

POPULATION DATA BC

Privacy in Health Research

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OUTLINE

Introduction

Compliance

- Legislation
 - Current
 - 2011 Amendments
- Policies
 - Responsibilities
 - Best Practices

Process

- Data Access Requests
- Data Provision
- Publication, Archiving and Destruction

Take-aways



INTRODUCTION





POPULATION DATA BC OVERVIEW

Population Data BC is a multi-university, nationally active and recognised data and education research resource providing:

- Data linkage, development, and access to what is expected to be the world's most comprehensive data source for research in human health, well-being and development.
- A comprehensive education and training service on how to best use population health data.

Expectation:

Research using these data informs policy-making, leading to healthier communities.



POPULATION DATA BC OVERVIEW

A brief history

1988	Beginning of the BC Linked Health Database
1996	Centre for Health Services & Policy Research begins serving the research community
2005	New funding secured to support:
	» Build-out of new space with enhanced physical and electronic security
	» Adding UBC partners (HELP, SOEH)
	» Adding non-health care databases
2007	Additional funding, additional (non-UBC) partners
2008	Population Data BC is born
2009	ISAs signed with BC Ministry of Health Services, BC Vital Statistics Agency and WorkSafeBC



POPULATION DATA BC OBJECTIVE 1:

Broaden and deepen data available supporting research on human health, well-being and development

Health care & health services

Medical Services Plan (BC Ministry of Health)

PharmaCare (BC Ministry of Health)

Hospital Separations (BC Ministry of Health)

Home & Community Care (BC Ministry of Health)

Mental Health (BC Ministry of Health)

Registry Data (BC Cancer Agency)



Consolidation File (Medical

& Billing) (BC Ministry of Health)

Services Registration

Births (BC Vital Statistics Agency)

Stillbirths (BC Vital Statistics Agency)

Marriages (BC Vital Statistics Agency)

Deaths (BC Vital Statistics Agency)



WorkSafeBC Claim Files

(WorkSafeBC)

WorkSafeBC Firm Level Data (WorkSafeBC)



Early childhood & education

Early Development Instrument (HELP)

Middle Years Development Instrument (HELP)

BC Ambulance (BC Ambulance Service) Cardiac Services

(Cardiac Services BC)

Physicians & Surgeons File (College of Physicians & Surgeons BC) Citizenship & Immigration Canada (Citizenship & Immigration Canada (Federal))

WorkSafeBC Exposure Data (WorkSafeBC)

BC K-12 Student Standard Testing School & District (BC Ministry of Education)



LEGISLATION





Scope

Section 3 Scope

- **3** (1) This Act applies to all records in the custody or under the control of a public body, including court administration records, but does not apply to the following:
 - (e) a record containing teaching materials or research information of
 - (i) a faculty member, as defined in the *College and Institute Act* and the *University Act*, of a post-secondary educational body,
 - (ii) a teaching assistant or research assistant employed at a postsecondary educational body, or
 - (iii) other persons teaching or carrying out research at a postsecondary educational body;

May exclude primary (researcher-collected) data from FIPPA

- Only if collected for the purposes of teaching or researching as a faculty member, teaching assistant, research assistant etc.
- Must still meet ethics and research agreement obligations as appropriate



Section 33.1 Disclosure inside and outside of Canada

33.1 (1) A public body may disclose personal information referred to in section 33 inside or outside Canada as follows:

(s) in accordance with section 35 [disclosure for research or statistical purposes];

Provides authority for disclosure



Section 35 Disclosure for Research for Statistical Purposes

- **35** (1) A public body may disclose personal information in its custody or under its control for a research purpose, including statistical research, only if
 - (a) the research purpose cannot reasonably be accomplished unless that information is provided in individually identifiable form or the research purpose has been approved by the commissioner,
 - (a.1) subject to subsection (2), the information is disclosed on condition that it not be used for the purpose of contacting a person to participate in the research,
 - (b) any data linking is not harmful to the individuals that information is about and the benefits to be derived from the data linking are clearly in the public interest,

Data not collected for research purposes can be disclosed for research purposes if:

- The research can't be done without it
- It's not harmful to individuals and is in the benefit of society



Section 35 Disclosure for Research for Statistical Purposes Continued

35 1(c) the head of the public body concerned has approved conditions relating to the following:

- (i) security and confidentiality;
- (ii) the removal or destruction of individual identifiers at the earliest reasonable time;
- (iii) the prohibition of any subsequent use or disclosure of that information in individually identifiable form without the express authorization of that public body, and
- (d) the person to whom that information is disclosed has signed an agreement to comply with the approved conditions, this Act and any of the public body's policies and procedures relating to the confidentiality of personal information.

The Data Steward has responsibilities to review and approve the application

- Security, de-identification, use only for original purpose
- Must be in the form of an agreement usually a Research Agreement



Section 35 Disclosure for Research for Statistical Purposes Continued

- **35** (2) Subsection (1) (a.1) does not apply in respect of research in relation to health issues if the commissioner approves
 - (a) the research purpose,
 - (b) the use of disclosed information for the purpose of contacting a person to participate in the research, and
 - (c) the manner in which contact is to be made, including the information to be made available to persons contacted.

Allows one to Request to Contact Individuals as Participants

- Commissioner must approve
- Not a clear or quick method of review yet



Disclosure

- **5** A designation order may authorize the disclosure of personal health information only for one or more of the following purposes:
 - (a) if disclosure is inside Canada, a purpose set out in section 4 (a) to (f) [collection and use of personal health information];
 - (b) a planning or research purpose;
 - (c) if disclosure is inside or outside Canada, a purpose set out in section 4 (i).
- **11** The data stewardship committee is solely responsible for managing the disclosure, for a planning or research purpose, of information contained in a health information bank or a ministry database.

Allows for disclosures under s14

Notes who reviews and approves applications for access



Section 14 Disclosure for Planning or Research Purposes

- **14** (1) A person who requires information for a planning or research purpose may request information from a health information bank or ministry database only by submitting to the data stewardship committee
 - (a) a request in the form and in the manner required by the data stewardship committee, and
 - (b) information required by the data stewardship committee for the purposes of evaluating the request.

Applies only to data in a Health Information Bank

Only PLIS is in a HIB at this point



Section 14 Disclosure for Planning or Research Purposes

- **14** (2) The data stewardship committee may approve the request if all of the following apply:
 - (a) the request is for a planning or research purpose;
 - (b) in the case of information from a health information bank, the disclosure is authorized under the terms of the designation order;
 - (c) in the case of personal health information requested for a health research purpose, the requirements of section 15 [disclosure for health research purposes] have been met;
 - (d) in the case of a request to disclose personal health information outside Canada, there is express consent, in writing, to the disclosure from each person who is the subject of the personal health information.

Requirements for DSC Approval

- Limited to purposes of designation order
- No disclosure outside of Canada



Section 14 Disclosure for Planning or Research Purposes

- (3) If the data stewardship committee approves the request, the administrator may, subject to any conditions set by the data stewardship committee on approving the request, disclose the information to the person who made the request.
 - (4) An administrator must not disclose information under subsection (3) except under an information-sharing agreement
 - (a) with the person who made the request, and
 - (b) made, whether or not personal health information is disclosed, in accordance with section 19 (2) and (3) [information-sharing agreements required for disclosure].

Administrator is at the Ministry of Health

- Most likely the Secretariat
- Requires an ISA



Section 15 Disclosure for Health Research Purposes

- **15** If a request for personal health information under section 14 [disclosure for planning or research purposes] is made for a health research purpose, the data stewardship committee may approve the request only if all of the following criteria are met:
- (a) the health research purpose cannot reasonably be accomplished unless personal health information is disclosed;
- (b) personal health information is disclosed on condition that it not be used for the purpose of contacting a person to participate in the health research, unless the commissioner approves
 - (i) the health research purpose,
- (ii) the use of disclosed personal health information for the purpose of contacting a person to participate in the health—research, and
- (iii) the manner in which contact is to be made, including the information to be made available to persons contacted;
- (c) any record linkage is not harmful to the individuals who are the subjects of the personal health information and the benefits to be derived from the record linkage are clearly in the public interest;
- (d) the data stewardship committee has imposed conditions relating to
 - (i) security and confidentiality,
 - (ii) the removal or destruction of individual identifiers at the earliest reasonable time, and
 - (iii) the prohibition of any subsequent use or disclosure of personal health information without the express authorization of the data stewardship committee.

Mirrors FIPPA s35



History of Amendments

Process

Who was involved?

- Special Committee to Review the Freedom of Information and Protection of Privacy Act
- 118 submissions were received from a variety of stakeholders
- 11/35 recommendations were made to the previous special committee in 2004
- Invited written submissions, public hearings and consultation

http://www.oipc.bc.ca/pdfs/public/Rpt-FOI-39-2-Rpt-2010-MAY-31.pdf

Timeline:

- Special Committee formed 2009
- Report 2010
- First Reading October 4
- October 4 2011 Commissioners lends approval
- Second Reading Oct 19
- Committee, Report and Third Reading Oct 25
- Royal Assent Nov 14



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 - (e) a record containing teaching materials or research information of
 - (i) a faculty member, as defined in the *College and Institute Act* and the *University Act*, of a post-secondary educational body,
 - (ii) a teaching assistant or research assistant employed at a postsecondary educational body, or
 - (iii) other persons teaching or carrying out research at a postsecondary educational body;

More clear and broad definition of who may hold research information



Section 36.1 Data Linking Initiatives

- **36.1** (1) A public body participating in a new or significantly revised data-linking initiative must comply with the regulations, if any, prescribed for the purposes of this subsection.
- (2) If all the participants in a new or significantly revised data-linking initiative are a health care body, the ministry of the minister responsible for the administration of the *Ministry of Health Act* or a health-related organization as prescribed, then subsection (1) does not apply to the participants.

Entirely New Section

- Definitions of Data Linking and Data Linking Initiative in Schedule 1 of the Act
- Regulations to be promulgated by the Ministry of Labour, Citizen Services and Open Government
- Carves out "health only" projects



Section 69 General information respecting use of personal information

- **69** (1) In this section:
 - (5.3) The head of a public body that is not a ministry must conduct a privacy impact assessment in accordance with the directions of the minister responsible for this Act.
 - (5.4) **The head of a public body that is not a ministry**, with respect to a proposed system, project, program or activity, **must submit**, during the development of the proposed system, project, program or activity, the **privacy impact assessment**, if it addresses a **common or integrated program or activity or a data-linking initiative**, to the commissioner for **the commissioner's review and comment**.
 - (5.5) The head of a public body must **notify** the commissioner of a data-linking initiative or of a common or integrated program or activity at an early stage of developing the initiative, program or activity.

For every project:

Conduct a PIA

For a Data Linking Initiative:

- Notify the commissioner at an early stage
- Submit your PIA to the OIPC for review and comment



Section 69 General information respecting use of personal information

- (5.6) If all the participants in a data-linking initiative are either a health care body, the ministry of the minister responsible for the administration of the *Ministry of Health Act* or a health-related organization as prescribed, then
 - (a) subsections (5.3), (5.4) and (5.5) do not apply with respect to a participant that is a **health care body or a health-related organization** as prescribed, and
 - (b) subsections (5), (5.1) and (5.5) do not apply with respect to a participant that is the ministry of the minister responsible for the administration of the *Ministry of Health Act*.

If all participants are a health care body, Minister or related organisation:

- You don't have to provide notice to the OIPC or CIO
- You don't have to conduct a PIA
- You don't have to send your PIA to the OIPC or CIO if you write one anyways



Next Steps

- Promulgation of regulations
- Ministerial orders
- Templates, guides and instructions
- Public body's policies & procedures
- PIA workshops and resources



Working in Multiple Jurisdictions

What legislation applies and when?

International:

- EU Directive
- PATRIOT Act

Federal:

- PIPEDA
- Privacy Act

Provincial:

- FIPPA, E-Health, PIPA (BC)
- PHIA, FOIP, PIPA (AB)
- FIPPA, MFIPPA, PHIPA (ON)

Substantively similar provincial legislation preempts PIPEDA.

- All legislation applies unless it specifically specifies otherwise
- Researcher's responsibility to determine which legislation applies







APPLICATIONS

Responsibilities

Principal Investigator

Ensuring application provides details and information required by DAR, legislation etc.

Research Ethics Board

Having reviewed the application for ethical, privacy and confidentiality concerns

Data Steward

 Ensuring that the disclosure and subsequent use, storage and access are consistent with requirements of FIPPA

Population Data BC

- Provide support, information and process and requirements
- Coordinating the application with all Data Stewards, ensuring it is complete and accurate

Applications can become an addendum to legal documents such as Research Agreements



MONITORING

Responsibilities

Principal Investigator

Behaviour and access of entire research project team

Research Ethics Board

Amendments

Data Steward

Responding to incident notices, expiries, extensions and amendments

Population Data BC

- Monitoring for compliance with legislation, ethics and agreements
- Monitoring for expiries
- Managing incidents
- Coordinating amendments and extensions

Monitoring is the weakest piece of the puzzle – until recently.



BEST PRACTICES

Physical

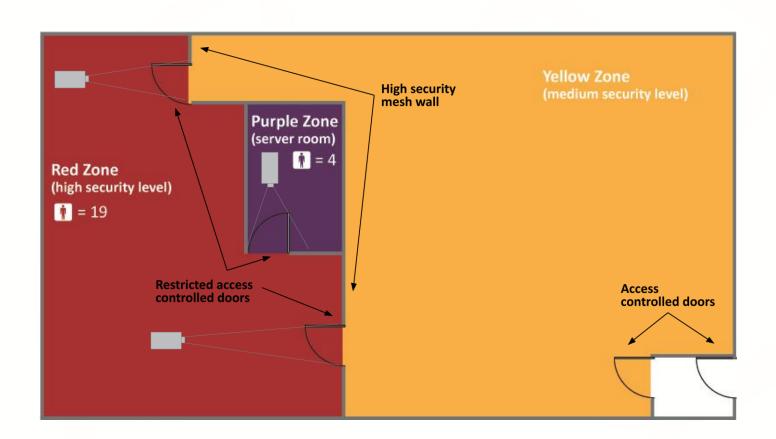
- Physical zoning with fobbed access and alarms
- Video Surveillance
- Fortification of walls
- Sign-in and escorts for visitors

Privacy by Design Principles: Preventative Controls, Privacy by Default, Embedding Privacy into Design



PHYSICAL

Security of the Population Data BC physical environment





BEST PRACTICES

Technical

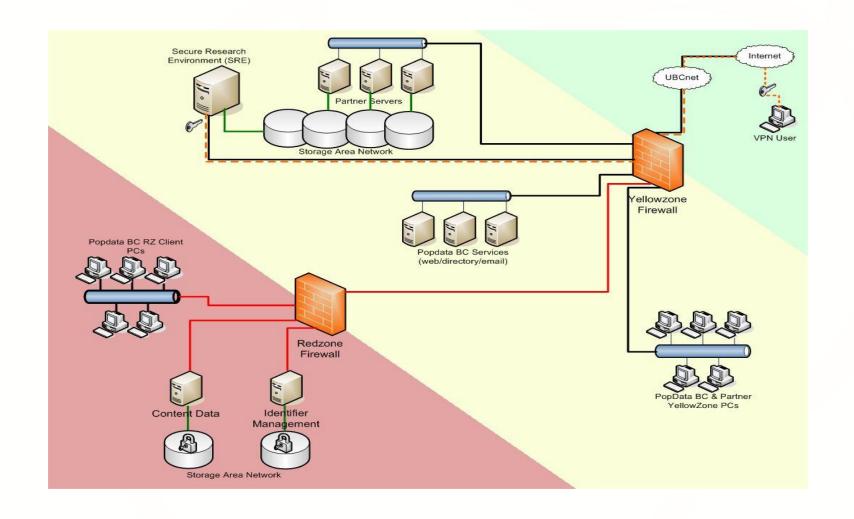
- Network Zoning with two-factor authentication
- Dummy Terminals
- Separation of identifiers from content
- Proactive linkage
- Auditing/Logging/Monitoring
- Secure Research Environment
- Encryption
- Data Destruction Methods

Privacy by Design Principles: Preventative Controls, Privacy by Default, Embedding Privacy into Design, Positive Sum Approach, Full Lifecycle Protection



TECHNICAL

Security of the Population Data BC network environment





BEST PRACTICES

Policy

- External Auditing
- Data Access Request (DAR)
- Research Data Access Framework (RDAF)
- Agreements
- Privacy Policy, Incident Response Policies and more
- Privacy Impact Assessment (PIA)
- Privacy Training (researcher and staff)
- Criminal Record Checks
- Limited, Need to Know access
- Education, literature reviews and close working relationships with OIPC and OCIO

Privacy by Design Principles: Preventative Controls, Positive Sum Approach, Respect for User Privacy



DATA ACCESS PROCESS



POPULATION DATA BC OBJECTIVE 3:

Streamlining access to data Data Access Process Overview



Stage 1: The Data Access Request (DAR)

- **A. Planning** Researcher plans DAR using resources on Population Data BC website.
- **B. Completion** Researcher completes DAR and submits it to Researcher Liaison. Researcher Liaison assesses completeness of the DAR and may request further detail.
- C. Population Data BC completes the technical section of DAR
- **D. Submission** All DARs are submitted to Data Steward(s) by Researcher Liaison on the researcher's behalf.

Stage 2: Data Steward review & approval

Data Steward(s) review, approve or reject DAR. Researcher Liaison notifies researcher.

Additional requirements - Ethics and Peer Review must be undertaken before moving to stage 3, though DAR may be approved pending successful review.

Stage 3: Contracts & Researcher Account set up

Once DAR is approved researcher signs **Research Agreement (RA)** with Data Steward(s) and signs a confidentiality pledge.

Researcher Liaison prepares a

Population Data BC - Researcher

Services Agreement and cost quote
based on the approved DAR which
formalises services and costs to be
reimbursed to Population Data BC.

Researcher Account is set up allowing access to privacy training and, for researchers using the Secure Research Environment (SRE), a SecurID token is issued and space created on SRE.

Stage 4 : Data preparation & delivery

All researchers who access data must complete online **privacy training**.

Data Services Unit (DSU) prepares data and delivers the research extract. **Data is delivered via SRE** or as per DAR.

Researcher is invoiced by Popluation Data BC as per quote.

Stage 5: Data analysis

Researcher has access to data extract as per RA typically for 2 years after delivery of first set of data, as long as privacy conditions of RA and Population Data BC - Researcher Services Agreement are met. Researcher may apply to extend data retention date.

Stage 6: Research outputs

All research outputs (including journal articles, slide decks for public presentations, and reports) produced using Population Data BC holdings must be submitted to Data Steward(s) via Researcher Liaison for review prior to public disclosure. The process requires 45 calendar days lead time.

Stage 7: Project closure

Researcher notifies Researcher Liaison of project completion.

Researcher signs and returns project closure documentation to Data Steward(s) via Researcher Liaison. Researcher Liaison works with researcher on appropriate data destruction.

Amendments to DAR

Researcher sends changes to DAR and rationale to Researcher Liaison. Researcher Liaison forwards amendment to Data Steward(s) for review.

If an amendment occurs after stage 2, a new quote will be required and additional costs will be incurred.



DATA ACCESS PROCESS

Processing times

Working with Data Stewards we aim to reduce processing times by:

- Developing strong agreements, policies and frameworks clarifying the roles and processes involved in application receipt and approval
- Moving the coordination and intake of applications to Population Data BC so that there is a single hub of communication
- Development of a single application form for all public bodies party to Population Data
 BC
- Providing researchers with technical support in defining study populations
- Developing policies and support systems to aid researchers in the completion of DARs prior to submission



DATA ACCESS PROCESS

The Secure Research Environment

The SRE is a central server accessible only via:

- an encrypted Virtual Private Network (VPN) through a firewall
- use of a SecurID token for authentication.

The SRE provides:

- Secure storage and backup
- Centralized location for access and processing of research data
- A range of software for use in data analysis
- Security standards that meet Data Steward requirements



TAKEAWAYS

- Legislation is decided by where the data is coming from and where it is going to
- Researchers are responsible, but head of the public body is liable
- Amendments have critical impact on research PIA submission
- Contact <u>rlu@popdata.bc.ca</u> for any questions on the data access process
- Contact <u>caitlin.hertzman@popdata.bc.ca</u> for more information on privacy and population health research

Researchers cannot rely on ethics review and an approved DAR, they must know their responsibilities and maintain compliance while working with the data. READ YOUR AGREEMENTS, KNOW YOUR OBLIGATIONS.



CONTACT INFORMATION

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