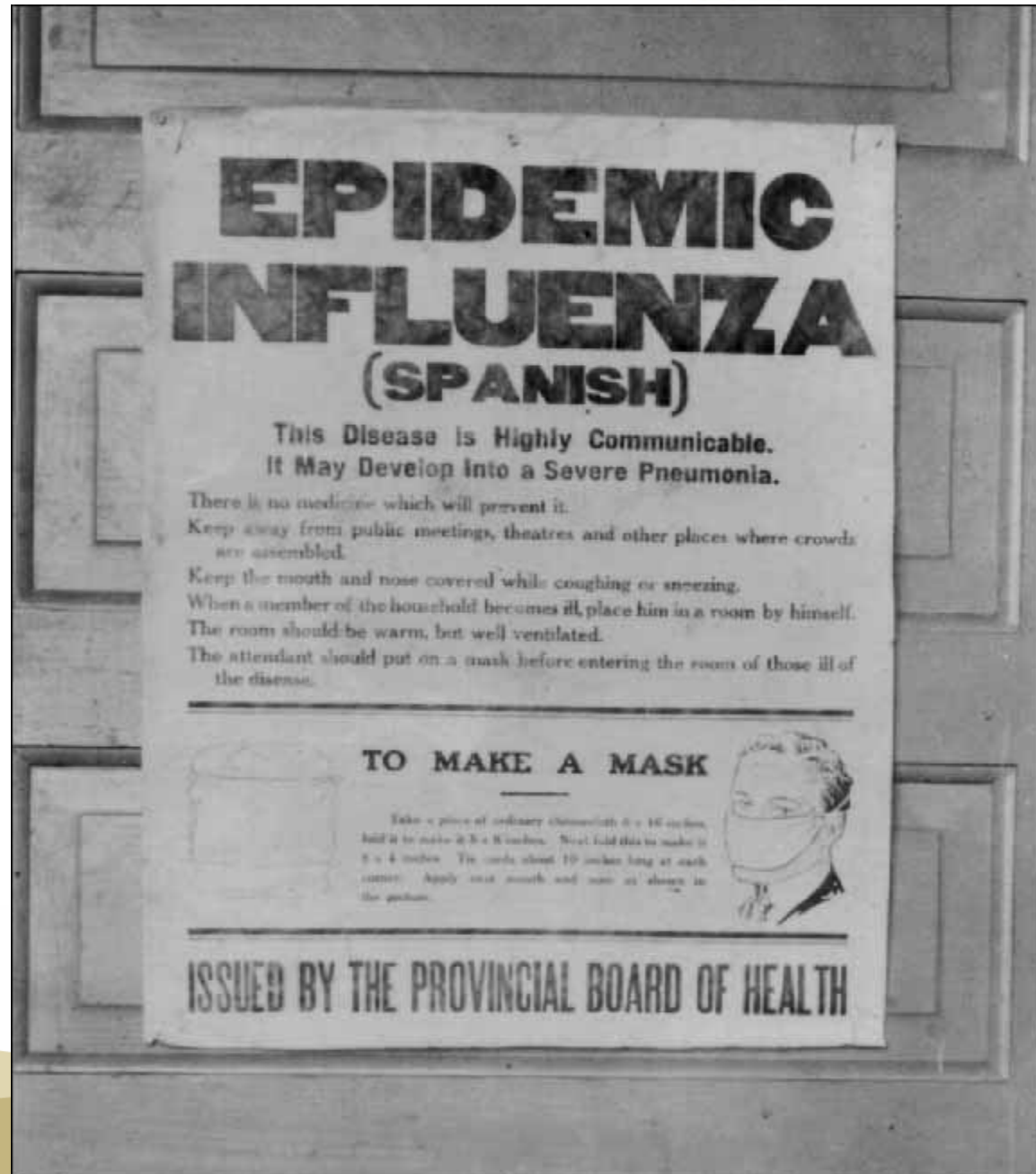


...to People in Ontario



Preparing for the Next Pandemic






**EPIDEMIC
INFLUENZA
(SPANISH)**

**This Disease is Highly Communicable.
It May Develop into a Severe Pneumonia.**

There is no medicine which will prevent it.
Keep away from public meetings, theatres and other places where crowds are assembled.
Keep the mouth and nose covered while coughing or sneezing.
When a member of the household becomes ill, place him in a room by himself. The room should be warm, but well ventilated.
The attendant should put on a mask before entering the room of those ill of the disease.

TO MAKE A MASK

Take a piece of ordinary cheesecloth 6 x 10 inches, fold it to make it 3 x 8 inches. Next fold this to make it 3 x 4 inches. The ends should be 10 inches long at each corner. Apply over mouth and nose as shown in the picture.



ISSUED BY THE PROVINCIAL BOARD OF HEALTH

Pandemics - Preparation





By September 11, 1918, influenza had spread to Boston's civilian population.



San Francisco residents, still fearful of influenza, wear masks during an armistice parade.



Safe Water

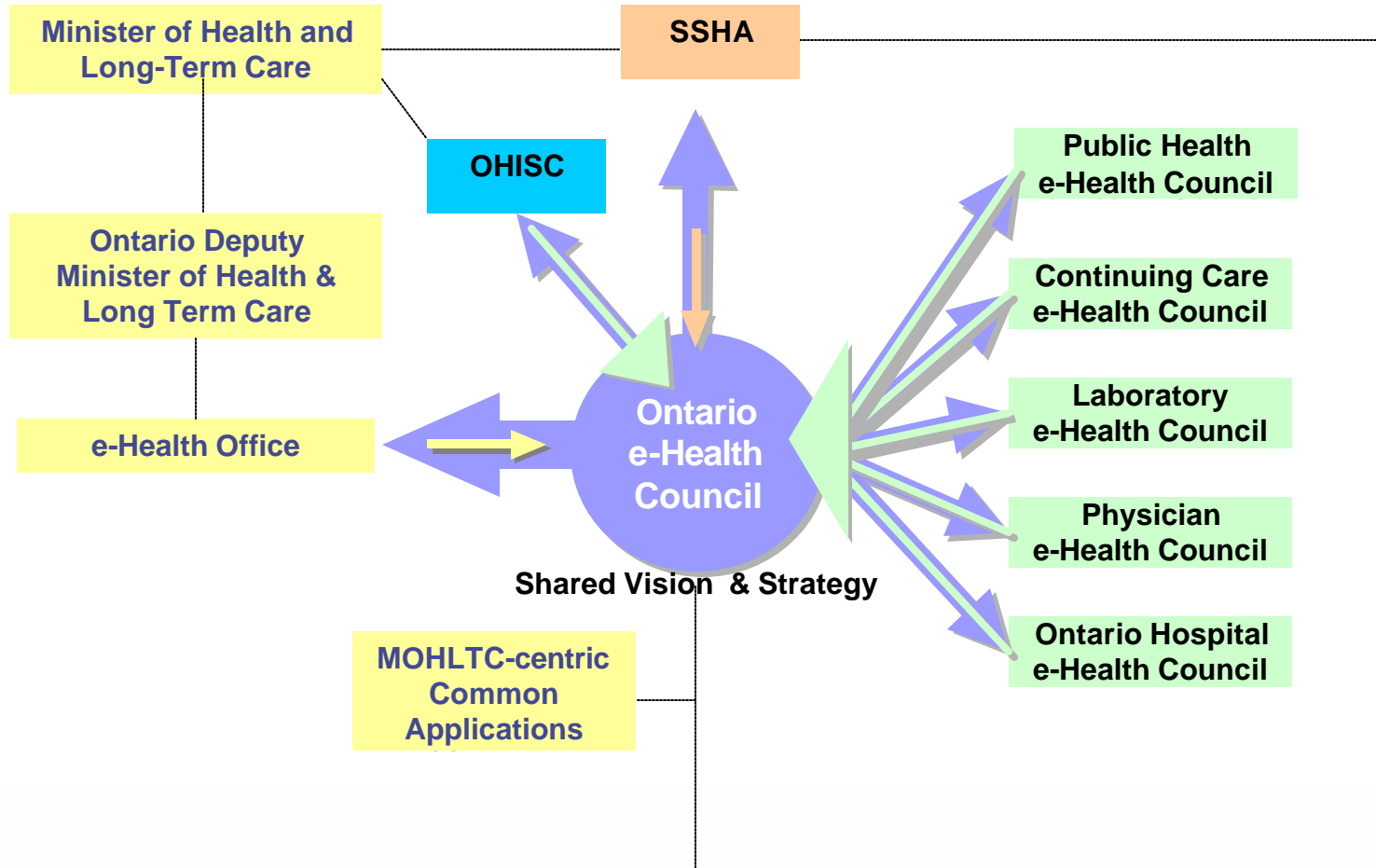






Public Health e-Health

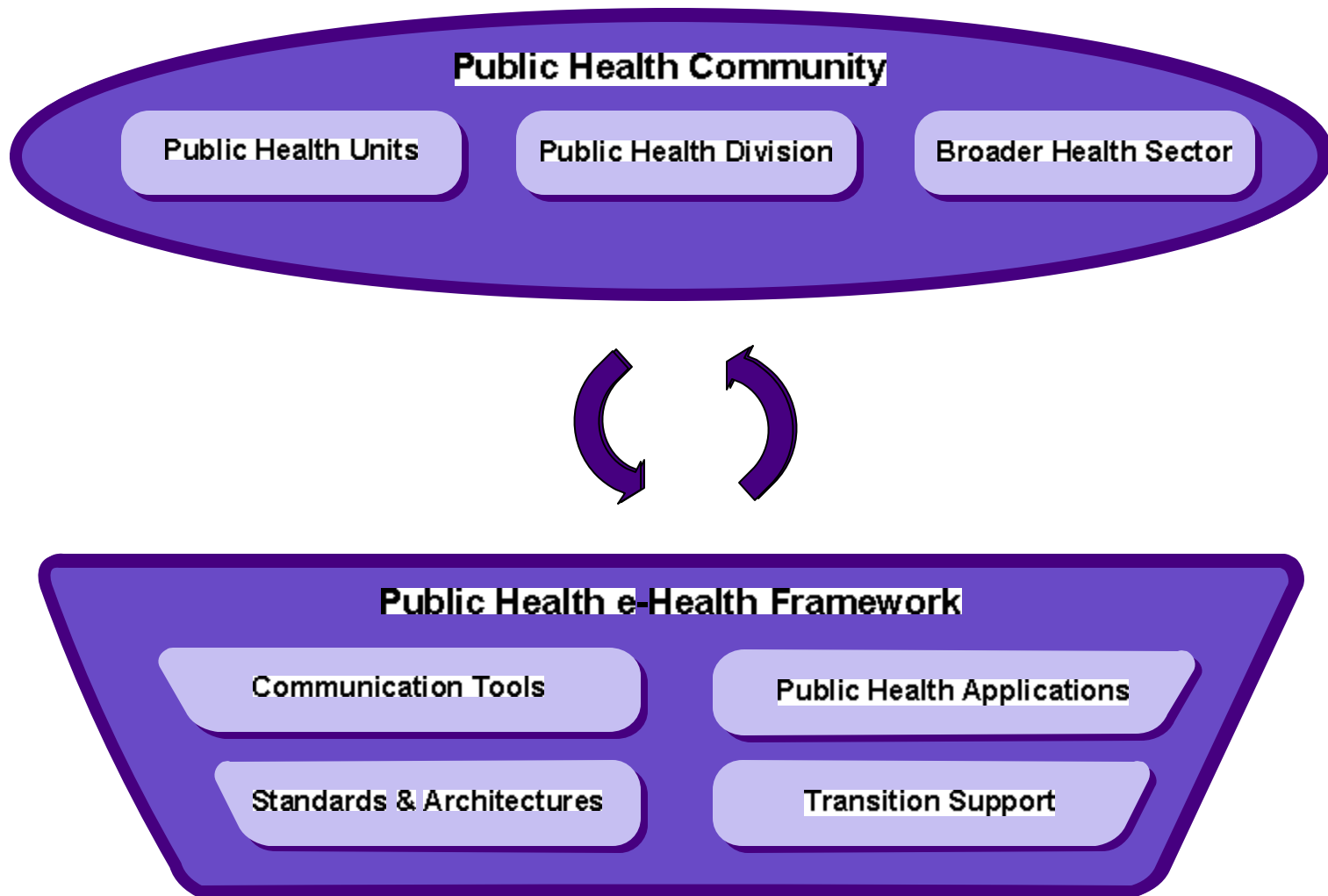
Governance and Accountability Framework



Public Health I&IT Strategy

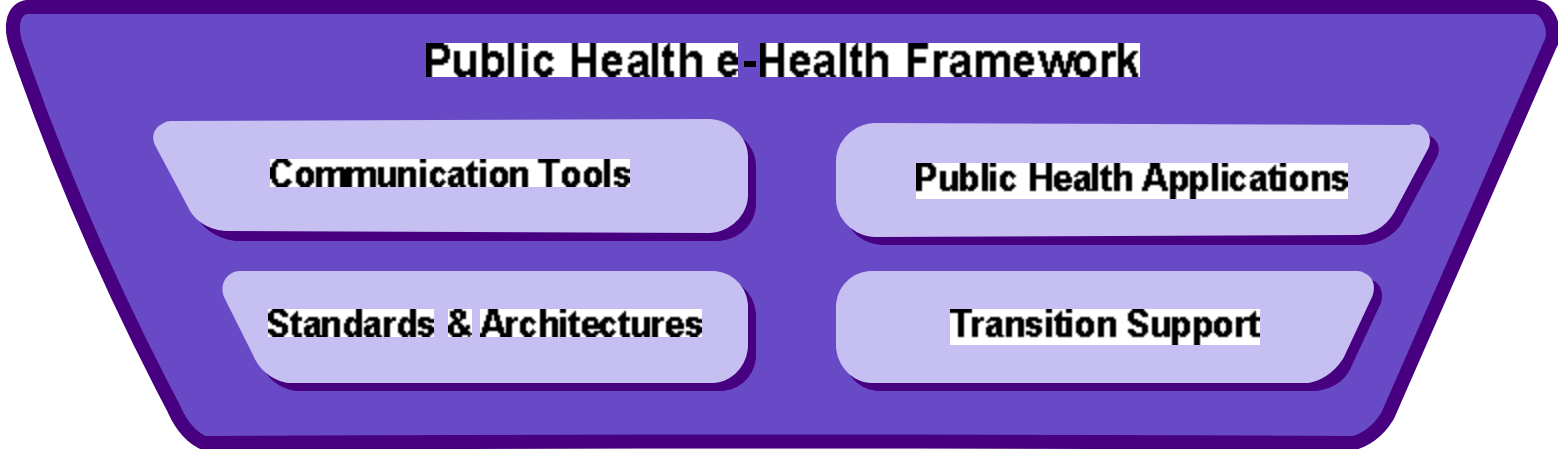
- Ensures public health system in Ontario has access to the information systems required to support its activities
- Public Health e-Health Framework comprised of:
 - Communication tools
 - Public Health applications
 - Standards and architecture
 - Transition support
- Framework enables the Public Health Community to work together more efficiently to protect Ontario's communities and renew public health

Public Health e-Health Framework



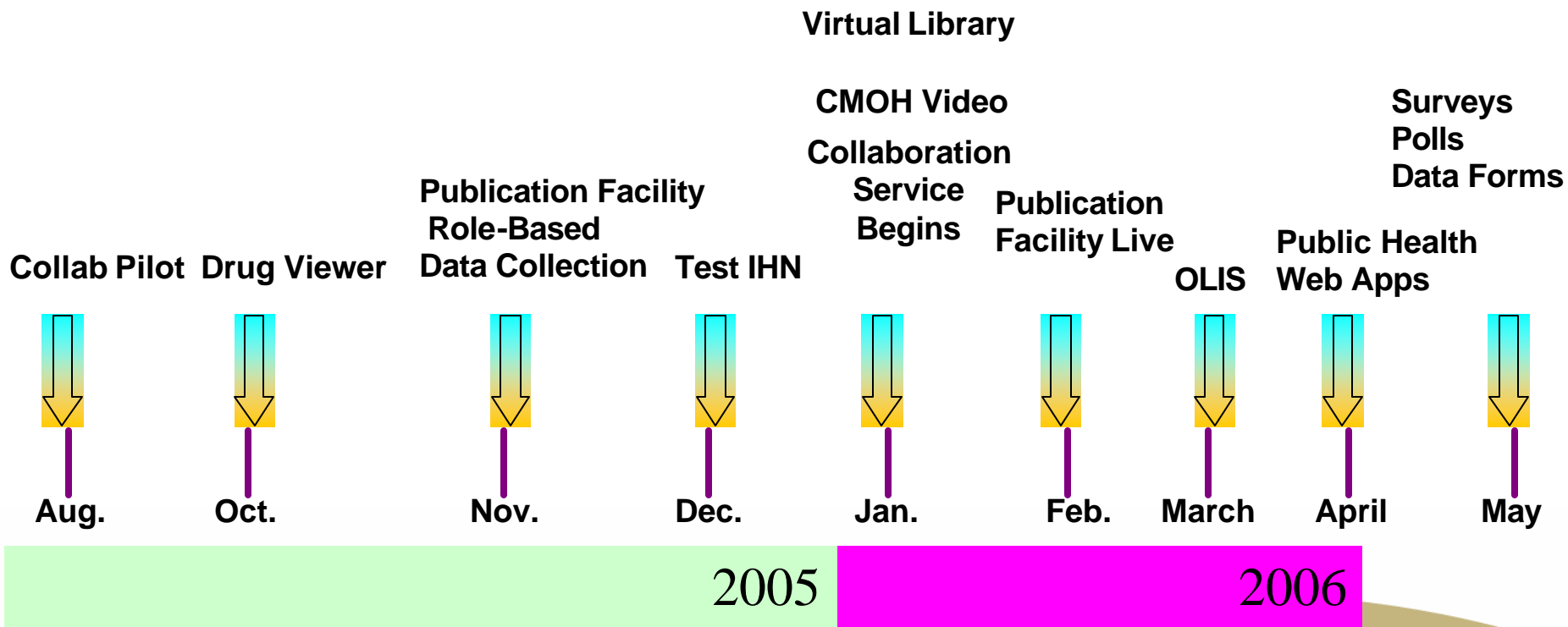
PHIIT Projects

- Public Health Communications Portals
 - PublicHealthOntario.ca
 - eHealthOntario.ca
 - Collaboration Tool
 - Publication Facility for publishing Important Health Notices
- Public Health Applications
 - integrated Public Health Information System (iPHIS)
 - Immunization Information System (IIS)
 - Public Health Inspection Information System (PHIIS)



Communication Tools - Portals

- PublicHealthOntario.ca - public health focused
- eHealthOntario.ca - serves broader health sector



- [Programs](#)
- [Public Health e-Health Council](#)
- [Support Services](#)
- [Research and Evaluation](#)
- [Learning and Development](#)
- [Projects and Committees](#)
- [Public Health Units](#)
- [Public Health Applications](#)
- [Important Health Notices](#)
- [Links](#)
- [Collaboration Pilot](#)
- [Virtual Library](#)

What's New

Final Report of the Capacity Review Committee

The Capacity Review Committee was struck in January 2005 to advise government on options to improve the function and configuration of the local public health unit system. Its Report to government was released May 4, 2006.

[More information](#)



IPHIS showcased at Health Care Expo

The integrated Public Health Information System (IPHIS) was recently chosen from more than 600 submissions to participate in the Celebrating Innovations in Health Care Expo, held in Toronto from April 19-20, 2006.

[More information](#)

Call for Abstracts

The Association of Public Health Epidemiologists in Ontario (APHEO) is calling for abstracts for its conference [Key Databases in Public Health: An Epi's Guide to the Galaxy](#), to be held in London, Ontario from October 16-17, 2006. Deadline for abstracts is August 18, 2006.

[More information](#)

A Report from the Sudbury & District Health Unit

In conjunction with the Ontario Public Health Association (OPHA), Ontario Prevention Clearinghouse (OPC) and the Association of Local Public Health Agencies (ALPHA), the Sudbury and District Health Unit completed



Important Health Notices

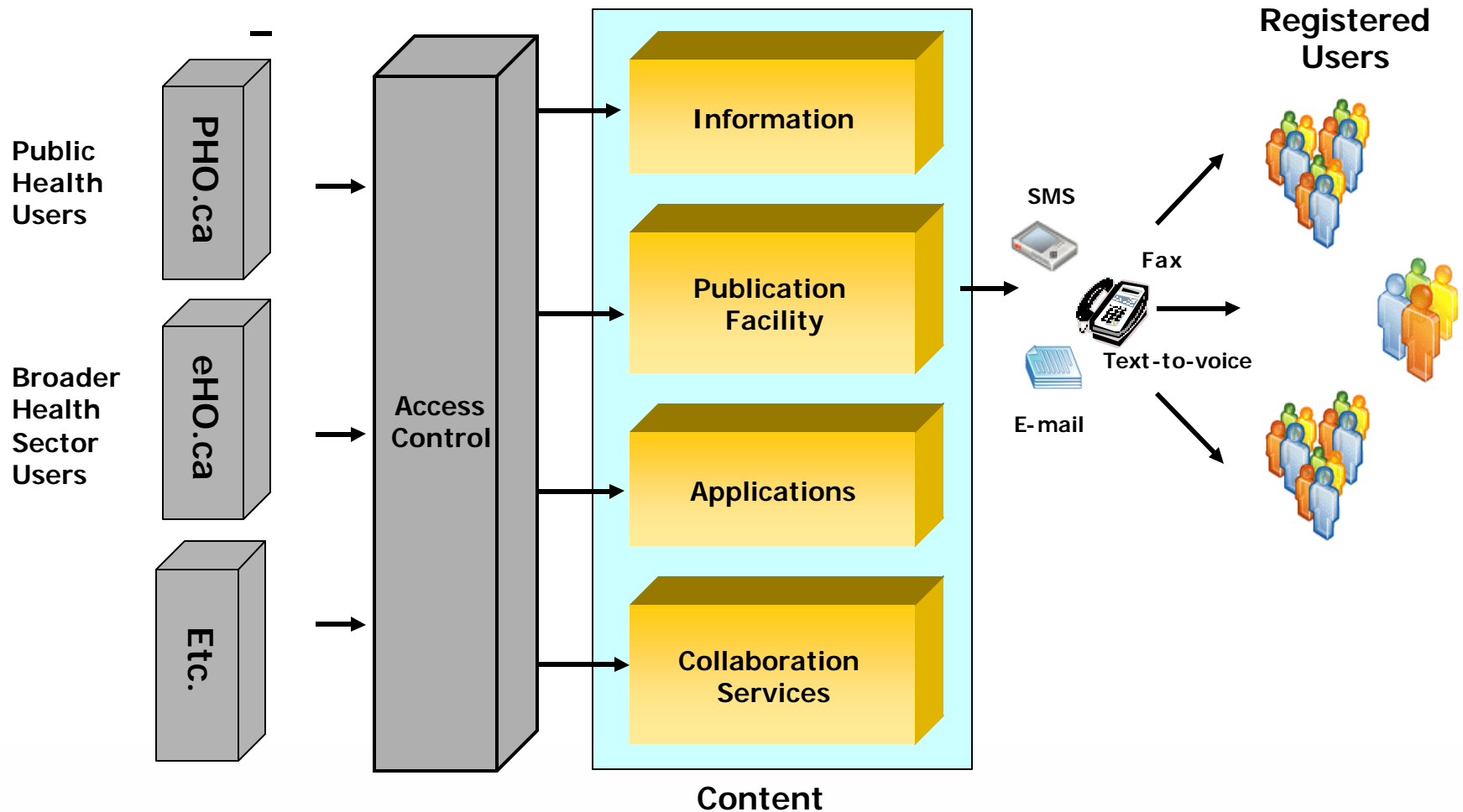
- [December 6 2005](#)
- [Influenza Update and Test](#)
- [November 07, 2005:](#)
- [Measles Cases in Ontario](#)
- [October 07, 2005:](#)
- [Legionella Outbreak in Toronto Nursing Home](#)
- [October 05, 2005: FRI](#)
- [Outbreak in Toronto Nursing Home](#)
- [October 03, 2005: FRI](#)
- [Outbreak in Toronto Nursing Home](#)



Update Contact Information

To receive Important Health Notices through e-mail or to change your current contact information please call
1-866-756-0660

Portal Conceptual Architecture

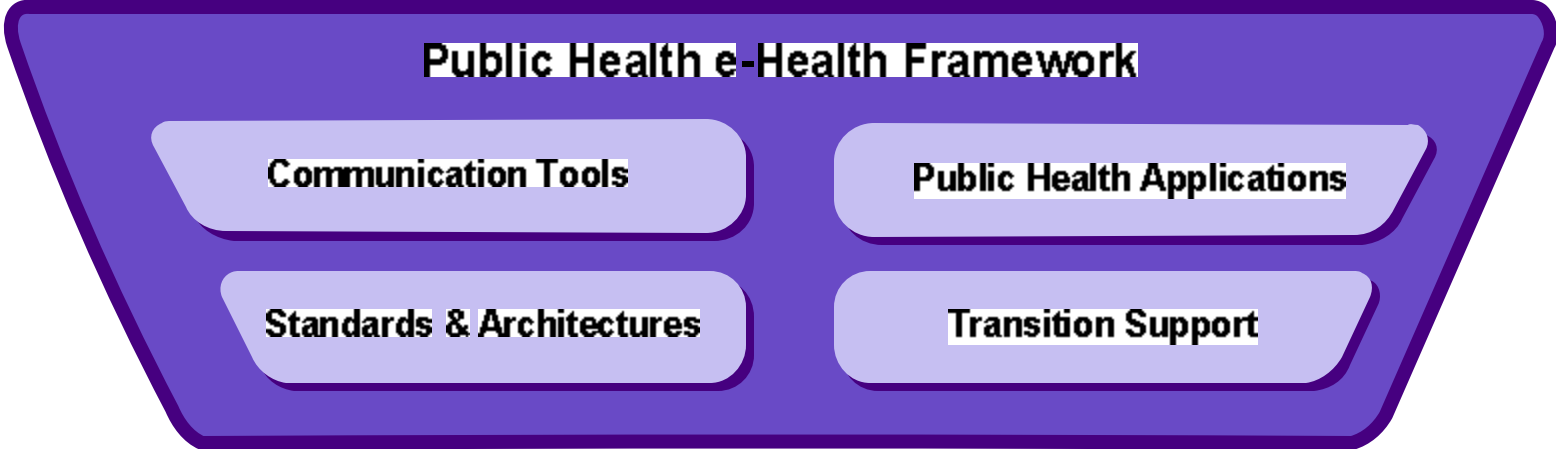


Some Collaboration Groups using the Portal

- Alzheimers Knowledge Exchange (129)
- Association of Public Health Epidemiologists (147)
- Dental Public Health Community (393)
- Ontario e-Health Architecture Board (13)
- Public Health Research and Education (69)
- Regional Infection Control Network (63)
- Seniors Health Research Transfer Network (144)
- Smoke-Free Ontario – TCAN1 (59)
- Substance Abuse Prevention Network (31)

Publication Facility Update

- Current Use is for distribution of Important Health Notices; objective is to extend to “regular communications”
- Data sources
 - MOH mailer - 34,000 recipients
 - Roles based data - 11,000 recipients
 - Five roles (medical lead, non-medical lead, admin lead, IC lead, emergency response lead)
 - Includes Ambulance/EMS, CCACs, Hospitals, LTC Homes, PH Labs, PHUs
 - Physicians have been included in the mailer (ad hoc); 06/07 deliverable is to include physicians (with associated maintenance activities)
- Performance
 - 34,000 faxes/emails sent in 4 hours



Integrated Public Health Information System (iPHIS)

- Implemented in 36 PHUs in December 2005
- Secure province-wide, integrated data and surveillance system
- Key component in enabling PHUs and the Ministry to conduct active disease monitoring and infectious disease surveillance
- iPHIS allows PHUs and PHD to standardize data collection and the reporting requirements for case identification and management, contact identification and outbreak management.
- Allows for consistent reporting

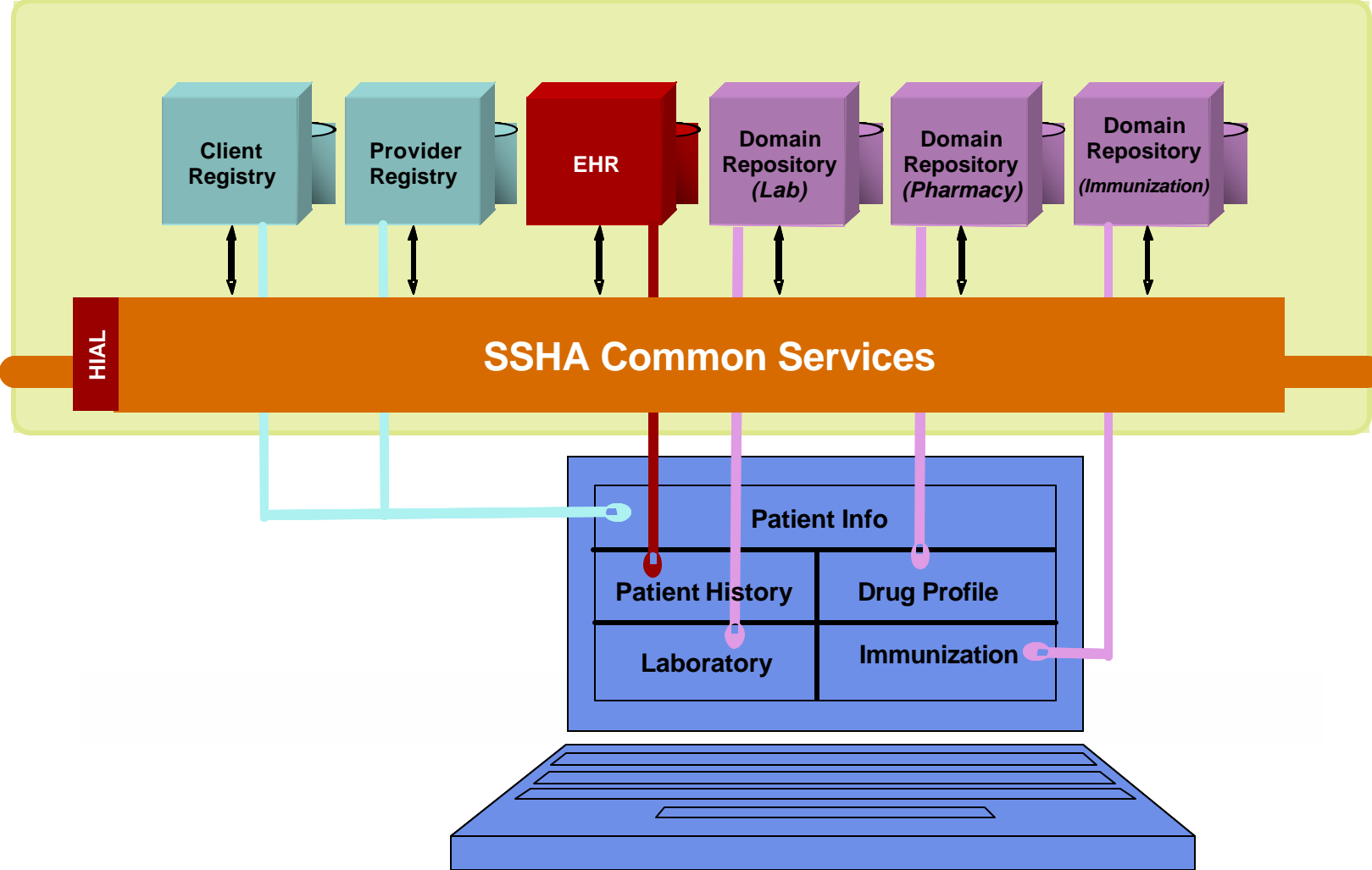
Immunization Information System (IIS)

- Will transform immunization information management by establishing a single integrated IIS
- Will include an immunization registry and vaccine ordering and distribution (VOD) modules
- Near-to-real time
- Information will be captured at each stage of the immunization process—from manufacturer to distribution of service to all Ontarians
- Ministry collaborating with Canada Health Infoway and the provinces and territories on this initiative
- Phased-in implementation

pan-Canadian PH Surveillance Solution

- Includes:
 - Communicable Disease and Outbreak Management
 - Immunizations (including Vaccine Ordering and Distribution)
 - Data standards and standards for data warehousing
 - Alerting and Notification standards
- Timelines
 - 2004 – April 2006 Requirements Specifications & Procurement
 - Rest of 2006 Software Build & Proof of Concept
 - 2007 – March 2009 Jurisdictional Deployment
- Ontario's deployment project will begin in fiscal 06/07 (pending approvals)
 - Immunization / VOD Late 06/07, 07/08
 - Next Gen iPHIS 08/09

How Does IIS Link with the EHR?



Public Health Inspection Information System (PHIIS)

- Will track and capture public health inspection activities, through an integrated system
- Will provide consistency in the information collected by PHUs, and monitor new and emerging location-based health issues
- Comprehensive system will have 15 modules, including food safety, rabies, cold chain
- Will be fully implemented over the next three years, using a phased approach. First two modules are:
 - Smoke-Free Ontario Module (SFO)
 - Small Public Drinking Water Systems Module (SPDWS)

Small Public Drinking Water Systems Module

- Consists of 18,000 small drinking water systems that serve the public, which have not been regulated for regular inspection e.g. ballpark or campground
- Field test and small pilot of risk assessment tool starting May 20, 2006
- Risk assessment begins January 2007, will take 2-3 years
- Training provided to private labs for testing water samples
- Public Health Inspectors will be trained to use PHIS

Questions?