



# Pre Hospital Care for Trauma



David Bowie  
Clinical Leader



Canterbury Air Retrieval Service



# Pre Hospital Care is part of a system



Pre hospital care



Hospital care



Rehabilitation



Community Care  
(Social services)





An educated public



A simple call activation process



A prepared local response



Reliable communications



Suitable transport



Responsive receiving Hospitals





# Midland Regional Trauma System



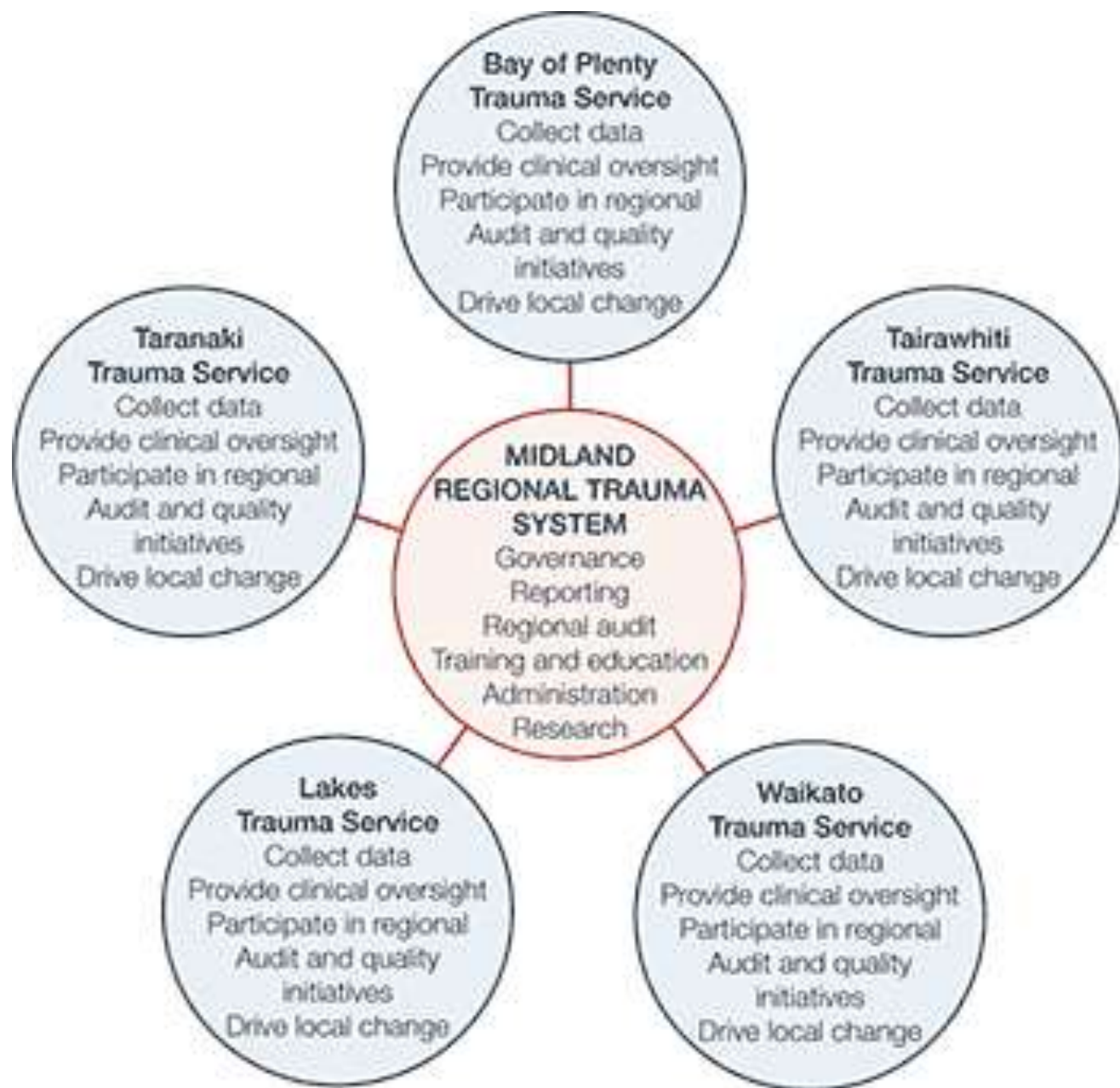
Officially Launched By Health  
Minister Ryall March 2010

Pilot scheme working for 5 yrs.

Severe Trauma mortality halved

Hoped to be introduced nationally  
eventually





# Midland Regional Trauma System

- Governance
- Data collection (From contributing DHB's)
- Regional Audit
- Training and education
- Research

# The Primary part of the system

## The Sharp End

- Under huge pressure maintaining staffing
- Frequently decreasing rural hospital facilities
- Increasing public expectations
- Increasing professional expectations  
(credentialing)



# PRIME INITIAL Course Programme



**St John**

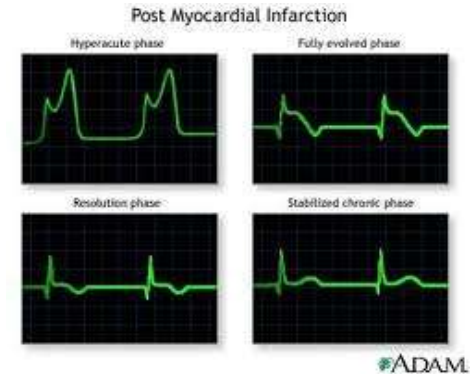
first to care

## Day One

- Introduction
- Prime System and Response
- Critical Action Checks skill stations
- Theory of Triage
- Airway Care: (OPA, NPA, LMA, ETT, Intubation catheter, trapped patient, C spine)
- Needle Cricothyroidotomy
- Cardiac Arrest (Algorithms, Practical VF unconscious VT and PEA)
- Arrhythmia Review

## Day Two

- Airway Assessment
- Breathing Assessment and Traumatic Respiratory Distress
- Non-Trauma Respiratory Distress (LVF, Asthma, CORD, PE, Hyperventilation, Croup & Epiglottitis)
- Chest Pain and AMI
- Paediatrics (Resuscitation, Intubation, Drugs, Croup / epiglottitis)
- LVF. Review of Management APO
- Skills Lab (IO Needles, ETT, Cricothyroidotomy)
- Anaphylaxis





## Day Three

- Blunt Trauma and Fluid Resuscitation, Hypo Shock and Burns (BP targets, Cannula size, Parklands)
- Triage Scenarios
- Head and Spinal Injuries and Causes of Coma (Helmet removal, C-Collars, KED)
- Arrhythmia Management Review with paper scenarios
- Cardiac Arrest Practice



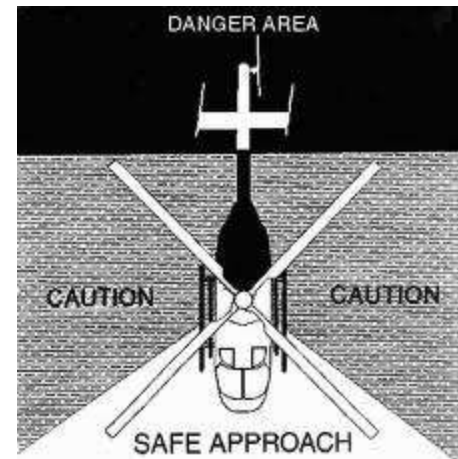
## Day Four

- Fracture management - use of splints. extrication
- Trauma Scenario with extrication
- Helicopter Safety
- Revision of the Management of: (Diving, Obstetric & Diabetic Emergencies, Overdose and Poisoning, Asthma, Anaphylaxis, AMI and LVF)



## Day Five

- Psychiatric Emergencies and Mental Health Act
- Critical Incident Stress
- Assessments (Medical and Trauma)







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# PRIME REFRESHER

## Course Programme

### Day One

- Introduction and welcome
- Review of Critical Action Checks
- Airway Skills: OPA, NPA, LMA, Intubation Practical
- Cardiac Management and Defibrillation theory & Practical
- Chest Pain
- Cricothyroidotomy and jet insufflation
- Asthma Management Review
- Adrenaline: preparing 1:10,000 and 1:1,000,000
- Anaphylaxis Management Review
- Cardiac Arrest management practice
- Arrhythmia Management
- APO Management Review



## Day Two

- Blunt Trauma and burns
- Preparing an IV Infusion set with 500mL 0.9% NaCl
- Triage
- Chest Trauma and chest decompression
- Review of Fracture Management (Cervical Collars, Traction Splints, Scoop Stretcher)
- Paediatric intubation and IO needle
- Scenarios
- ACLS Assessment



# Controversies in Pre Hospital Trauma Care

- Fluid Management

- How Much ?

- None if radial pulse palpable ?
    - But prevention of hypotension in head injury a crucial goal
    - 250ml boluses
    - Longer transport time may require more fluid

- What sort

- Crystalloid or Colloid ?
    - Albumin worse in head injury (SAFE trial)





# Controversies in Pre Hospital Trauma Care

- Acute Airway management in head trauma
  - Prevention of Hypoxia the goal
  - Intubation definitive but hypotension a real risk (Intubation without drugs carries a poor prognosis)
  - Arthur Guedel's little invention still very useful
  - LMA always worth considering
  - Cricothyrotomy uncommon and scary but life saving





Thank you for your attention

