MEDICO-LEGAL DEATH INVESTIGATION
ENGAGING WITH THE CORONER
Presentation Outline

• The Coroner - Truth and Myth
• The Coroners Jurisdiction
• The Death investigation Service
  • How are deaths investigated by the Coroner?
  • How are the family and community engaged?
  • How are Hospitals and Medical Practitioners involved
• Modern Approaches to Medico-legal Investigation
  • Postmortem CT imaging (MRI etc.)
  • Genetic investigations
  • Family follow up and medical referral
  • Clinical Audit and the Inquest

Mortui vivis praecipiant
'What Do We Do'  
The Curse of the MEDIA?  

BUT these sources drive public belief and also influence the viewpoint of the Public, Politicians, Government bureaucrats, Lawyers, Doctors, Jurors etc.

* TV shows I have been a medical advisor on.
Death Investigation Myths (ALL WRONG)

• The People
  • Pathologists are not Doctors
  • Coroners perform autopsies
  • Coroners are Doctors
  • Pathologists work in the morgue not in a hospital
  • Pathologists don’t see living patients
  • Pathologists talk to the corpse during the autopsy
  • Pathologists crack jokes and “sassy” quips over the body
  • Pathologists say things just to disgust mortuary visitors
  • Forensic Pathologists don’t like being cross examined
  • Forensic Pathologists are interested in outcome of trials
Forensic Pathology Myths

• The Job
  • Forensic Pathologists interrogate/shoot/catch suspects
  • Pathologists can determine the cause of death
    • Immediately on arrival at the scene
    • By sniffing the body
    • By using laser enhanced 3D virtual construct models floating in the air
  • Pathologists can tell police the time of death-
    • With an accuracy of a few minutes
    • With an accuracy of a few tens of minutes
    • With an accuracy of a few hours
  • Pathologists do autopsies in a white coat and wearing a bow tie.
  • the cause of death is always a ‘mystery’ and like a ‘complex puzzle’ which we have to solve
In our Community

Who Investigates most deaths?
Who ‘Could’ investigate deaths?
Who ‘Should’ investigate deaths?

Message 1.
Only ~40% of deaths referred to the Coroner result in an autopsy
Death and Government

• Public safety is a core responsibility of government and political representatives will rightly demand to be involved
• Communities hold the government of the day responsible regardless of the cause of death, person or organisation liable, or the nature of the circumstances of the death.

ERGO

Death investigation is, inherently, a ‘POLITICAL’ activity
So- how do you create an independent process
Coroners Court of Victoria

• 10 Coroners, 10 Solicitors, 15 Clerical Staff
• Coroners Responsibility:
  • The Coroners Act 2008 – The Preamble states:
    • The coronial system of Victoria plays an important role in Victorian society. That role involves the independent investigation of deaths and fires for the purpose of finding the causes of those deaths and fires and to contribute to the reduction of the number of preventable deaths and fires and the promotion of public health and safety and the administration of justice.
  • The investigation of reportable deaths
  • The investigation of reviewable deaths
  • Judicial findings including recommendations
  • Coroners Prevention Unit CPU
  • Jurisdiction includes deaths of Victorian residents overseas

CORONERS IN AUSTRALIA ARE LAWYERS NOT DOCTORS
Modern Coronership

- Family focused
- What happened rather than who done it
- Is system rather than employee focused
- Prevention rather than blame
- Is public health and safety focused
- Uses more external experts
- Uses national reference data sets (NCIS)
- Medical and public health training is part of coroners CPD
- Holds cluster inquests of similar cases
- Will actively engage in communicating findings
- Is independent of government – regarding findings
What do Coroners investigate
From Where might a recommendation originate

• Unexpected
• Not natural
• Violent
• In care or ‘custody’
• Result of a medical procedure
• Unidentified person
• No death certificate
• Directly due to accident or injury
• Indirectly due to accident or injury

Message 2.
The word “suspicious” doesn’t appear anywhere in the Coroners Act (Vic.) 2008. The guiding principles are: (the four P’s) “public interest”, private interest”, “public record” and “prevention”
Typical Coroners Legislation

(a) to establish, so far as possible,—

(i) that a person has **died**; and
(ii) the person’s **identity**; and
(iii) **when** and **where** the person died; and
(iv) the **causes** of the death; and
(v) the **circumstances** of the death; and

(b) Hold a formal Inquest hearing and deliver a detailed narrative finding (not just a verdict)

(c) Make/deliver formal **recommendations** that may, if drawn to public attention, reduce the chances of the occurrence of deaths in circumstances similar to those in which the death occurred;

(d) **Publish the findings and recommendations on the Web and publish the written responses of ‘organisations’ against whom recommendations have been made.**
In order to support the Coroner

1. **Victorian Institute of Forensic Medicine**
   - Department of Forensic Medicine *Monash University*

2. **Coroners Court of Victoria**

3. **National Coroners Information System**

4. **Donor Tissue Bank of Victoria**

- **Facilities (rebuilt 2011-2014)**
  - Courts
  - Mortuary
    - Average holding 100 (max. 300)
    - Dual Beam CT scanner
  - Laboratories
    - Molecular Biology, Microbiology
    - Toxicology, Anatomical Pathology/Histology
  - Forensic Medical Clinic Rooms
  - Photographic Studios
  - Information Services
VIFM Services

Medico-legal Death Investigation

6000-7000 cases annually

Clinical Forensic Medicine
(Sexual assault, interpersonal injury, custodial medicine, family violence)

Over 4000 cases annually

Education and Research
(Monash University)

Forensic Scientific Services
(DNA, Toxicology)

Over 40,000 cases annually

Disaster Victim Identification

Donor Tissue Bank of Victoria
DTBV Allograft Products – Current

• 4 main tissue allografts that are banked
  • Musculoskeletal
    • Bone
      • Frozen
      • Freeze Dried
    • Tendon
  • Skin
  • Cardiovascular
    • Aortic and Pulmonary Valve
    • Aortic and Pulmonary Conduit
    • Pericardium
Message 3.
Most cases do not proceed to an inquest (there are ~ 6500 Death Investigations but only 200 Inquest hearings)
Elements of the Death Investigation Process

• Reporting of deaths
  • If no report, no independent investigation
  • Are reportable deaths all reported?

• Investigation Procedures
  • Medical/Social
    • Pathology
    • Clinical
    • Public Health
  • Legal
    • Criminal
    • Civil
    • Coronial inquest

• Communication of Findings/Recommendations
  • NCIS
  • Publication of findings on the Internet (Including responses to recommendations)
Medico-legal Death Investigation

Integration of:
- Circumstantial information
- Official documentation
- Scene attendance/photographs
- Medical history
- Medical records
- PM: CT/MRI/Radiographs
- External examination
- +/- Photography, video
- +/- Autopsy data
- +/- Clinical input: Possible sexual assault
- +/- Interpretation toxicological/microbiological data

Information driven process:
Quality of outcome depends on Quality of information provision
Cognitive bias issues a potential problem
CORONIAL ADMISSION AND ENQUIRIES

Duty Pathologist and Duty Coroner
Manager Admission & Enquiries & Forensic Technical Services
Assistant Manager Admissions & Enquiries
Case Liaison & Health Information Officer
Assistant Manager Mortuary
Odontologist
Tissue Donor Coordinator
Anthropologist
Pathology Liaison Nurses
Senior Forensic Technical Services Officer
CAE
Consultant in charge Identification Services

VICTORIAN INSTITUTE OF FORENSIC MEDICINE
MONASH University
What happens in Practice

• Death is reported to Coroner by ringing CAE

• The CAE (VIFM function)
  • Collect demographic information
  • Collect medical information
  • Collect medical records, ante-mortem medical specimens etc.
  • Identify and Communicate with Next-of-Kin (Initial Family Contact)
    • Obtain information regarding
      • relevant lifestyle factors, medical history, GP, Dentist, family members, Next of Kin, Executor,
      • The name of the family’s funeral service provider
      • Family views regarding autopsy
    • Provide information about the Coronial process
    • Provide initial bereavement support
    • If required – arrange appointment for formal visual identification
  • Arrange for the body to be transported to VIFM mortuary

• Rarely the Pathologist may be requested to attend the death scene to assist in the investigation.
What happens in Practice

• On arrival of deceased
• Preliminary examination (Coroners Act 2008)
  • a visual examination of the body (including dental examination);
  • the collection and review of information, including personal and health information relating to
    the deceased person or the death of the person;
  • the taking of samples of bodily fluid including blood, urine, saliva and mucus samples from
    the body (which may require an incision to be made) and the testing of those samples;
  • the imaging of the body including the use of computed tomography (CT scan), magnetic
    resonance imaging (MRI scan), x-rays, ultrasound and photography;
  • the taking of samples from the surface of the body including swabs from wounds and inner
    cheek, hair samples and samples from under fingernails and from the skin and the testing of
    those samples;
  • any other procedure that is not a dissection, the removal of tissue or prescribed to be an
    autopsy;
  • the fingerprinting of the body;
  • Clothing / possessions examined collected

Message 4.
Coroners Permission is not required in order to carry out a preliminary examination
What happens in Practice

• Case management meeting
  • Persons Present
    • Duty Coroner
    • Duty Pathologist
    • CAE Nurse
    • (Identification Manager – if required)
    • (Coroners Solicitor – if required)
  • Case Triage
    • Review of Pathologist’s preliminary examination report
      • Pathologist’s advise regarding possible Cause of Death
      • Pathologist’s advise regarding need for autopsy or partial autopsy
    • Review of preliminary toxicology report & CT scan findings
    • Review of Identification report
    • Coroner hears and considers:
      • Family issues/requests
      • Police issues/requests
      • Medical issues/requests
      • Legal issues (Criminal and/or Civil) – legal representatives issues/requests
What happens in Practice

Coroner Determines

- Whether they are satisfied as to the identity of the deceased
- Who is the Senior Next-of-Kin
- Whether or not they will order an autopsy or partial autopsy
- Whether they need to authorise any invasive investigation
  - CT angiogram
  - Tissue biopsy
- When the body can be released to the family and to who

Second Family contact

- CAE nurse contacts the family and informs them of the Coroner’s decision
  - opportunity for reconsideration/appeal
Death Investigation Workload

- 20 – 30 forensic examinations every day
- 60% Natural deaths
- 30% Suicides and accidents
- 50% died in hospital
- Less than 1% confirmed homicides
- 5% Cause not able to be medically identified
- Always 120 or so bodies in the fridge
- Tuberculosis is the main occupational hazard
- Only ~ 40% investigations involve an autopsy
- family health liaison is a critical output of the investigation
- Radiology skills have become critical for forensic pathologists
VIFM’s Medical Death Investigation for the Coroner attempts to answer the following questions:

• Who is the deceased
• Where did they die
• When did they die
• The ‘Cause of Death’
• How did they die
• The circumstances of their death
Modern Autopsy Imaging Techniques at VIFM

- CT
- Enhanced CT
  - angiography etc
- Digital Plain films
- (MRI)
Message 5.
Whole Body CT SCANS are now carried out in every case
Forensic Pathology Clinical Engagement

**Therapeutic**
- Grief Counselling
- Medical Advise and Education
- Medical Communication and Explanation
- Specialist Medical Referral
- Genetic testing, Counselling and Referral
- Medico-legal Process Explanation

**External**
- Health Departments’ Policy Advice
- Consultative Councils
- Morbidity and Mortality meetings
- Grand Rounds
- Craft Group Meetings/Presentations
- Public Health and Safety (TGA etc.)
- NCIS reports and Coroners’ Communiques

Message 6.
Forensic Pathology has both a direct and indirect therapeutic service provision function.
Coroners Recommendations Australia

**Victoria** - Power to make and publish recommendations & publish responses

**NSW, ACT Queensland WA, SA, NT.** Allow Coroners to make recommendations

**Tasmania** – Coroners have a **DUTY** to make and publish recommendations & publish responses

“*A Coroner must, whenever appropriate, make recommendations with respect to ways of preventing further deaths and on any other matter that the coroner considers appropriate.*”

Coroners Act 1995 (Tas), S28(2)

N.B. ‘…..whenever appropriate….’ BUT N.B. ‘…any other matter…’
Health Safety principles in Coroners investigations

• The ‘systems based approach’ to the coronial death investigation process.

• Recommendations ensure the investigations result in a responsive system i.e., ‘closing the loop’
  • Identification of adverse events.
  • Analyzing information about the adverse event.
  • Formulation prevention strategies and initiatives
  • Communication of prevention strategies to relevant parties
  • Continuous monitoring of the new initiatives

• Publishing Coroners findings on the Internet
• Publishing agencies responses to recommendations on the internet
Investigation Outcomes

• Justice Outcomes
  • Factual medical and scientific support for Justice system and agencies
  • Coroners’ recommendations
  • Safe convictions and appropriate acquittals
  • Fair and equitable civil judgements and administrative determinations

• Health Care Outcomes
  • Families/patients (victims and perpetrators) feel cared for and supported at a challenging time in their lives
  • Families/patients referred for health care services or genetic/health care counselling as appropriate
  • Medical Audit and QA information for health care providers
  • Human Tissue made available for transplantation

Message 7.
Forensic medicine and the Coroners Jurisdiction in Victoria are wholly funded by the Department of Justice and Community Safety and has no formal relationship with Health Department or related Community Services
Links

• www.coronerscourt.vic.gov.au
• www.vifm.org
Messages

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Forensic Medicine serving the Community from within the ‘Justice System’