

# **Preparing for a Mass Casualty event: Beyond Day-one**

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# Different Rehabilitation Challenge

- Volume of cases / presentation
- Mechanisms of wounding
- Closer interaction with acute services
- Different pressures

# Rehabilitation

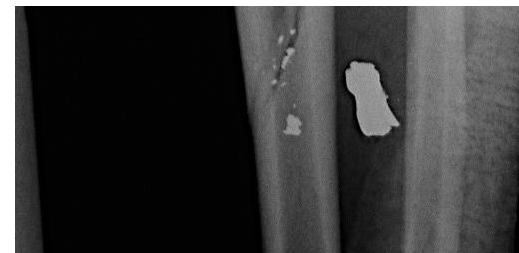
- Planning day 2?
- Rehabilitation
  - Improves functional outcome
  - Reduces time on ITU/Ward
  - Back door

# Paris

- Killed 130
  - Injured between 352 and 368
  - 80 'serious condition'
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- GSW
  - Blast injury

# Military Grade Weapons

- More destructive
- Multiple wounds
- Contamination



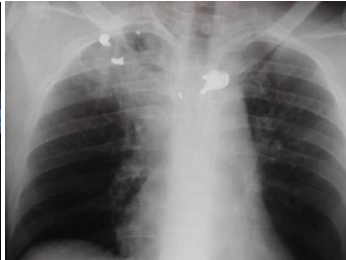
# Nature of Injuries Will be Different

- GSW
- Peripheral Injuries - Limb
- Open Brain Injuries
- Sepsis
- Chest Wounds Survive?  
(cf Military)

US Army, World War Two	13%
UK Forces, Falklands War	7%
US forces, Mogadishu 1993	8%
US Army, Iraq 2003-4	3%

**Table 8-1: Incidence of chest injuries in conflict**  
a is taken from 1237 US Army casualties sustained Mar 04



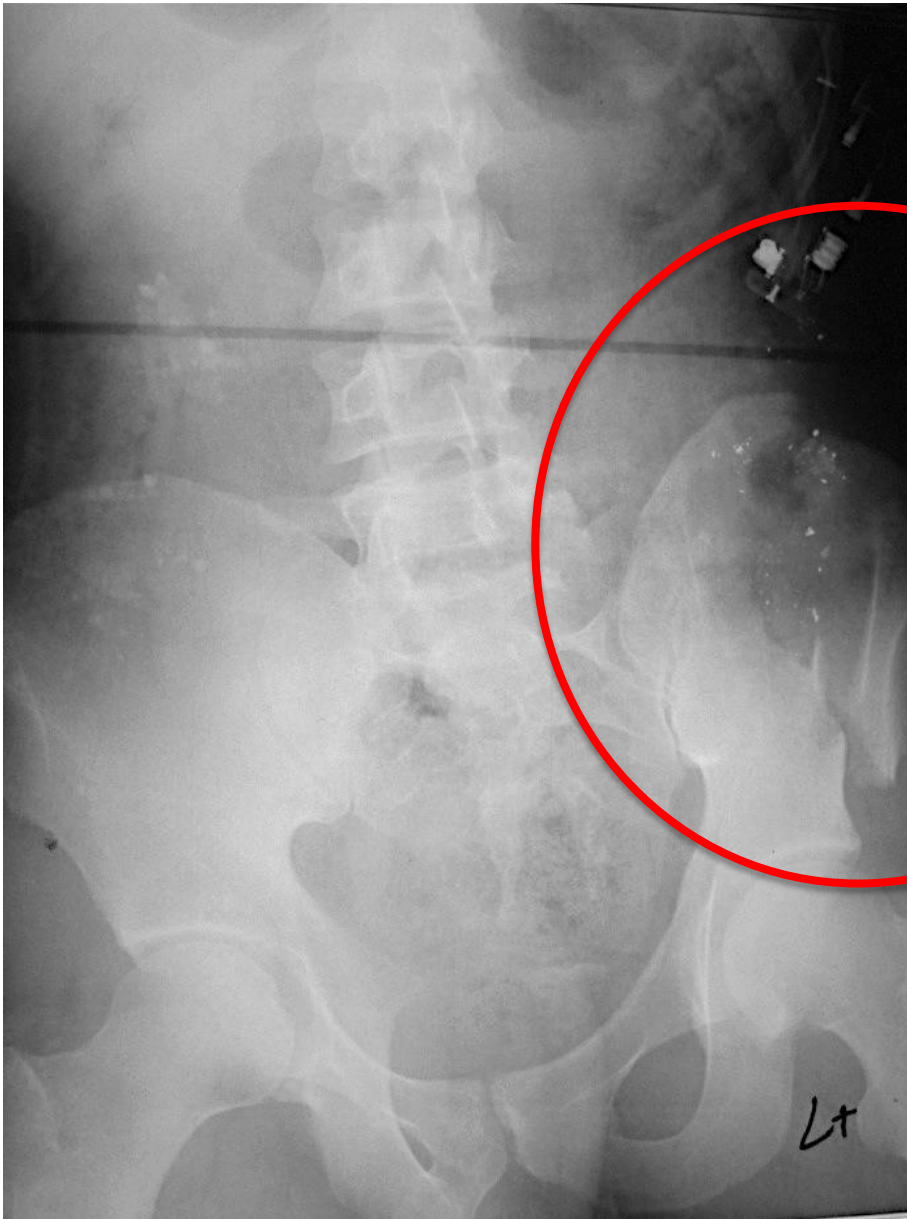


**Figure 8.6:** Shoulder injury with exposed lung apex.  
(This is potentially both a **C** and a **B** problem).





# Pelvic Injuries





# Issues

- Rehab should be part of the trauma team
  - Ward round / telecon
- Rehabilitation Coordination Officer
  - Coordinates treatment / discharge from unit
  - 1 post responsibility (24/7)
  - Engage
    - Patients
    - NOK
    - Teams
  - Clear view of whole care pathway
  - Engage with social services / housing /eqpt

# Early Rehab

- ITU
  - Respiratory
  - Musculo-skeletal
  - Maximise function
    - e.g. placement of ex-fix
    - Compromises
- Ward
  - Wound management
  - Nutrition
  - Mobilisation
  - OT
  - Exercise Rehabilitation Instructor

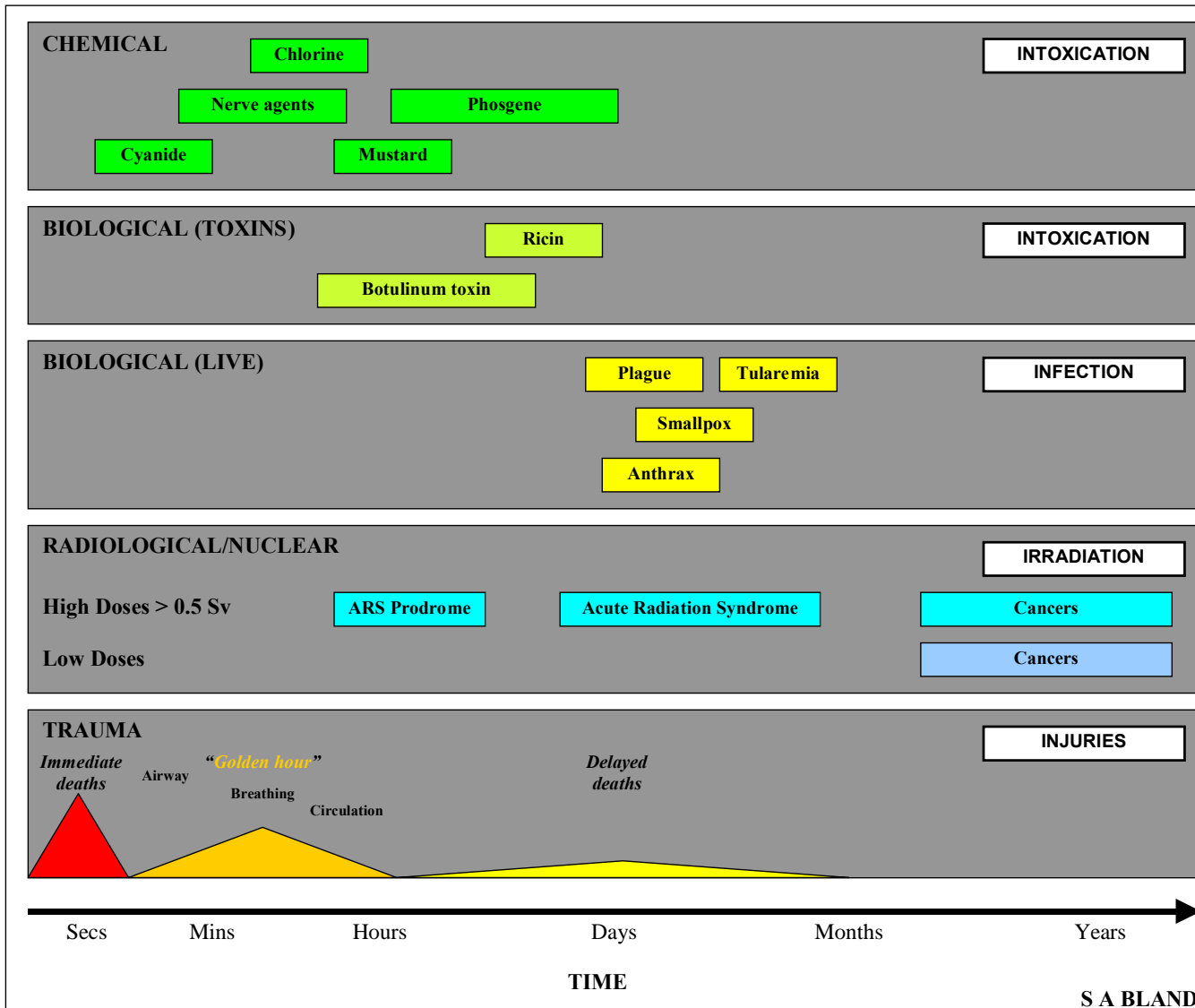
# Ward Based Rehabilitation

- Early pain management
- Early prosthetics
- Vocational focus
- Eqpt and resupply
  - Juzo
  - Wheelchairs
- MDT records
- Patient tracking
- Transfer summary

# Next of Kin

- Brief family and patients about care pathway
  - early and often
- Not everyone will live locally or UK
- Not everyone is a happy family
- Contingency fund for welfare?
- Presentational issues
  - Press
  - VIP visits
  - Security
- Caring for carers

# CBRN



# CBRN

## Survivors

- Neuro-toxic effects
  - Neuro-cognitive
  - Peripheral nerve
- Pulmonary
- Burns
  - Vesicants
  - Ocular
- Radiological exposure

# Acute Rehab Team

- RCO
- Consultant
- Physio
- OT
- SW
- Prosthetics



# Military Aid to Civilian Authorities

- Adapt the Military Medical Rehabilitation model and SOPs as a basis to enhance NHS rehabilitation from within NHS resources.  
Role 4 Trauma App
- Request Military Rehabilitation SME assistance/advice on an individual case by case basis
- Request mobilisation of an Acute Medical Rehabilitation Team in response to a significant incident
- Use DMRC resources for patients whose rehabilitation needs cannot be met by the NHS

# Trauma Rehabilitation:

- Embedded within acute services
  - Early assessment
  - Active case management
  - Multi-disciplinary team working
- Responsive to Service and Patient Needs
- Right Dose
- Integrated with community services
- Vocational Focus
- Breach artificial funding / commissioning barriers
- Ambitious – High Levels of Expected Outcome

Exercise-based rehabilitation

Group therapy