

Ministry of the Solicitor General

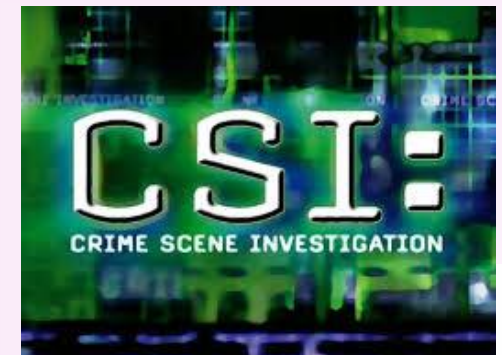
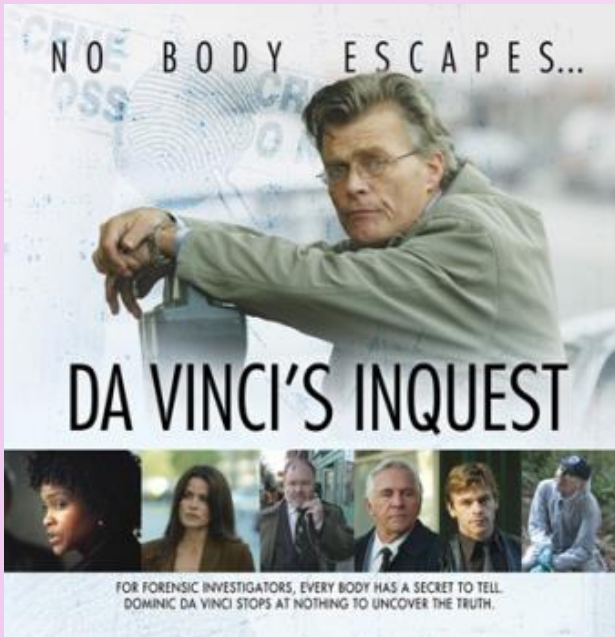
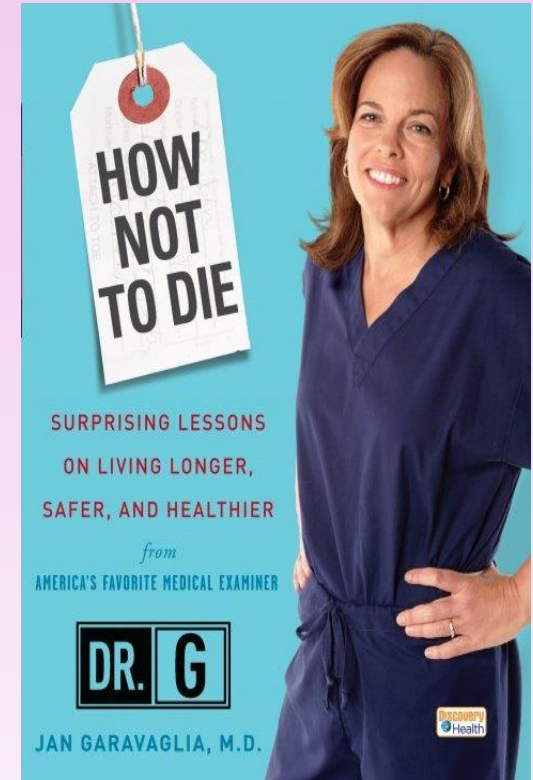
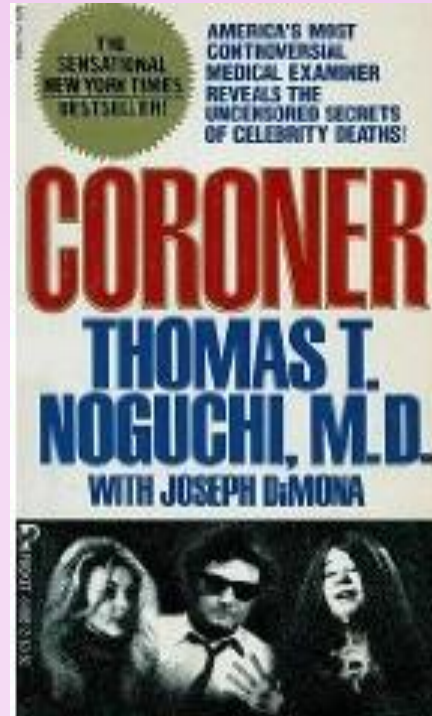
Coroners and the Investigation of Deaths in Childhood

Dr. Dirk Huyer, Chief Coroner for Ontario
Past Chair, Paediatric Death Review Committee

Dr. Joel Kirsh, Regional Supervising Coroner
Chair, Paediatric Death Review Committee

Boost CYAC, October 22nd, 2019

Coroners & Medical Examiners



Outline

- Ontario's Death Investigation System
- Duties and Powers of Coroners
- Case Selection and Classification
- Investigation of Childhood Deaths
- Expert Death Review Committees
- (Un)Safe Sleep Environments for Infants
- Future Directions

Ontario's Death Investigation System

Ministry of the Solicitor General

Ontario's Death Investigation System



Office of the Chief Coroner
(OCC)



Ontario Forensic Pathology
Service (OFPS)

OCC Structure: Coroners



Chief Coroner

Deputy Chief Coroners (2)

Regional Supervising Coroners (11)

Investigating Coroners (~300)

Coroners in Ontario

Medical model – must be licensed physician

Legally bound to answer the “Five Questions”

Public interest/preventative:

- determine if inquest necessary/not necessary
- prevent further deaths (in similar circumstances)

Broad search/seizure powers under the Coroners Act

“We Speak for the Dead, to Protect the Living”



Coroners: “The Five Questions”

Who was the deceased?

When did they die?

Where did they die?

What was the cause of their death?

How did their death occur (“manner”)?

Cause versus Manner of Death

- **Cause of death** = illness/injury that immediately led to death.
 - Coronary artery disease
 - Blunt force head injury
- **Manner of death** (“by what means”): how that occurred.
- In Ontario, there are five options:
 - **Natural, Accident, Suicide, Homicide, Undetermined**
- Undetermined is used if:
 - Not enough information to determine manner
 - Significant contest between two or more manners

Natural



Manners of Death ("By what means")

Homicide



Accident



Suicide



Undetermined



Death Investigations in Ontario

What deaths are investigated?

1. All non-natural deaths
2. Deaths in specific circumstances or environment, as specified by law
 - Vulnerable populations (e.g. custody, children)
3. Natural deaths with “issues”

Specific Natural deaths:

Mandatory Investigations in vulnerable populations



CAS



Prison/Jail



Mental Health Sites



Police custody (SIU)



Group Homes



Moms, infants

Coroner's Jurisdiction

The dead person

AND **any matters** pertaining to the dead person that are directed to:

- Answering the Five Questions, *or*
- Determining if inquest necessary, *or*
- Preventing further deaths

Coroners' Investigative Powers

Warrant Authority:

- Take Possession of a Body
- Post-Mortem Examination
- Burial (proxy for Death Certificate)

Non-Warrant Authority:

- Enter and Inspect (places)
- Inspect and Extract Information (records)
- Seize anything for the investigation (things)

Challenges in the Investigation of Childhood Deaths

Emotional responses

- Family/friends - early guilt, assignment of blame
- Healthcare/Investigators: grief reaction

Difficulty in assigning cause and manner, especially in infants

- Sudden Unexpected Deaths In Infancy:
“SIDS”, Metabolic, Cardiac, Toxicologic, Airway Obstruction

Criminally Suspicious

- Limited scene evidence
- Limited external findings - may be no evidence of traumatic injury
- Challenges associated with traumatic head injuries

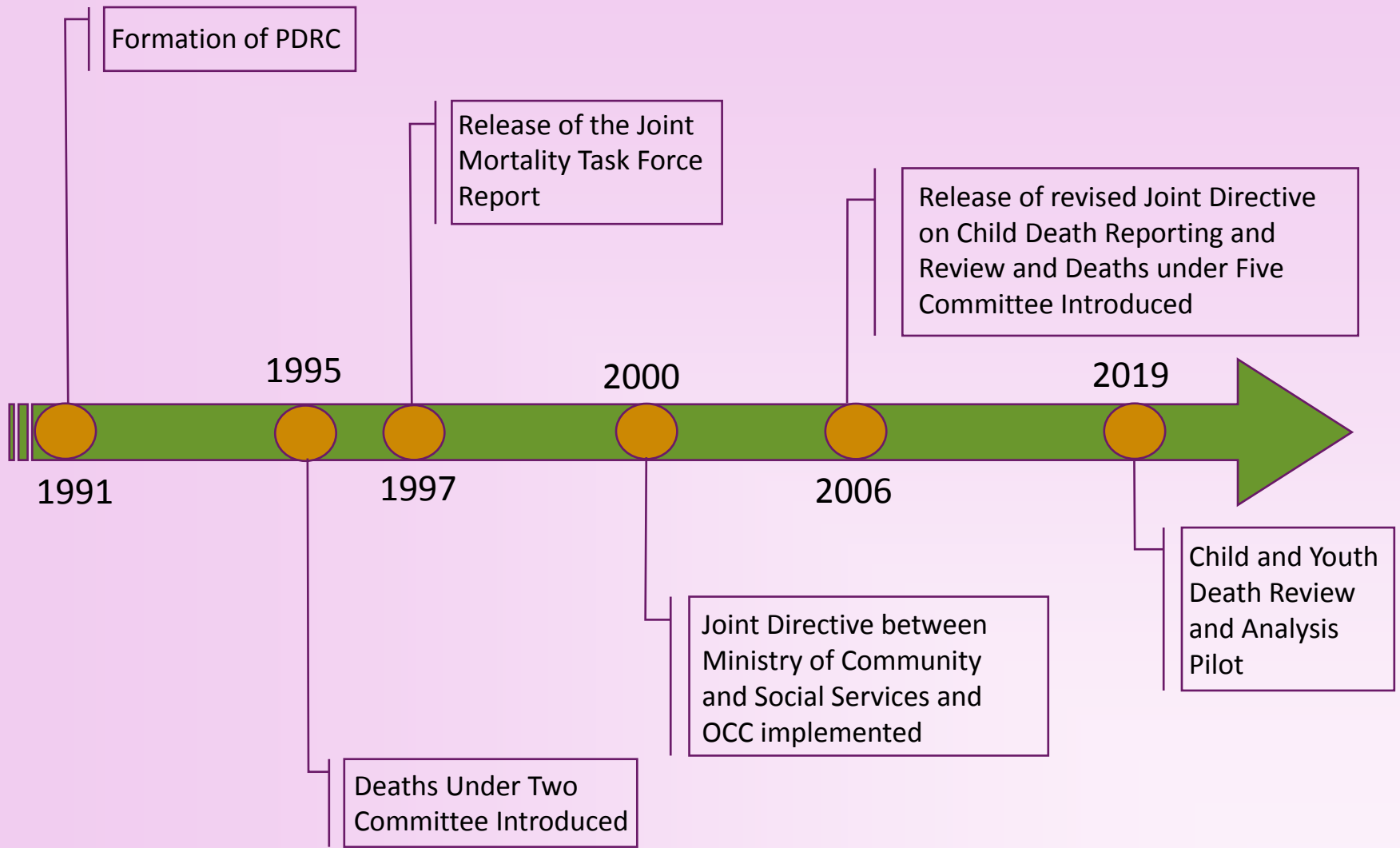
Small number of these deaths

- Limits the development of expertise

The Importance of Investigative Protocols

- Accurate investigative conclusions require data that is:
 - Accurate
 - Complete
- Paediatric Death Investigations are inherently complex
- Effects may be minimized by utilizing a defined approach
- Investigative Protocols are defined for major participants:
 - Coroners (+ data collection template)
 - Police (internal escalation)
 - Forensic Pathologists (mandatory peer review)
 - CAS (internal/external review)
- Paediatric-specific Review Committees

Paediatric Death Review Committee: A History



Expert Death Committees

The OCC's death investigation procedures provide for **expert death committee reviews** for deaths in certain circumstances.



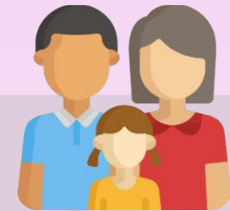
Deaths Under Five
Committee

(DU5C)



Paediatric Death Review
Committee* – Medical

(PDRC – Medical)



Paediatric Death Review
Committee* – Child Welfare

(PDRC – CW)

These committees contribute to child death prevention through careful, thorough review and discussion of childhood deaths.

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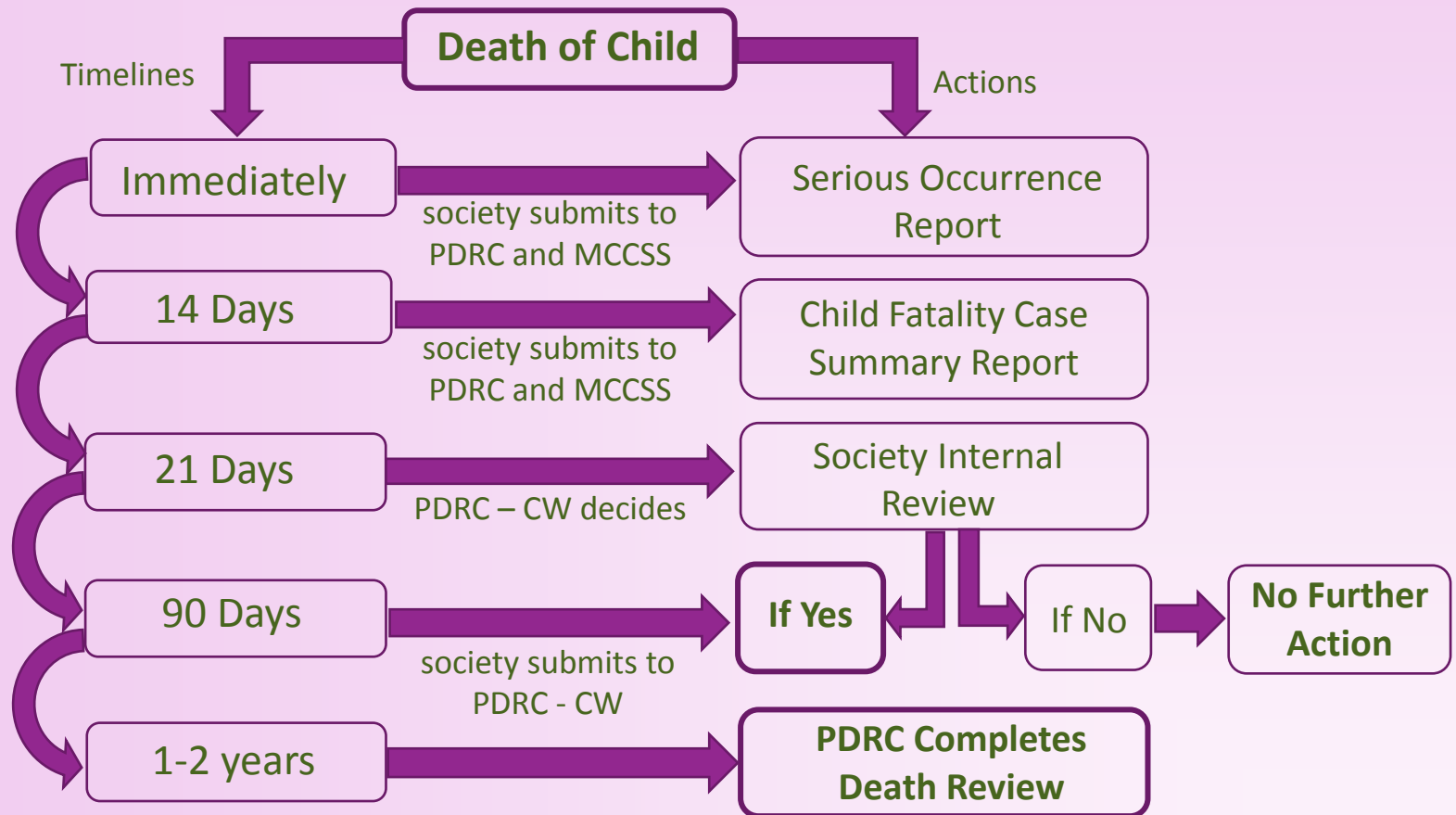
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(PDRC – CW)

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Current Model for Child Death Review and Analysis (Child Welfare Involvement)

The 2006 Joint Directive on Child Death Reporting and Review



PDRC – CW Recommendations

In 2016, the PDRC – Child Welfare reviewed **32 cases** and issued a total of **34 recommendations**.

Recommendations were made to:



Individual
Societies

MCCSS

[Formerly MCYS]

LHIN



**Police
Service**

PDRC – CW Recommendation Themes

- Enhance Service Delivery
- Reflective Learning Opportunities
- Collaboration between
 - Ministries
 - Agencies
 - Indigenous stakeholders
- Promoting information sharing

Pediatric Deaths (0-19)

	Pediatric	All
Total	1200	99,000
Coroners Investigations	600 (50%)	15,000 (15%)
Natural	34%	75%
Accident	35%	15%
Suicide	12%	5%
Homicide	8%	2%
Undetermined	11%	3%

Deaths of Children and Youth

- Pediatric population of Ontario ~ 3,000,000 children
- Approximately 1,200 deaths per year
- Approximately 600 coroners' investigations
- Estimated 100/600 child welfare involvement

M 62% > F 38%

78% less than age one year

82% undetermined;

10% homicides;

7% natural;

2% accidental

SIDS (Sudden Infant Death Syndrome)

SIDS is defined as the sudden death of an infant under 1 year of age that remains unexplained after a thorough case investigation, which must include:

- A complete autopsy
(including full skeletal survey & toxicology)
- Review of the circumstances of death
 - Examination of the death scene
 - Police investigation
 - Review of the clinical history

Unexpected Death in Infancy

If any part of the death investigation in a child under one year of age is positive then:

- the cause of death should be provided as undetermined/unascertained
- the manner of death will be recorded as “undetermined”

Examples

- a) Negative autopsy, but evidence of an old healed fracture, which has not been adequately explained by the investigation.
- b) Negative autopsy, but a previous history of child maltreatment
- c) Negative autopsy, but some positive toxicology, which although not considered to be a cause of death cannot be explained
- d) Negative autopsy, but evidence of an unsafe sleeping environment

Unsafe/Compromised Sleep Surfaces



Dangerous Sleep Environments

Sharing a sleep surface (especially a couch)

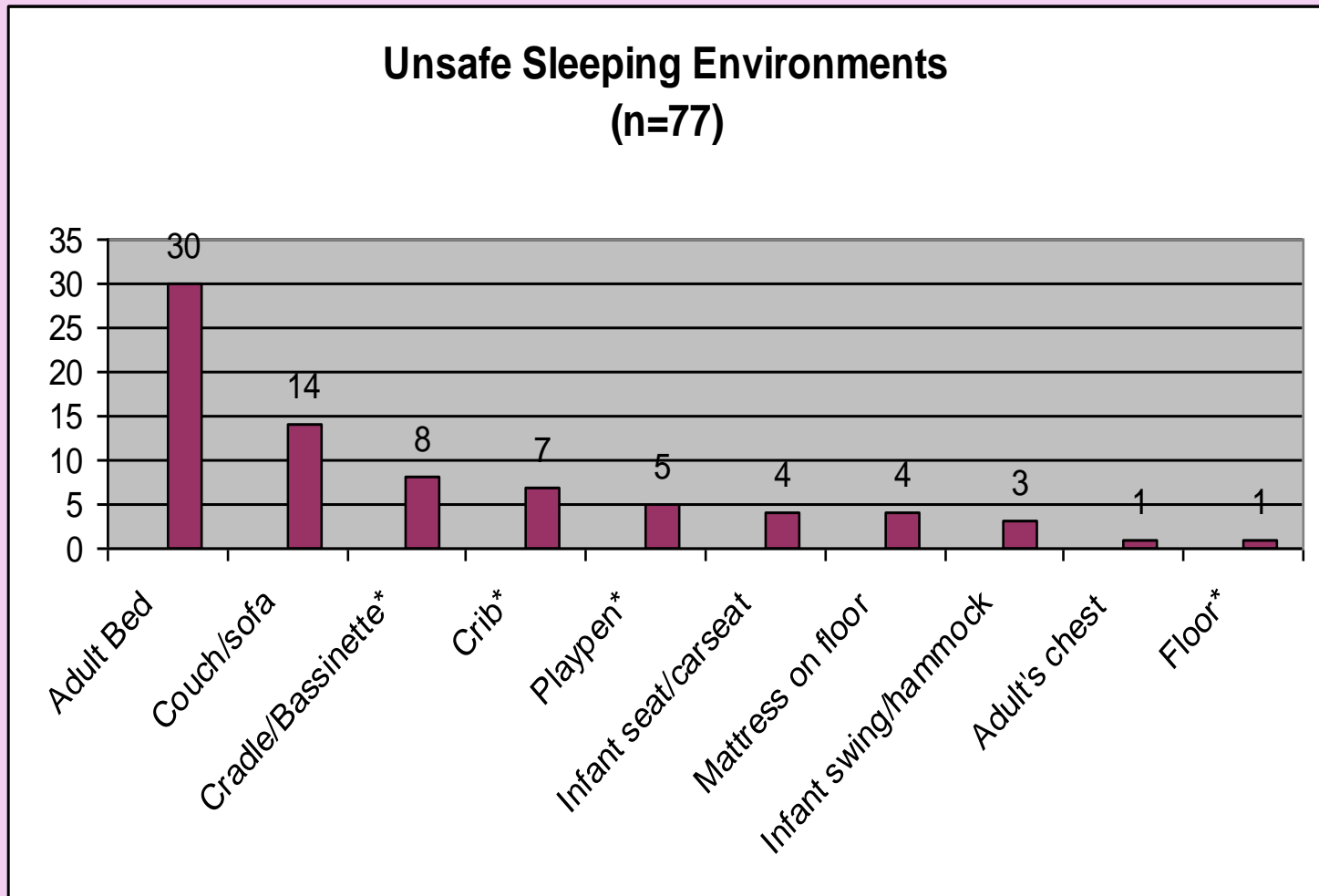
- Intoxicants—alcohol/drugs/medications
- Increased BMI (body mass index)
- Younger infants (corrected age)
- More than one person/animal
- Soft bedding accessories
- Soft mattress/water bed
- Fatigue

45-72% adults share sleep surface w infant

Historical Data (one year)

- 131 sudden and unexpected infant deaths reviewed by the DU5C
 - 50% of these deemed undetermined
 - 37% occurred in an unsafe sleep environment
 - 25/48 bed sharing
 - Manner = Undetermined

Unsafe sleep environments



The Safest Sleep Environment

Supine in an approved crib with

- A firm mattress
- Fitted sheet
- Thin blanket
- No other contents (i.e. bumper pads, toys)
- Room sharing



Challenges of the Current Model

- Minimal use of available data
- Timeliness and time commitment
- Not multi-level or tiered
- Review teams not reflective of service continuum
- Limited evidence-informed recommendations
- No information on the impact of recommendations
- Cost and effective use of resources

Best Practices for a New Model

- Employ **public health** principles and a **population health** approach
- **Multi-level** reviews – case level and systemic level
- Broad **data** collection across sectors
- **Multi-sector** reviews – representative of service spectrum
- Open **information sharing** and collaboration across sectors
- Target high-impact opportunities for **prevention**
- Evaluation of recommendation **impact**

Data Driven Public Safety: A Key Priority



A key priority of the OCC is a commitment to data driven public safety.



informs



At the **individual** level
i.e. investigators, families



At the **aggregate** level
*i.e. other cases, data over time,
other jurisdictions*

Data Driven Pediatric Death Review

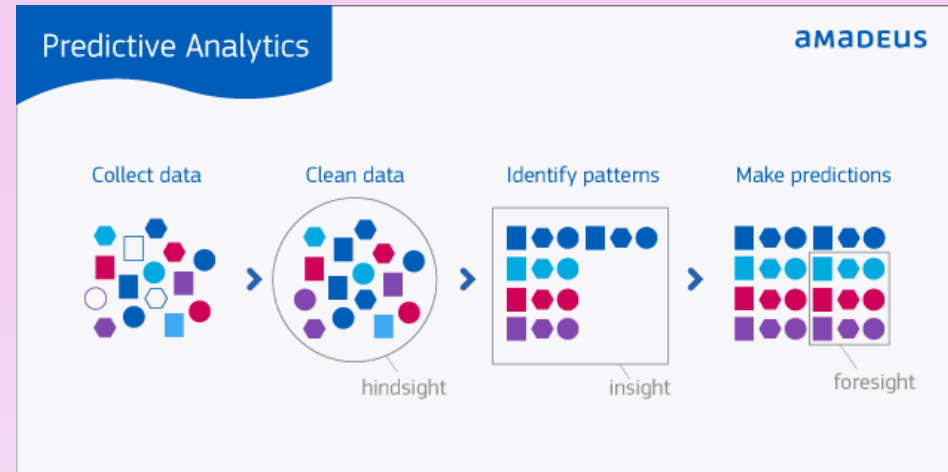
- Since 2014, the OCC has been working with the Ministry of Children, Community and Social Services and the Ontario Child Advocate to develop a “best-in-class” model of review
- New model will be piloted by March 2020 and is intended to be data-driven, evidence informed and grounded in collaborative partnerships to maximize the potential for affecting public health analysis, policy development, research and prevention strategies in Ontario.
- Objective of a new model: to improve the health, safety and well-being of Ontario’s children and youth and reduce the child mortality rate in Ontario.

CYDRA

“Child & Youth Death Review & Analysis”

Retrospective analysis of “big data”

Predictive analytics to assess risk



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CYDRA - Guiding Principles

The Child and Youth Death Review and Analysis (CYDRA) project is grounded in the principles that:

1. The circumstances of a person's death may be influenced by their intersections with various government systems throughout the course of their life; and
2. Understanding these intersections will help us better understand some of the life circumstances that lead up to a child or youth death and provide insight into potential intervention points in the interest of public health.

CYDRA Project

To complete this work, the OCC will be conducting three pilot projects:

1. Data Integration Pilot

- Data from five ministries will be integrated to inform the creation of a risk model to learn more about the life trajectories of specific individuals who have died, and to evaluate trends in particular death types.

2. Local Review Table Pilot

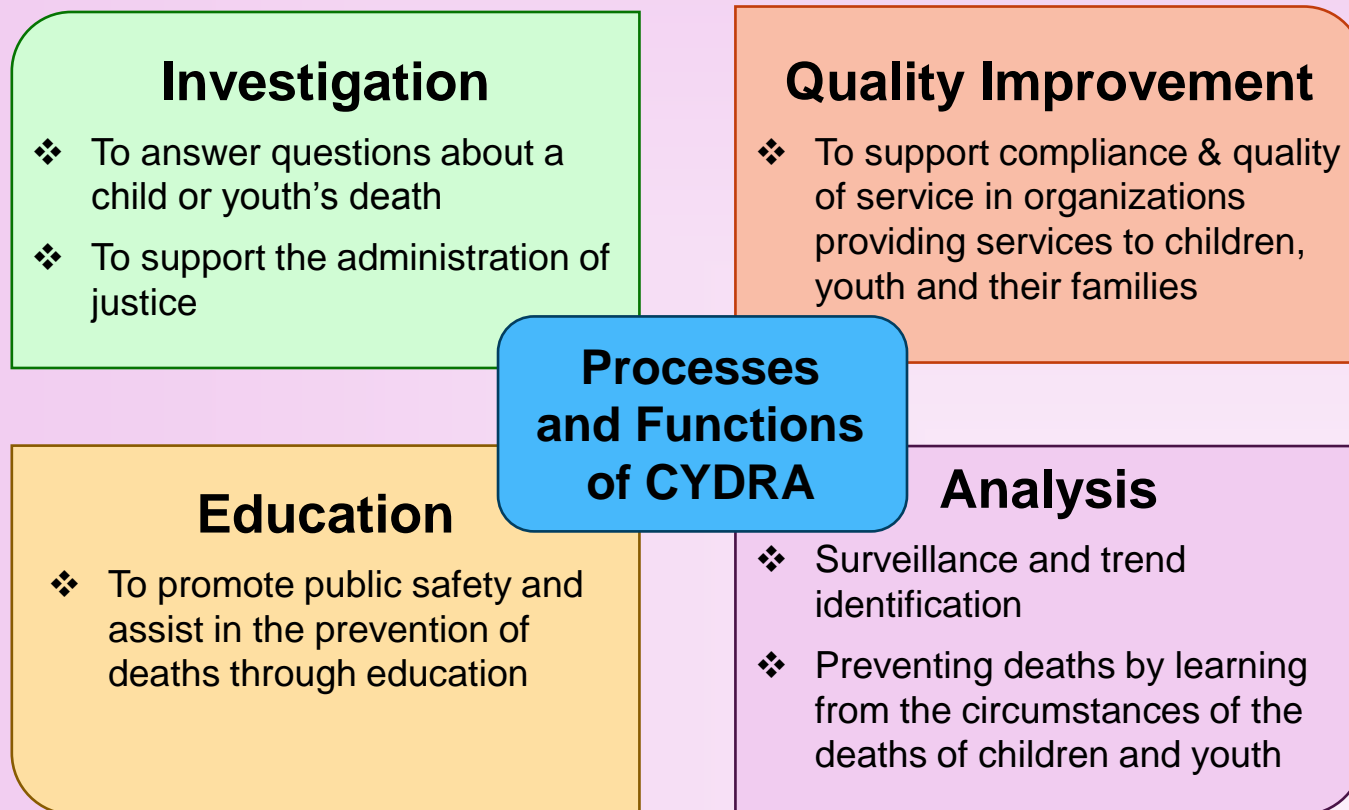
- Case-level review by service professionals that intersected with the child or youth prior to their death will be completed in the region in which the death occurred.

3. Research and Evaluation Pilot

- The use of evidence and the involvement of community service providers in the death review process is intended to both increase the credibility of recommendations, and improve recommendation uptake.

Why Child and Youth Death Review and Analysis?

Child and Youth Death Review and Analysis (CYDRA) is completed to satisfy four key areas:



Review

- Ontario's Death Investigation System
- Duties and Powers of Coroners
- Case Selection and Classification
- Investigation of Childhood Deaths
- Expert Death Review Committees
- (Un)Safe Sleep Environments for Infants
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Comments or Questions?



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