Environmental Health Issues in Fiji

Josefa Tabua
Environmental Health Officer, Ministry of Health, Fiji
Presentation Overview

A. Demographics of Fiji
B. EH Establishment within the Government
C. EH Core responsibilities
D. Issues
   1. Water Safety
   2. Sanitation
   3. Food Safety
   4. Outbreaks(s) of Communicable Diseases
   5. Increase in rate of developments
   6. Disposal of Health Care Waste
   7. Impacts of Climate Change
D. Opportunities
Demographics of Fiji

- Total pop. – 837,271 people (Fijians, Indians, Europeans, Chinese, etc)
- Urban pop. – 52%
- 300+ islands whereby < 100 are inhabited
- Life expectancy – 69 male 66: female 71
EHOs in both Ministries are appointed under by the Central Board of Health to enforce the provisions of the Public Health Act (1936)
EH Core Responsibilities in Fiji

- Environmental Management & Planning
- Food Safety & Quality control
- International Health Quarantine
- Water & Sanitation
- Health Promotion
- Vector Surveillance & Control
- Legal Enforcement
- Pollution Control
- Communicable Disease surveillance, prevention & control
I. Water Safety

• Accessibility
  o Urban – 100% Public Water Supply system
  o Rural - 90% Communal or Individual supply system (*borehole*, *spring*, *creek*, *river*)

• Quality
  o Urban – 100% treated
  o Rural – 80% untreated (*river*, *creek*, *spring*, *borehole*)

Primary role of EHOs is to monitor the water quality esp. in rural areas

• Common waterborne related illnesses in rural communities in Fiji
  o Diarrhoea, Skin infections e.g. Tinea, Typhoid, Giardisis
Typical Rural Water Supply system in Fiji

‘Gravity Driven concept’
2. Sanitation

- **Urban**
  - No. with Unimproved sanitation: 13% (*pit toilets, water seal toilets*)

- **Rural**
  - No. with unimproved sanitation: 62% (*pit toilets*)
  - No. without basic sanitary facility: 13.4%

- **Common illnesses related to unimproved or no sanitary facility in Fiji**
  - Typhoid
  - Shigellosis
  - diarrhoea
3. Food Safety

- The increasing demand for food surveillance in food processing plants
  - Limited manpower
  - Need to develop a good & sound surveillance system which includes both manufacturers and enforcement officers.

- Developing of a training manual on Good Hygiene Practices
  - Limited expertise on this field
  - For EHOs & food handlers as well

- Training of EHOs on developing and assessing of HACCP plans
  - Limited expertise on this field
4. Outbreak(s) of Communicable Diseases

- Three major diseases of
  - Leptospirosis
  - Dengue
  - Typhoid

- Concerns
  - Outbreaks happen almost every year for the past 6-8yrs in various districts
  - Geographical distribution of cases
  - Cases are more sporadic than before
  - Identification of actual disease pathogen host”- (for leptospirosis cases)
  - Understanding the adaptive capacity of the disease pathogens
5. Increase in the rate of Development

The push for economic growth has resulted in the rapid growth of developments, such as:

- Tourism (hotels, resorts, casinos)
- Industrial activities
- Agricultural activities (poultry & piggery farming)

**Concerns:**

- No established guideline or policy to assess the potential health impacts of these developments
- Waiving of existing policies
- Reduction in the assessment process timeframe
6. Disposal of Health Care Waste

Current Practice:

a. Incineration
b. Disposed into sanitary landfill (general waste)

Concerns:

1. Disposal of liquid waste
   - Holding tanks (similar to septic tank method)

2. Monitoring of emission from incineration
   - Incomplete combustion
   - Dioxin & furans
7. Impact(s) of Climate Change

Concerns:

1. Relocation
   - Those living in coastal areas
   - Those living in areas prone to flooding

2. Changing of adaptive capacity of diseases vectors & pathogens
   - e.g. Intrusion of new mosquito species

3. Emergence of new diseases
   - e.g. Malaria

4. Saltwater intrusion into the water systems
Opportunities!

1. Legislating of HIA in Fiji by end of 2013

2. Publication of our EH Practitioners Manual

3. Government support on capacity building

4. Continuing Professional Development through fellowships or attachments in developed countries through;
   - Inter-Govermental agreements
   - Our EH counterparts

5. Adopt best practices from developed countries to suit the local context
Thank You for Listening