JULY 6, 2017

INVESTIGATING SERIOUS WORKPLACE INJURY AND FATALITY INCIDENTS

A TURNKEY SYSTEM DEVELOPED WITH THE CALGARY POLICE SERVICE

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37th PARLIAMENT, 1st SESSION

Standing Committee on Justice and Human Rights

Wednesday, May 22, 2002

Dr Susan Dodd Testimony

"...When I first started thinking about this, it didn't seem possible that...the burden of holding the culprits responsible would fall to bereaved relatives of the dead. But not only was it possible, it's exactly what happened...ten years ago when the highly subsidized Curragh Resources (Westray coal mine) management intimidated workers, bullied compliant inspectors, and then evaporated into bankruptcy with millions of dollars in taxpayers' money...

We need to recognize organizational culture as something people make and remake on a daily basis, and that deaths like those in the Westray mine are not the inevitable outcomes of things left undone. It's not a matter of neglect, but of the consequences of positive acts, of choices made in pursuit of profit, and these days, of increasingly deregulated workplaces.

Often the authors of those choices are hidden within the black box of the corporate hierarchy, and this black box is a culture within which corporate decision-makers decide on the priorities of the organization. If this government wants people to believe there is justice in this country, it will need to draw on the rich literature on corporate criminology and develop ways to either shed light on the contents of such black boxes or to compensate for this lack of transparency by finding means to discipline the corporation as if it were an agent in its own right..."

Objectives

1. If someone is seriously injured or killed on a worksite-it is incumbent on law enforcement to rule out criminal negligence as a possible cause;
2. Victims and loved ones are provided with answers and closure through high quality science based investigation methods; and
3. Enforcing the criminal code exposes corporate decision makers to life altering consequences for decisions that impact the lives of others personally by way of a criminal record and jail.

Failure of Process

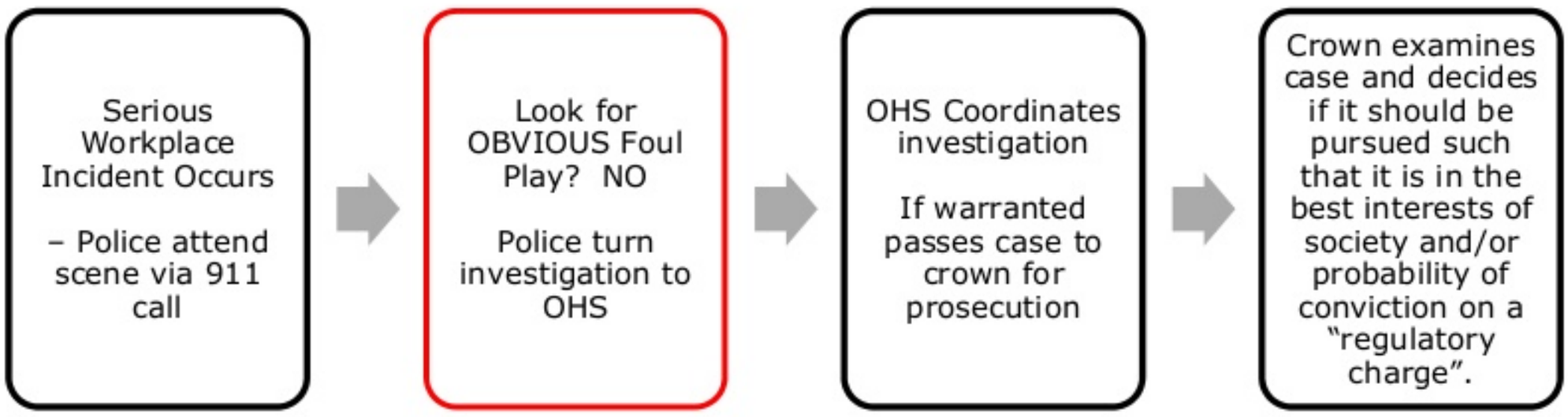
Norm Keith, a senior partner with Fasken Martineau and a legal expert in workplace health and safety and the criminal code, has written on why there are so few prosecutions. In his opinion there are three reasons [1]:

1. There has been little education provided to both the police and Crown attorneys on the existence of the criminal code amendment and also with respect to assessing a company's management structure with respect to determination of who is the "senior officer" and assessing the organization's decision making process. This is not a normal area of expertise of the police and Crown attorneys;

2. Police have been told by Crown attorneys that workplace incidents are not an area of concern for the police and they should "leave it to the occupational health and safety (OHS) regulator"; and

3. Canada is "soft" on enforcing white-collar crime and has been publicly criticized by both the G20 and the Organisation for Economic Co-operation and Development for failure to enforce these types of laws.

Figure 1: Serious Injury Fatality Police Practice

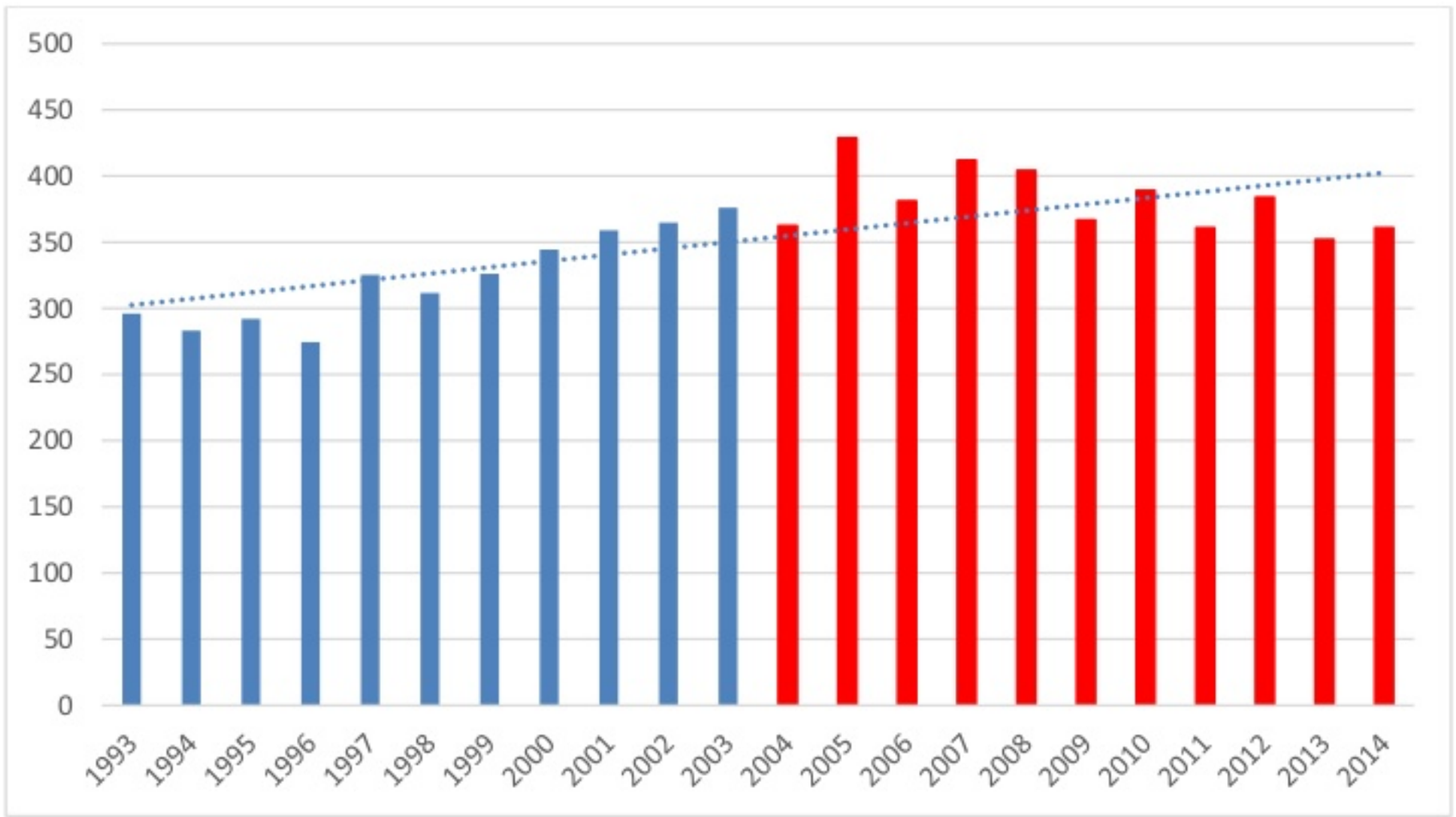


OHS does not have the jurisdiction nor the expertise to investigate under the criminal code. Further their ability to compel evidence violates charter protections making a criminal code conviction next to impossible.

Results

The Criminal Code has failed to act as a deterrent given the lack of enforcement. As a result, there has been no impact on fatality rates in Canada.

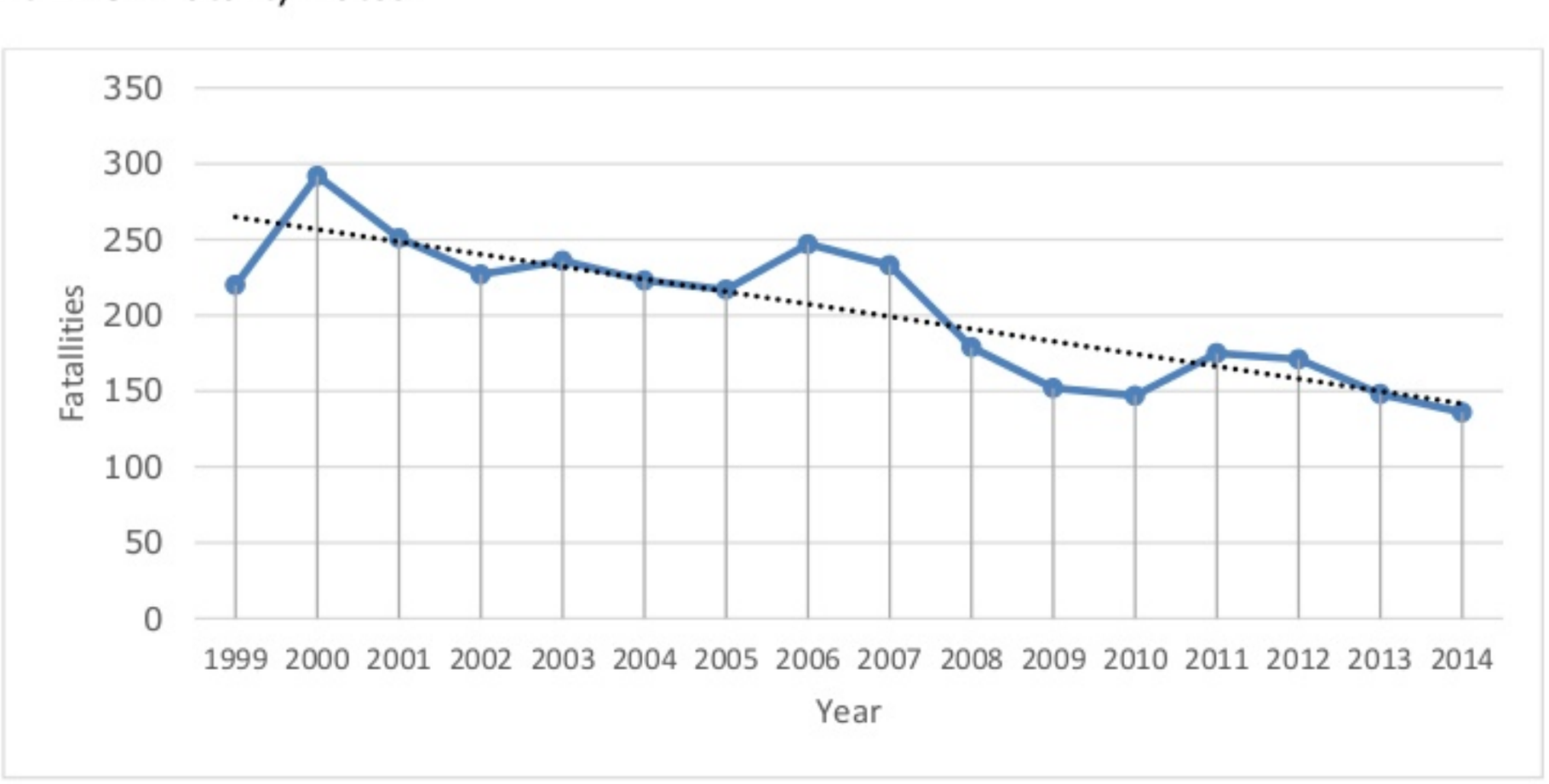
Chart 1: – Fatality Rate[1] 1993 to 2014



Note, red bars are fatality rates since the passing of the criminal code amendment.

In contrast the UK's fatality rate has been falling significantly

Chart 2: UK Fatality Rates[2]

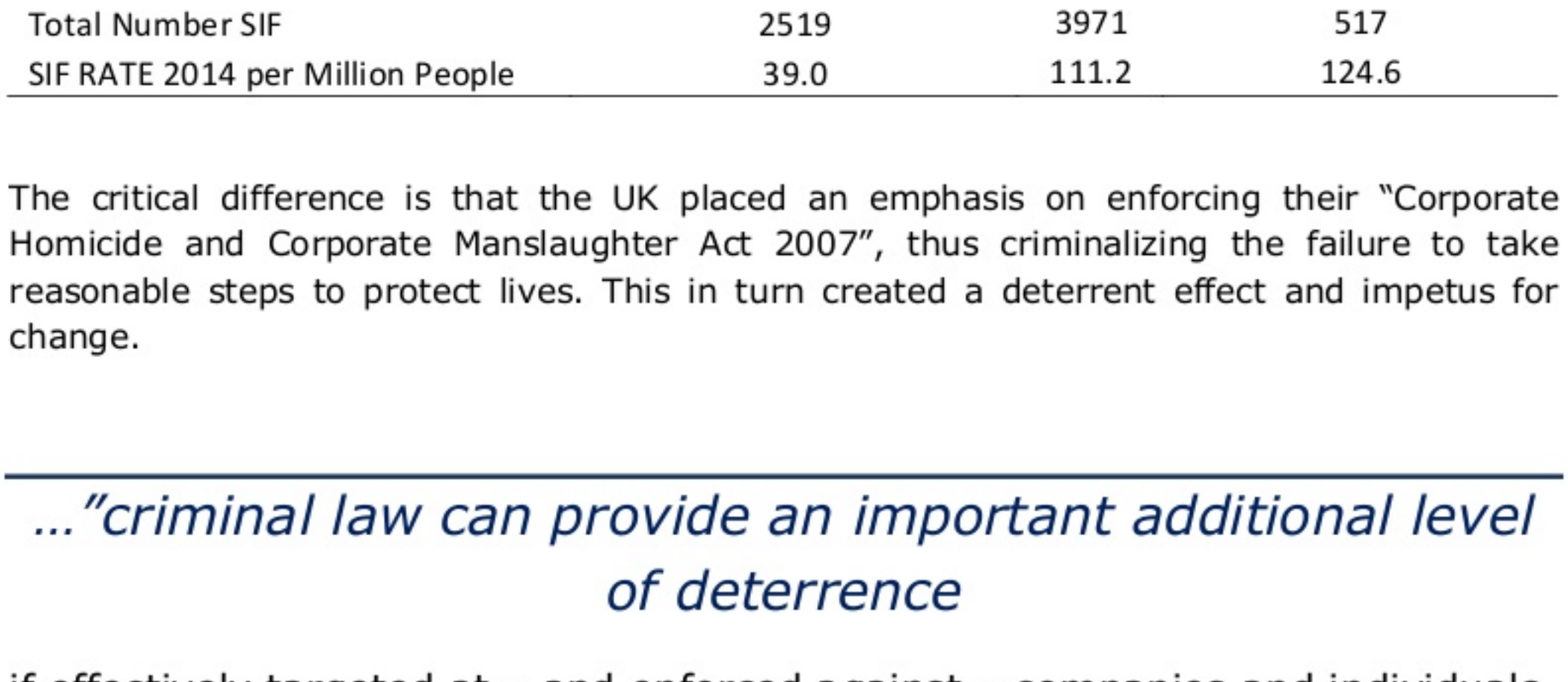


[1] Does not include occupational disease fatalities.

[2] UK data based on RIDDOR does not include work related motor vehicle fatalities.

The UK Canada comparison is even more dramatic when looking at serious injury and fatality (SIF) rates per million of population. For comparison purposes 2014 fatality data was used to extrapolate and include serious injuries. The results speak for themselves:

Chart 3 SIF Rate[3] Comparison for 2014



	United Kingdom	Canada	Alberta
Population	64.6	35.7	4.15
Total Number SIF	2519	3971	517
SIF RATE 2014 per Million People	39.0	111.2	124.6

The critical difference is that the UK placed an emphasis on enforcing their "Corporate Homicide and Corporate Manslaughter Act 2007", thus criminalizing the failure to take reasonable steps to protect lives. This in turn created a deterrent effect and impetus for change.

…"criminal law can provide an important additional level of deterrence

if effectively targeted at – and enforced against – companies and individuals that show a reckless disregard for the safety of workers and the public."

(Canadian Government Response to the Fifteenth Report of the Standing Committee on Justice and Human Rights, November 2002)

[3] Work related motor vehicle SIFs were added to the UK numbers allowing for direct comparison.

Calgary Police Service

In recognition of the failure of process; the author was engaged by the Calgary Police Service (CPS) sponsored by Superintendent Cliff O'Brien to work with Staff Sergeant Vincent Hancott in the development of an investigative protocol that:

1. Provides answers to victims with science based investigative tools;
2. Helps "to preserve the quality of life in our community by maintaining Calgary as a safe place to live, work and visit[4]"; and
3. Limits liability for failure with fiduciary duty in enforcing the Criminal Code

Protocol Requirements

Develop a tool that examines serious injuries and fatalities through the lens of the criminal code:

1. That ensures a 'reasonable likelihood' of conviction
2. That is easy to follow with a 'direct line of sight' for prosecutors (connects the dots)
3. That will hold senior executives (corporate decision-makers) accountable even in large, complex organizations

Protocol Development

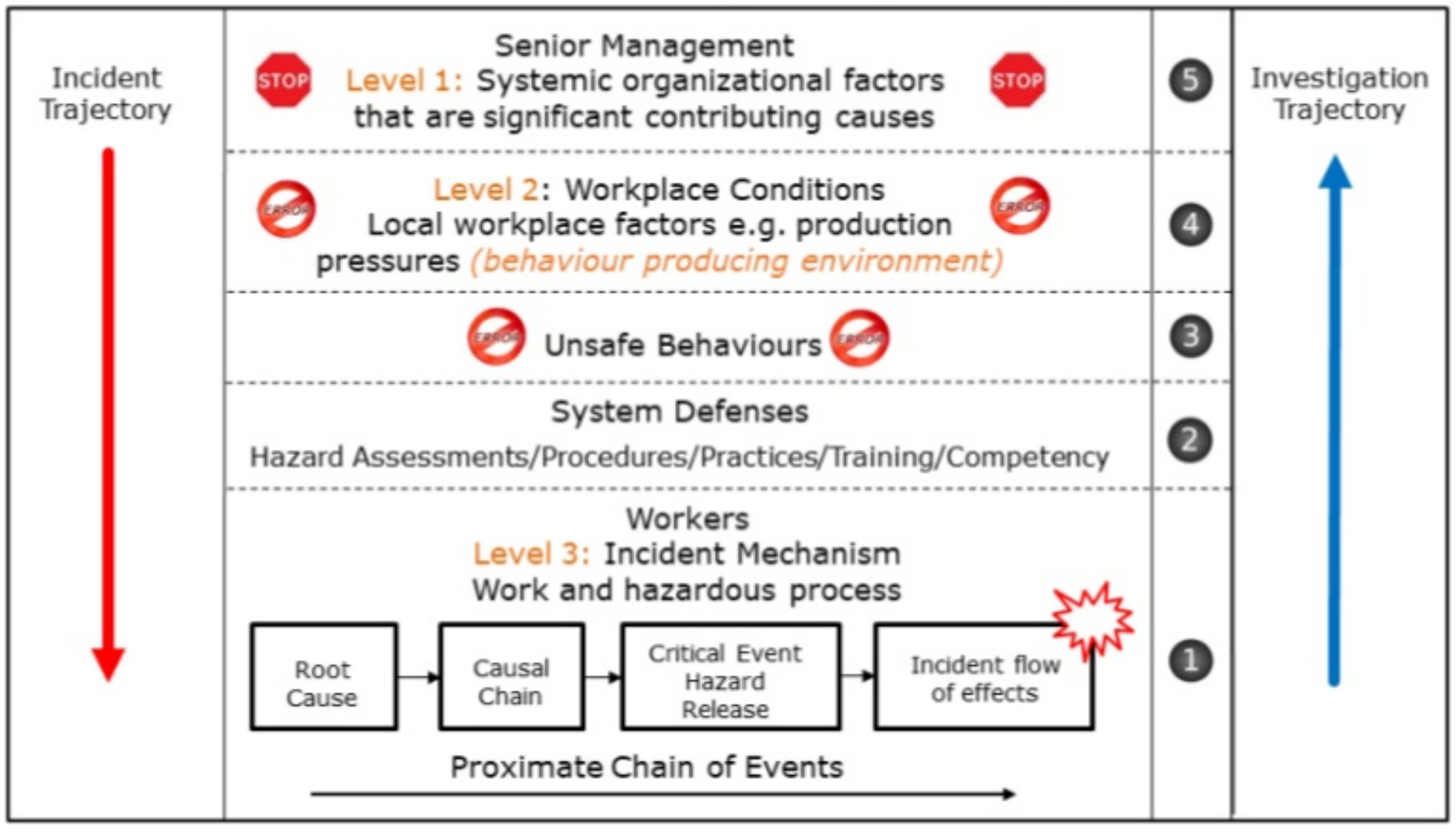
- Science (evidentiary) based methodology:
  - Literature review of 35 years of research into causation of serious incidents and safety culture
  - Utilizes a composite of several peer reviewed models of how to conduct an organizational (socio-technical) incident investigation:
    - Systems-Theoretic Accident Model and Processes (STAMP) [2];
    - Safety Through Organizational Learning (SOL) [3];
    - Human Factors Analysis and Classification System (HFACS) [4];
    - Human Factors Investigation Tool (HFIT) [5]; and
    - European Safety, Reliability and Data Association (EReSDA) Guidelines for Safety Investigations of Accidents [6], [7].
- The protocol was tested against six cases for effectiveness. Case information was collected from the following sources:
  - Author involved in investigation
  - Interviews with people involved in the investigations
  - OHS investigation reports
  - Court records
  - Public knowledge (media)
- A basic description of the incident was provided and the protocol was used to help guide the investigative process and questioning. This process was deemed successful when it led to questioning beyond the proximate chain of events and started to examine organizational factors – See Figure 2. The protocol was tested using individuals from:

[4] http://www.calgary.ca/cps/Pages/home.aspx

- Law enforcement,
- OHS Lawyer
- Health and safety professionals
- Non experts (general public)

- Conclusions were then referenced against applicable case law and legal tests.

Figure 2: Socio-Technical Incident and Investigation Trajectories [2]



Turnkey Protocol

Protocol development from start to launch was an intensive *two year* project that was vetted by CPS legal, included collaboration with Crown Prosecutors and Provincial OHS. Further, a training workshop for detectives was developed and delivered on conducting socio-technical investigations into workplace serious injuries and fatalities through the lens of the criminal code. The end result is a turnkey system that can be delivered to other police services at *no cost with the exception of 1 day training workshop*– which is offered by the author at a nominal fee to cover time and expenses - see details below.

The turnkey protocol enables other concerned police services to leverage off the comprehensive work completed by the Calgary Police Service. As a result, there is a *savings in time, money and resources*. The community benefits with implementation being a matter of *months rather than years* driving greater *workplace protection.*

Details

1. Needs Analysis: failure in process and requirement for socio-technical investigations
2. Calgary Police Service Internal Documents:
    a. Policy,
    b. Procedure and
    c. Process Flow Diagram
3. Investigation Tools:
    a. Handbook
    b. Socio-Technical Investigation Form with step-by-step guidance and investigative mapping and support tools including evaluation of safety documentation, common safety culture failures, common hazards and controls.
4. Legal Information:
    a. OHS Acts, Regulations and Code
    b. Applicable criminal case law
        i. 217.1 (R v. Metron)
        ii. Criminal Negligence (marked and substantial departure),
        iii. Mens rea (wanton and reckless, objective foreseeability, significant contributing cause) (R v. Lovett, R v. Singh)
        iv. Manslaughter (R v. Fournier)
5. Safety Information:
    a. OHS Acts, Regulations and Code
    b. Safety system audit protocols
    c. Safety manual example
6. Socio-Technical Investigation Examples:
    a. Videos from results of public inquiries
7. One Day Workshop: The police are experts at conducting investigations, although they may be lacking in specific knowledge with respect to occupational health and safety systems, human factors and organizational factors, along with the use of the related investigation protocol. Workshop consists of:
    a. Course pre-read
    b. Course pre-assessment
    c. Workshop in conducting socio-technical investigations (utilizes an applied approach with Canadian case studies)
        i. What they need to do
        ii. What they need to know
        iii. Knowledge verification case study
8. Protocol Assessment: based upon the "Taxonomy of Training and Development Outcomes"[8] which provides a mechanism to evaluate training effectiveness at the individual, group, organizational and societal level with measurable outcomes.

comprehensive investigation. *Saves time* from having to seek out information on their own.

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