Master of Applied Epidemiology

THE AUSTRALIAN FETP
Overview

- History
- Objectives
- Operation
- Evaluation
- Achievements
National needs assessment 1989

* States, Territories, Federal Government

* Urgent workforce needs:
  - communicable diseases control
  - outbreak investigation, surveillance, epi
  - Indigenous health

* National Center for Epidemiology & Population Health

* Federal funding
Program Objectives

Build National workforce Capacity:

* Communicable disease control
* Indigenous Health
* Outbreak investigation, surveillance
* Field research, intervention & evaluation
* Rapid impact
* ‘Work-ready’ graduates
Master of Applied Epidemiology (MAE)

Training Model:
* Vocational training
* 2-year full-time scholarship:
  - 75% field work
  - 25% at NCEPH
* 3-way learning collaboration:
  * student + 1 academic + 1 field supervisor
* Master’s qualification (MAppEpid)
MAE Program curriculum

Core requirements:
* Outbreak investigation/Risk analysis
* Surveillance establishment/evaluation
* Major field study
* Skills development:
  * communication: oral, written
  * database management & analysis
  * teaching
**MAE Program evaluation**

**Multi-layered & ongoing:**

* Scholar and supervisor review:
  * Focus-group - independent facilitator
  * Regular teleconferences x 2 years
  * Formal review of progress six monthly

* Annual review by funding body

* External reviews 3-yearly:
  * National Public Health Education
  * Academic review

Review of Program statistics:

58 Graduates + 11 Indigenous graduates:

* 90% in workforce
* 216 outbreak investigations
* 125 surveillance evaluations
* 28 systems established
* 239 peer-reviewed papers
* 137 conference presentations
* 14 major projects - Indigenous health
* Impact on policy
Emerging Infectious Diseases

- Melioidosis
  - Merianos 1993 (human)
  - Ruben 1993 (milking goats)

- Gonococcal conjunctivitis
  - Merianos, Condon 1993*

- Autochthonus melioidosis
  - Condon 1993*

- RRV
  - Condon 1993

- Peanut Butter
  - S. Mbandaka

- E. coli O111
  - Beers 1994*

- Non-toxigenic C. diphtheria endocarditis
  - Beaton 1995*

- Mycobacterium ulcerans
  - Veitch 1995*, Drummond 1998

- Autochthonus melioidosis
  - Bell 1996*

- Q fever (abattoir)
  - Bell 1995

- Hendra virus
  - Selvey 1994*

- Meningococcal disease
  - (serogroup C ET15)
  - Hewitt, Brown 1996-8*

- Diabetes (Echovirus)
  - Crerar 1996

- Psittacosis
  - Crerar 1996

- Q fever (abattoir)
  - Gilroy, Formica 1998

* Peer review publications

- RRV / BFV
  - Merianos 1993
  - Streeton 1995*

- Meningococcal disease
  - (serogroup A vaccine)
  - Pearce 1993*

- Invasive non-toxigenic C diphtheria endocarditis
  - Beaton 1995*

- Acute post-streptococcal glomerulonephritis (APSGN)
  - Johnston 1996*

- Mycobacterium ulcerans
  - Veitch 1995*, Drummond 1998

- APSPN
  - Streeton 1995*

* Peer review publications
Future directions

Field epidemiology training:

* General Practice evaluation (1994)
* International Health (2000)
* Injury control (2000)
* Rural and remote health (2000)
* Environmental Health (2003)
* Chronic disease (2003)
* Hospital epidemiology (2003)
MAEs: making a difference.....