“Paramedics: Early recognition, advanced treatment and safe referral of patients with suspected zoonoses”

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Introduction:
- Prehospital care has undergone a significant paradigm shift in recent years, with emergency medical service (EMS) providers now playing a fundamental and rapidly expanding role in health care in Australia.
- EMS practitioners provide complex and life-saving treatment of medical emergencies/trauma and undertake ‘in-community’ treatment of chronically ill and lower acuity patients.
- This evolving, broader scope of practice is referred to as out-of-hospital care, acknowledging that many patients are now treated within the community, and no longer transported to hospital.
- Extended Care Paramedics (ECPs) specialise in the provision of comprehensive, out-of-hospital community care for low-acuity patients.

Extended Care Paramedics:
- Can comprehensively assess, treat and discharge patients without the need for hospital attendance.
- Advanced treatment options include wound care, closure and referral with prescription and initiation of a wide variety of pharmacology including; ADT, antibiotics, steroids and potent analgesia.
- Advanced clinical decision making skills feature in their training.

Well equipped:
- ECP Specialist Vehicles: Equipped for rapid response and an extensive range of treatment options for the community, within the community.

Considerations:
- Australia’s notifiable zoonoses generally present with non-specific signs and symptoms including:
  - Influenza type symptoms
  - General malaise
  - Respiratory symptoms
- If left undiagnosed or indeed misdiagnosed then they can progress to life threatening conditions.
- Therefore early suspicion and safe referral is essential for positive patient outcomes and the safety of paramedics.
- However this cannot occur if paramedics are not educated regarding Australia’s significant zoonoses and clinical reasoning skills are not developed in zoonotic diseases.

Current concerns:
- ECPs and general paramedics are frequently the first treatment contact for patients with zoonotic infections, and require current and relevant educational support.
- Some of the diverse and essential components of education required include advice for patients who seek discharge from care, prophylactic and initial treatment recommendations, infection risk and personal protective equipment use.
- Within the increasing opportunities in paramedic science tertiary education, a focus on zoonoses is notably absent.

Recommendations:
- The inclusion of Australia’s significant zoonotic diseases into standard and advanced paramedic education, in particular:
  - Infection control considerations
  - Introduction of specific state ambulance service protocols
  - Notifiable zoonoses (Anthrax, ABL, Brucellosis, Leptospirosis, Lyssavirus (NEG), Ornithosis, Q Fever)
  - High risk species; bats (ABL)
  - New and emerging zoonoses; Hendra
  - Vectorborne Diseases
  - Advanced clinical decision making skills
  - Identification of questions for comprehensive past medical history can assist with differential diagnosis, referral, advice and follow-up
  - Local Public Health Units - procedures for notification
  - Safe referral procedures and networks
  - Regular updates via a specific Paramedic Science subcommittee

Conclusion:
A firm partnership with ASID via a subcommittee representing the discipline of Paramedic Science nationally would be invaluable for adequate preparation and education of these frontline personnel.

Acknowledgement:
The NSW Ambulance Service