Health Privacy Trends in Ontario

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NIHI ePRIVACY FUNDAMENTALS COURSE

Dec 4, 2023

Agenda

- Privacy Law in Ontario
- About the IPC
- Health Privacy Trends in Ontario
  - Cybersecurity Attacks
  - Administrative Monetary Penalties
  - Artificial Intelligence

Privacy Law in Ontario

Privacy Law in Ontario

	Federal Public Sector	Private Sector	Ontario Public Sector	Ontario Health Sector
Generally applicable to	Government of Canada • E.g. federal ministries, agencies, crown corporations	Private sector businesses in Canada	Public sector in Ontario • E.g. government, ministries, agencies, hospitals, universities, cities, police, schools	Health care sector in Ontario • individuals, custodians (e.g. hospitals, clinics, pharmacies, etc.)
Laws (non-exhaustive)	• Privacy Act	• Personal Information Protection and Electronic Documents Act (PIPEDA)	• Freedom of Information and Protection of Privacy Act (FIPPA) • Municipal Freedom of Information and Protection of Privacy Act (MFIPPA)	• Personal Health Information Protection Act (PHIPA)
Oversight	Privacy Commissioner of Canada	Privacy Commissioner of Canada	Information and Privacy Commissioner of Ontario	Information and Privacy Commissioner of Ontario

The Office of the Information and Privacy Commissioner of Ontario

Information and Privacy Commissioner of Ontario

Patricia Kosseim

- Ontario's Information and Privacy Commissioner is an officer of the legislature
  - Appointed by and reports to the Legislative Assembly of Ontario
  - Independent of the government of the day
- The IPC has authority under the following laws:
  - *Freedom of Information and Protection of Privacy Act* (FIPPA)
  - *Municipal Freedom of Information and Protection of Privacy Act* (MFIPPA)
  - *Personal Health Information Protection Act, 2004* (PHIPA)
  - *Child, Youth and Family Services Act, 2017* (CYFSA)
  - *Anti-Racism Act, 2017* (ARA)
  - *Coroners Act*

IPC's Overall Role & Mandate

In addition to overseeing provincial access and privacy laws, the office of the IPC also serves the government, public institutions and the public through its mandate to:

- Resolve appeals when access to information is refused
- Investigate privacy complaints related to personal information
- Ensure compliance with the province's access and privacy laws
- Review privacy policies and information management practices
- Conduct research on access and privacy issues and provide comment on proposed legislation and government programs
- Educate the public, media and other stakeholders about Ontario's access and privacy laws and current issues affecting access and privacy

IPC'S VISION

Enhance Ontarians' trust that their access and privacy rights will be respected by ...

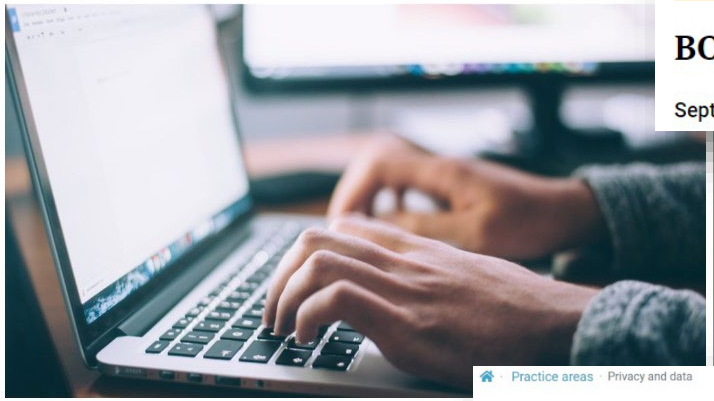
IPC's Role in the Health Sector

- Provide guidance for health information custodians (and beyond)
- Issue access and privacy decisions
- Conduct three-year reviews of prescribed entities, persons, and organizations
- Provide review and comment on health sector organization policies
- Consult with Ontario Health regarding interoperability standards (IPC also has oversight role of interoperability standards set out in regulation)
- Consult with government regarding proposed legislation and regulation
- Provide presentations and participate in other consultations with health sector organizations
- Conduct research on access and privacy issues relevant to the health sector

Health Privacy Trends in Ontario

Trend: Cybersecurity Attacks

Perinatal and child registry data breach affects health info of 3 million Ontarians



An Ontario agency that collects data on pregnancies and births in the province says a resulted in a leak of personal health information of approximately 3.4 million people.

By Tyler Griffin, The Canadian Press

Posted September 25, 2023 1:55 pm. Last Updated September 25, 2023 1:58 p

PRIVACY & SECURITY

BORN agency suffers cybersecurity attack

September 27, 2023

Canadian organizations averaged 25 cybersecurity incidents in the past year, finds EY survey Français

News / Local News

Five Southwestern Ontario hospitals scramble after cyberattack disruption

Five Southwestern Ontario hospital were scrambling to notify and accomm provider wor

Paul Morden

Published Oct 24, 20

Windsor

Cyberattack at 5 southwestern Ontario hospitals leaves patients awaiting care

The attack on 5

CBC News · Posted:

Practice areas · Privacy and data

Cybersecurity incident protection becoming prohibitively expensive as threats multiply, says

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hen attacks occur

Local News

Stolen cyberattack data includes info on every Sarnia hospital patient in last 30 years

Trevor Wilhelm

Published Nov 09, 2023 • La

News / Local News

Do more to protect patient data from cybercriminals: IT experts

Hospitals are a "treasure trove" of highly sensitive personal data that can be used for extortion, making them an ideal target for cyberattacks, says an IT expert

GTA

Michael Garron Hospital ransomware attack compromised personal data of employees, clinicians

nce numbers, bank account numbers and earnings

News / National

Hackers demanded multimillion-dollar ransom to end attack against Ontario hospitals

But even after the hackers started posting millions of patient files online, the hospitals and their shared service provider refused to pay the ransom.

Trevor Wilhelm

Published Nov 16, 2023 • Last updated 1 week ago • 3 minute read

PRIVACY & SECURITY

Cyber-thieves put hospital data on dark web

November 8, 2023

News / Local News

Southwestern Ontario hospitals confirm theft of millions of records in cyberattack

The hackers behind an ongoing cyberattack against five Southwestern Ontario hospitals stole personal details from close to 300,000 people — including more than 5.6 million records from one facility alone.

Trevor Wilhelm

Published Nov 06, 2023 • Last updated Nov 06, 2023 • 5 minute read

For the first time, top leadership from the five southwestern Ontario hospitals hit by a ransomware attack answered questions from the media — acknowledging the significant impact the incident has had on care, as well as the large amount of stolen data.

During the roughly 50-minute meeting on Friday, each hospital CEO said their facility has been hard hit by the Oct. 23 attack, but recovery is ongoing and they're getting by with the hard work of staff. With systems down and hospitals unable to access critical information, thousands of patient appointments have been cancelled across the five hospitals, creating backlogs of varying lengths at some of the facilities.

Spark

Paying ransom for data stolen in cyberattack bankrolls further crime, experts caution

Ceding to demands can alert other hackers, with no guarantee access will be granted

Jason Vermes · CBC Radio · Posted: Nov 18, 2023 4:00 AM EST | Last Updated: November 18

Cybersecurity Attack Trends

- The number and types of attacks are increasing
  - Last year, the Canadian Centre for Cybersecurity blocked up to 5 billion attempts on Government of Canada systems *per day*
  - Tactics are no longer limited to locking down information; now usually include threats to expose sensitive information
- Victims are increasingly including public institutions; hospitals are a common target
- Bigger payouts: the average ransom paid in Canada in 2022 was over $250,000
- Lower bar for entry: it's easier than ever to be a cyber criminal
- Pandemic and movement to work-from home has expanded the "threat surface"
- "Collective defense" is being explored in the health sector

PHIPA Decisions Related to Cybersecurity Attacks

- Decision 210: Cyberattack on a public hospital
  - Several hospital systems were accessed through a password-spraying attack that compromised a privileged account
  - Concerns about account privileges, system protections, strength of passwords, and notification timelines
- Cyberattack on laboratory system
  - The IPC undertook a joint investigation with the IPC in BC which found that the company failed to implement reasonable safeguards to protect the PHI of millions of Canadians
  - Jointly, the IPC in Ontario and BC ordered the organization to:
    - Improve specific practices regarding information technology security
    - Formally put in place written information practices and policies with respect to information technology security
    - Cease collecting specified information and to securely dispose of the records of that information which it has collected
  - The Ontario IPC issued the following additional orders:
    - To improve its process for notifying individuals
    - To clarify and formalize its status with respect to the custodians in Ontario with whom it has contracts

IPC Resources

- Unmasking Digital Threats: How to Guard Against Cyber Crime (Podcast)
- Detecting and Deterring Unauthorized Access to PHI (Guidance)
- How to Protect Against Ransomware (Technology Fact Sheet)
- Responding to a Health Privacy Breach: Guidelines for the Health Sector (Guidance)
- Protect Against Phishing (Technology Fact Sheet)

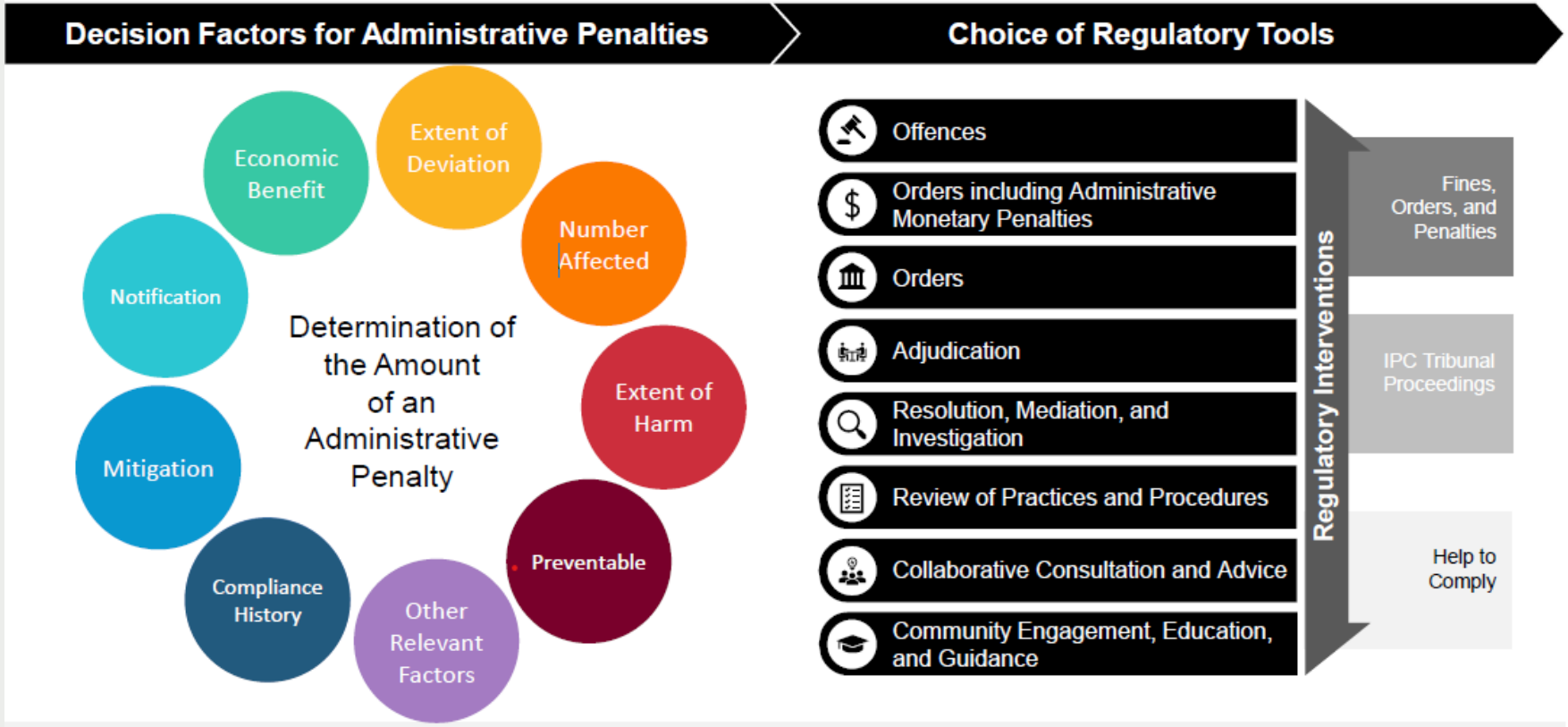
Trend: Administrative Monetary Penalties

Administrative Monetary Penalties

- Ontario is the first jurisdiction in Canada to have put in place administrative monetary penalties (AMPs) in the health sector
- As of Jan 1, 2024, the IPC will be able to issue AMPs for serious contraventions of PHIPA
- AMPs are not fines; they are a part of a progressive toolset of regulatory interventions that can be used to address PHIPA contraventions
- AMPs will help ensure that no one derives economic benefit from contraventions of PHIPA
- The regulation includes a range of penalties (max. $50,000 for an individual and $500,000 for an organization); specific amounts will depend on the particulars of each case and must not be punitive
- IPC guidance regarding AMPs will be coming soon

Administrative Monetary Penalties

Figure. Factors to consider when imposing administrative penalties, among the range of other IPC regulatory tools



Note: The left hand of this diagram is a simplified visual representation of the factors that would be considered by the IPC in determining the amount of an administrative penalty in accordance with the Proposed Regulation. The right hand side of the diagram shows how administrative penalties would become a part of a broader toolset of progressive regulatory interventions that the IPC could apply to address PHIPA contraventions depending on their severity, level of risk and potential for resolution, among other considerations. The diagram does not include all of the regulatory tools potentially available to the IPC and all of the regulatory tools identified are not available in every situation.

GUIDING PRINCIPLES Proportionate | Outcomes-Focused | Responsive | Transparent | Risk-Based | Accountable | Innovative | Trusted

Trend: Artificial Intelligence

NEXT GEN INVESTING

'Godfather of AI,' ex-Google researcher: AI might 'escape control' by rewriting its own code to modify itself

Published Wed, Oct 11 2023•8:30 AM EDT

Tom Huddlest

ARTIFICIAL INTELLIGENCE

AI and the Ascendancy of Non-Physician Providers

The evolution of care must include human and technological elements.

Posted September 21, 2023 | Reviewed by Ray Parker

Alberta Innovates is looking to enable better health through artificial intelligence

ARTIFICIAL INTELLIGENCE

Chatbots: The Future of Healthcare

Medical chatbots can encourage people to sooner.

Posted September 27, 2023 | Reviewed by Davia Sills

Thanks to generative AI, profits are up and costs are down at these businesses

Generative AI has already started to save companies millions, upending workflows, changing hiring plans and shifting investment criteria. And the enthusiasm shows , despite the caution signs

LOGY REPORTER

Local News

Artificial intelligence promises to change the way health care works

Get the latest from Elizabeth Payne straight to your inbox

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Elizabeth Payne

Published Sep 26, 2023 • Last updated Oct 02, 2023 • 5 minute read

AI-powered tool to streamline care in emergency departments receives $1.5M in funding

September 27, 2023

Microsoft launches new AI services for Health

ARTIFICIAL INTELLIGENCE, DEMOCRACY, SECURITY

Canada Needs an Artificial Intelligence Agency

Generative AI applications are just the tip of the iceberg.

Dan Ciuriak, Anna Artyushina

October 5, 2023

AI Will Help Bridge Gaps in Canadian Healthcare

October 4, 2023 Colin Hung 3 Min Read

Damian Jankowicz moves crosstown to Unity Health

November 1, 2023

TORONTO – Damian Jankowicz (pictured) joine an executive vice president and its first chief inf Health, he will steward major technological tran implements a new electronic patient record thr grow its cutting-edge AI team.

TORONTO | News

Toronto hospital network appoints chief AI scientist in bid to improve health care

Big changes on the way: Doctors say AI will improve health care

Artificial intelligence technology is already being used in Ontario to predict the future health of people based on existing health data

PEI

AI will be critical for the future of rural health care in Canada, experts say

Fewer specialists, doctors, nurses in rural Canada means AI will play a larger role

Cody MacKay · CBC News · Posted: Oct 15, 2023 6:00 AM EDT | Last Updated: October 16

Artificial Intelligence: Ethical and Privacy Concerns

- AI technologies make it possible to process tremendous amounts of personal data; in the case of generative AI, algorithms can be used to create entirely new content.
- These technologies raise serious ethical and privacy concerns, while also offering beneficial uses in certain situations.
- AI technologies, and generative AI in particular, have the potential to generate damaging content that can sustain unfair biases and put privacy and other fundamental human rights at risk.
- Strong legal and ethical safeguards are needed to ensure that AI technologies are used in an accountable, transparent, and ethically responsible manner that fosters public trust.

AI in the Health Sector Trends

- **Federal government**
  - Bill C-27, the Digital Charter Implementation Act
  - The Artificial Intelligence and Data Act (AIDA) Companion Document
  - Voluntary Code of Conduct on the Responsible Development and Management of Advanced Generative AI Systems
  - Health Canada draft guidance: "Pre-market guidance for machine learning-enabled medical devices"
  - Guidance for the responsible use of AI by government
- **Provincial governments**
  - Ontario's Trustworthy AI Framework
- **Regulators**
  - Joint statement on the use of AI technologies (Ontario IPC and Ontario Human Rights Commission)
  - IPC Ontario Comments on Ontario's Trustworthy AI Framework
  - Joint special report "Getting Ahead of the Curve" (BC and Yukon)
  - Ontario IPC joined international regulators in co-sponsoring two resolutions on AI
  - Ontario IPC participates with federal, provincial, and territorial counterparts to develop joint resolutions
- **Health sector organizations** are implementing AI solutions; creating AI-related positions
- **Educators** are offering an increasing number of AI-related courses, certificates and degree programs

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