Risk Analysis and Contingency Planning

In the context of policy & decision making

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FAO POLICY LEARNING PROGRAMME
Capacity Building Programme on Policies and Strategies for Agricultural and Rural Development

Risk Analysis and Contingency Planning

By

Patrick Otto, Animal Health Officer (Veterinary Public Health), Animal Health Service

of the

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

About EASYPol

The EASYPol home page is available at: *www.fao.org/easypol*

This presentation belongs to a set of modules which are part of the EASYPol Resource package: **FAO Policy Learning Programme : Specific policy issues: Risk analysis and contengency planning**

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Objectives

- Define risk analysis and its application
- Outline the key components of risk analysis and provide a brief overview of the risk analysis process
- Identify key players in risk analysis process
- Risk analysis principles

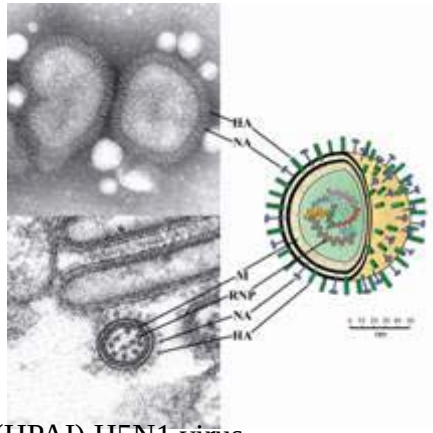
Introduction

What is Risk Analysis?

- A process performed to understand the nature of unwanted, negative consequences to health; and to
- identify and consider the options for preventing or minimising the negative consequences.

A HAZARD is...

- A biological, chemical or physical agent with the potential to cause an adverse health effect.



(HPAI) H5N1 virus

RISK is

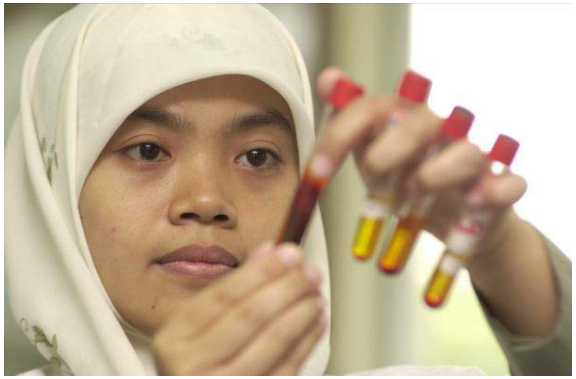
- The likelihood (probability) *i.e. how likely is it to happen?* and
- the impact on health *i.e. how sever?*

RISK = Probability x Severity

Components of Risk Analysis

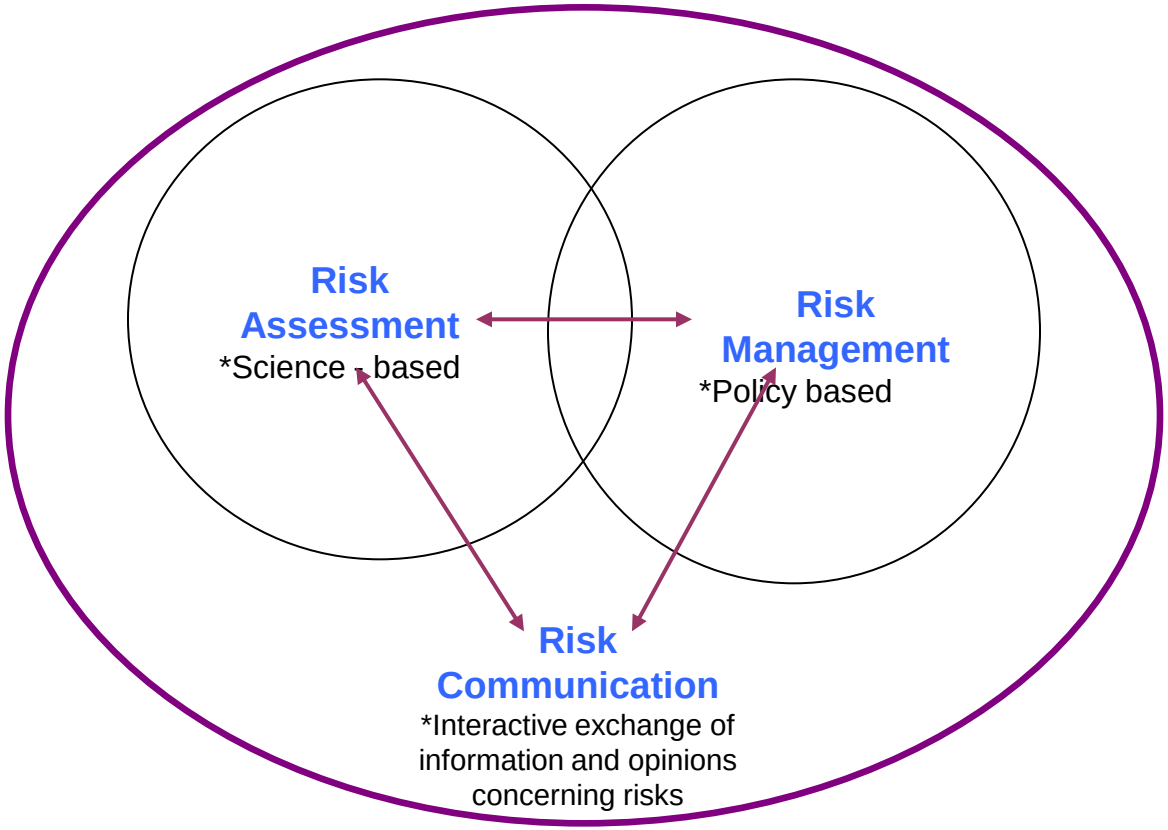
I. Risk Assessment

II. Risk Management



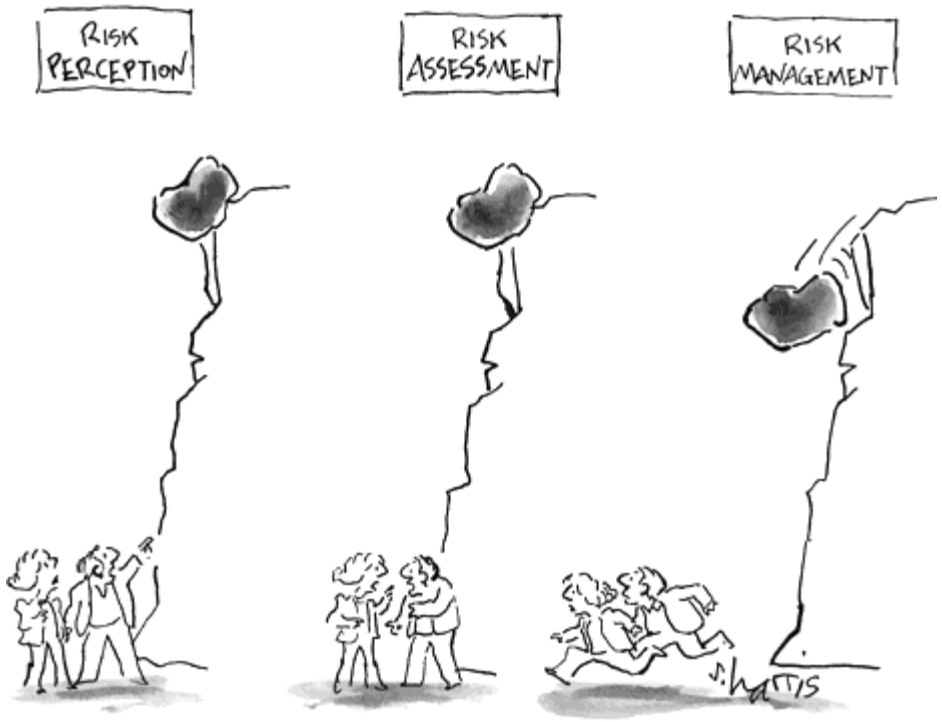
III. Risk Communication

Risk Analysis Framework



I. Risk Assessment

- A scientific process (in the context of health) – consists of 4 steps:

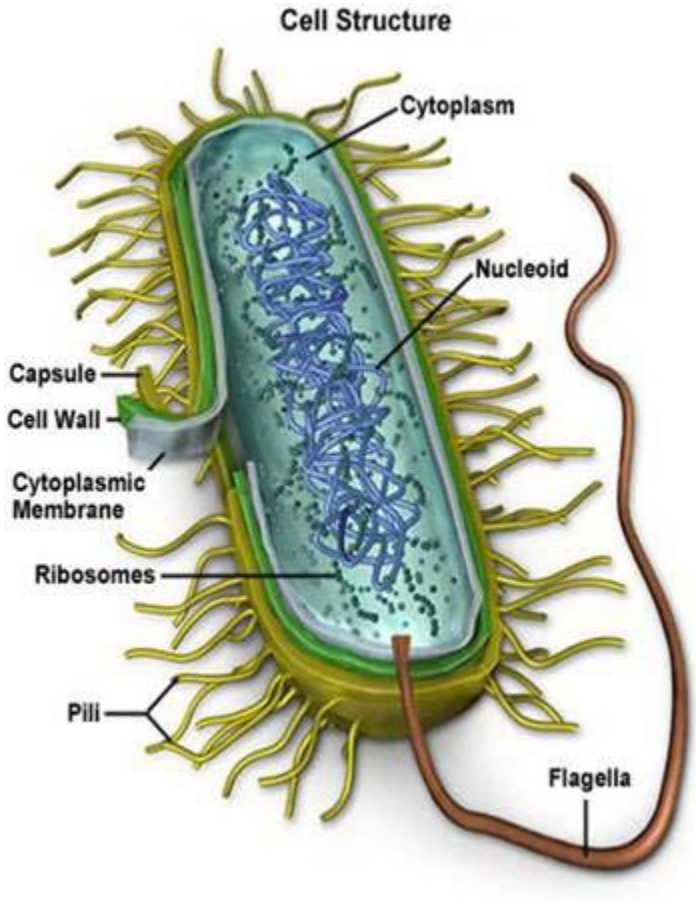


1. Identify the Hazard

2. Describe the Hazard (characterisation)

E.g for bacteria

- growth requirements/characteristics
- mode of transmission
- host range
- vulnerabilities
- survival



3. Assess exposure

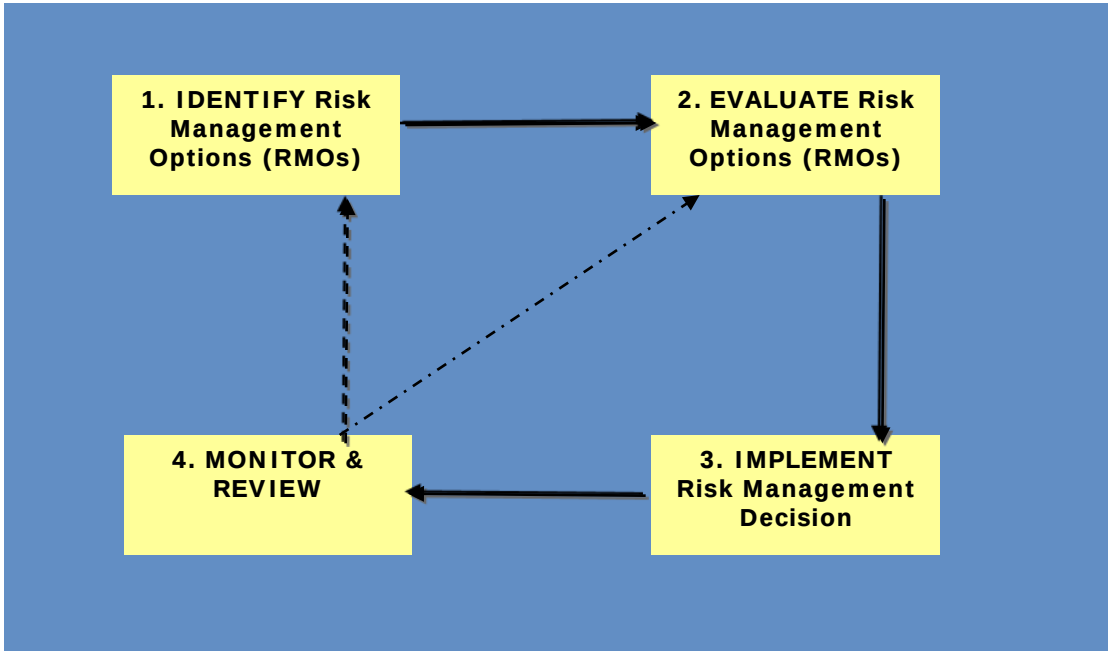
i.e. ***the degree of intake or contact likely to occur***

4. Describe the risk - (characterisation)

i.e what is the most likely health impact for the population?

II. Risk Management

Involves considering policy options *to accept, minimise or reduce risks* and to select and implement appropriate options



Examples of Risk Management Options (RMOs)


culling & burning

quarantine


Decontamination


Restricted zones


Vaccination


Vehicle disinfection

Question:

“Are there any other RMOs to control animal diseases?”

III. Risk Communication

- Interactive information exchange among risk assessors, risk managers and other stakeholders.
- An integral and ongoing part of all stages of risk analysis.
- Should be agreed between risk assessors and managers early in the process.

Risk Communication Strategy

Question: Who presents information to the public (i.e. who do the public trust, how should it will be done?)

- Consider ‘risk perceptions’

Summary – risk analysis

- A process made up of 3 components – risk assessment, risk management & risk communication;
- Helps to identify risks and to analyse RMOs;
- Risk communication - an interactive process, requires a strategy.

Contingency Planning

Contingency Planning (defined)

The development and maintenance of a framework for responding to suspected and confirmed incidences with significant consequences for public health, safety or welfare *e.g. outbreak of exotic human, plant disease or serious food contamination*.

Includes the arrangements, structures, systems, and individual and group responsibilities.



Outline

1. Contingency planning – aims and context
2. Contingency Planning or Emergency Preparedness
3. A Contingency Plan framework
4. Contingency Planning – Organization
5. Alert Levels

1. Contingency Planning - Aims :

- Protect human, animal and plant health;
- Minimise economic loss e.g. the number of animals which need to be culled either to control the disease or on welfare grounds,
- Minimise the disruption of the food supply chain, and related industries;
- Protect livelihoods;
- Minimise damage to the environment.



1. Contingency Planning - context

Part of wider prevention measures, including:

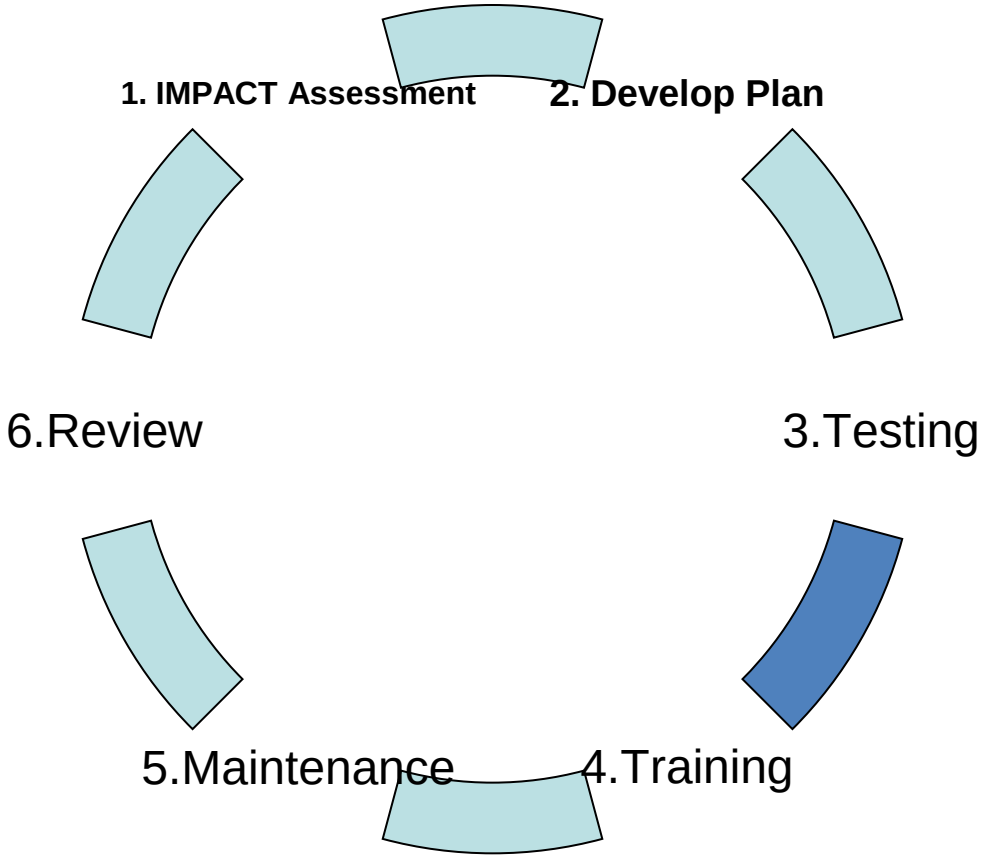
- improved surveillance of animal disease, preventing illegal movement of animals, plants or food;
- improved bio-security in farms and markets, and;
- general education and raising awareness – for farmers and the rural community on measures to improve farm hygiene and bio-security to reduce the risk of disease.

2. Contingency Planning or Emergency Preparedness

Part of emergency planning. Intended to ensure;

- **Capability to initiate and take appropriate / timely actions to support the response.**
- **the right institutions / organisations and stakeholders are notified, briefed, and engaged to respond.**

3. A Contingency Plan framework

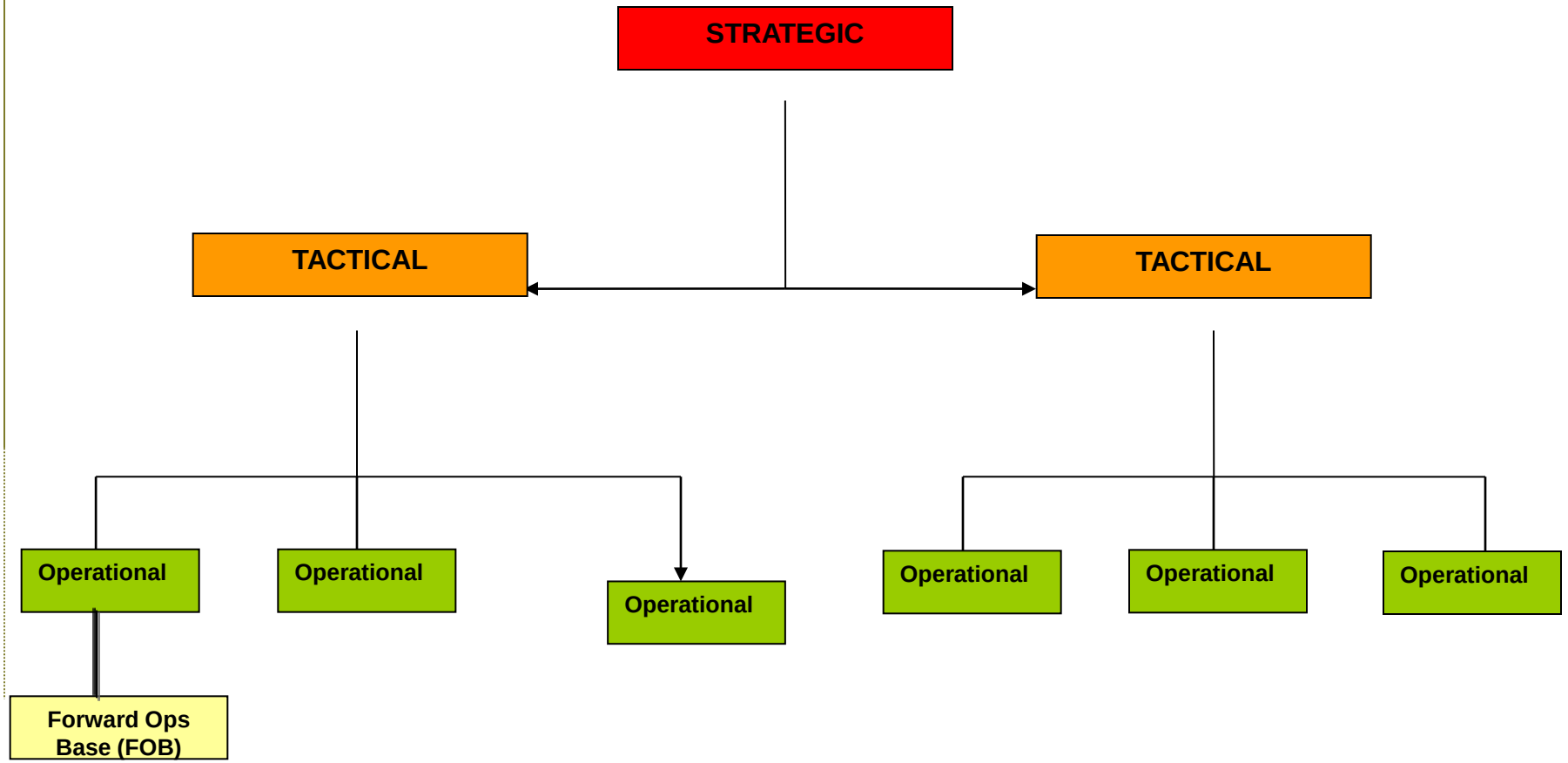


4. Contingency Planning - Organization

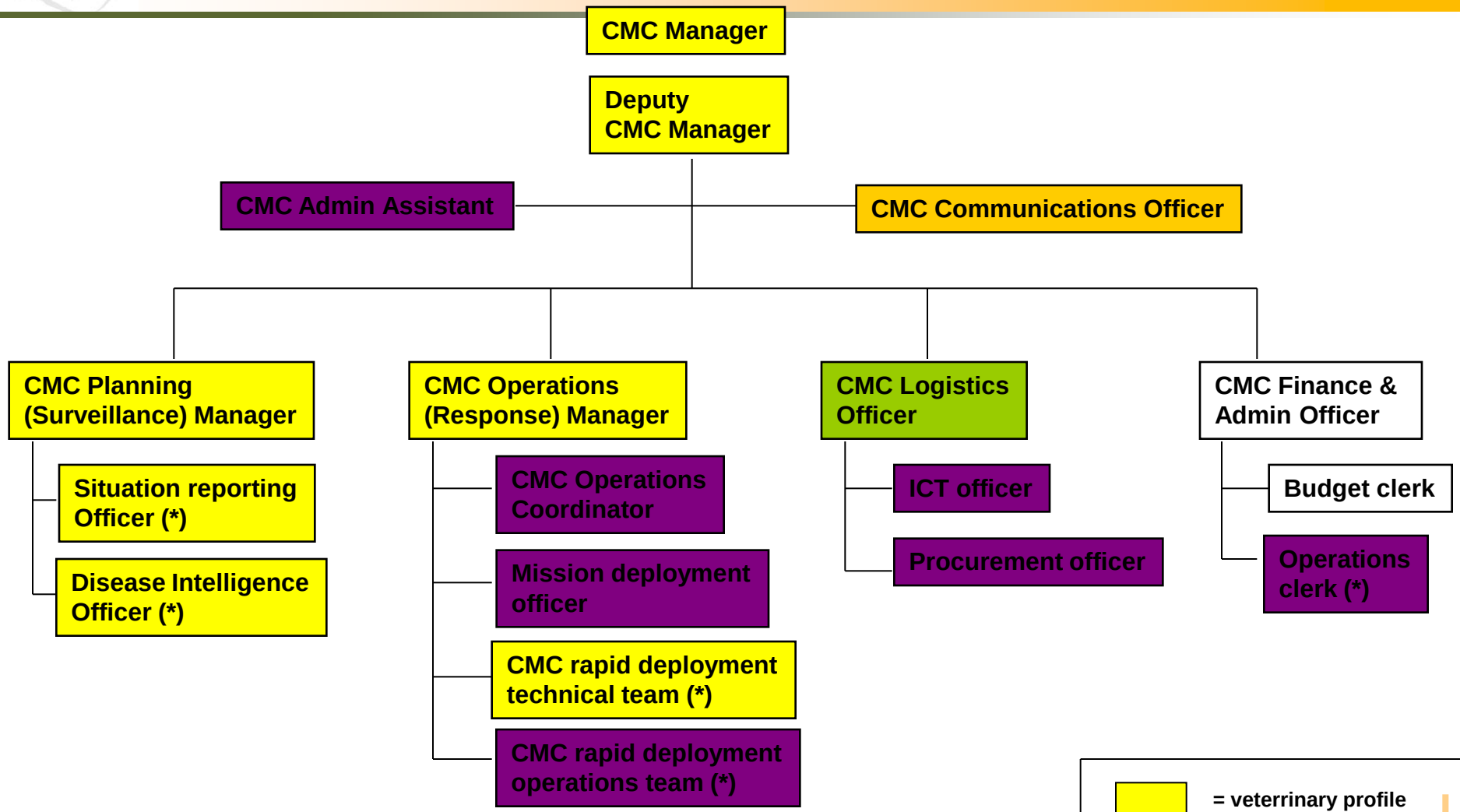
Approaches may vary but a clear structure helps to ensure;

- **effective coordination;**
- **efficient response;**
- **clear communication lines;**
- **clear understanding of roles and responsibilities;**
- **decisions made at the right level - and communicated efficiently.**

Typical Multi-Level Command & Response Structure



FAO Crisis Management Centre (Animal Health) Organisation Structure



note: the structure can accommodate growth depending on the nature of the demand for CMC services in the areas indicated (*)

4. Organisation (cont'd)

Strategic Level

Provides:

- overall strategic oversight
- direction to the tactical level responses teams
- a forum to review strategies (in a wider Government context)

– *e.g. a Civil Contingencies Committee (CCC) – involving all relevant departments,*

Tactical Level

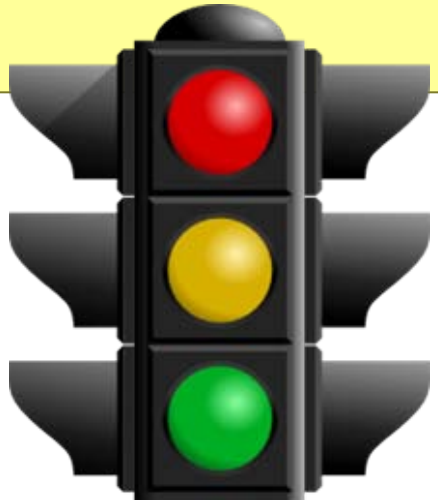
- Translates advice from strategic level into practical instructions for operational personnel;
- Advice and coordination for those dealing with the incidence at local level.

4. Organisation (cont'd)

Operational level

- implement prevention and control/prevention measures in accordance with tactical level advice and guidance;
- report on the progress of the incidence and the control measures to the Tactical level.

5. Alert Levels



Alert levels are useful:

- Different approaches but same objective;
- Each level clearly defined;
- Helps ensure appropriate response and resources;
- To rationalize use of resources;
- Decisions to escalate, downgrade or stand-down the response - based on clear criteria and evidence;

Summary – contingency planning

- An essential part of risk management
- Supports emergency preparedness and response
- Aims to protect human, animal and plant health; to minimise disruption of the food chain and food supplies, protect livelihoods, damage to the environments ..etc
- Approaches vary but a structured approach is preferable;
- Alert levels help ensure appropriate response and resource levels are deployed.

Further readings

- Risk Management and food safety – WHO/FAO
- Application of risk analysis to food standards issues – WHO/FAO Expert Committee, Geneva, 13 – 17 March 1995
- Risk Assessment Of Microbiological Hazards In Foods *Report of the Joint FAO/WHO Expert Consultation Geneva, Switzerland, 15 to 19 March 1999*
- Evaluation Du Risque Microbiologique Dans Les Aliments *Rapport de la Consultation mixte d'experts FAO/OMS Genève (Suisse) 15-19 mars 1999*