

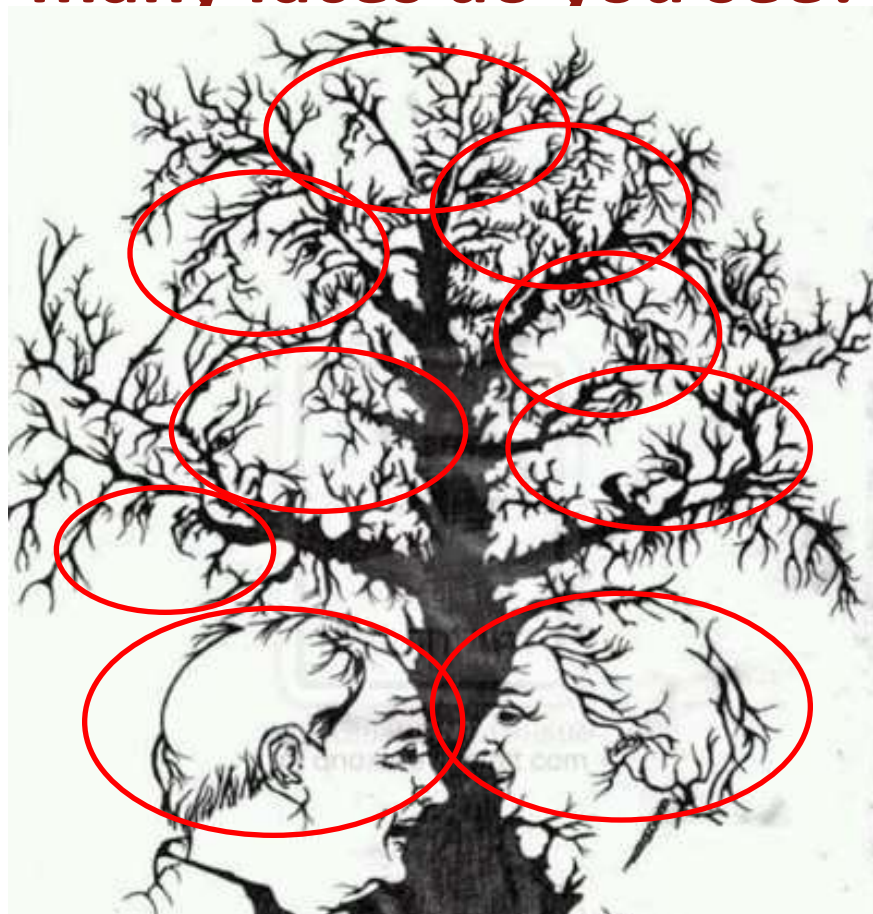


# Surveillance for early detection and outbreak investigation

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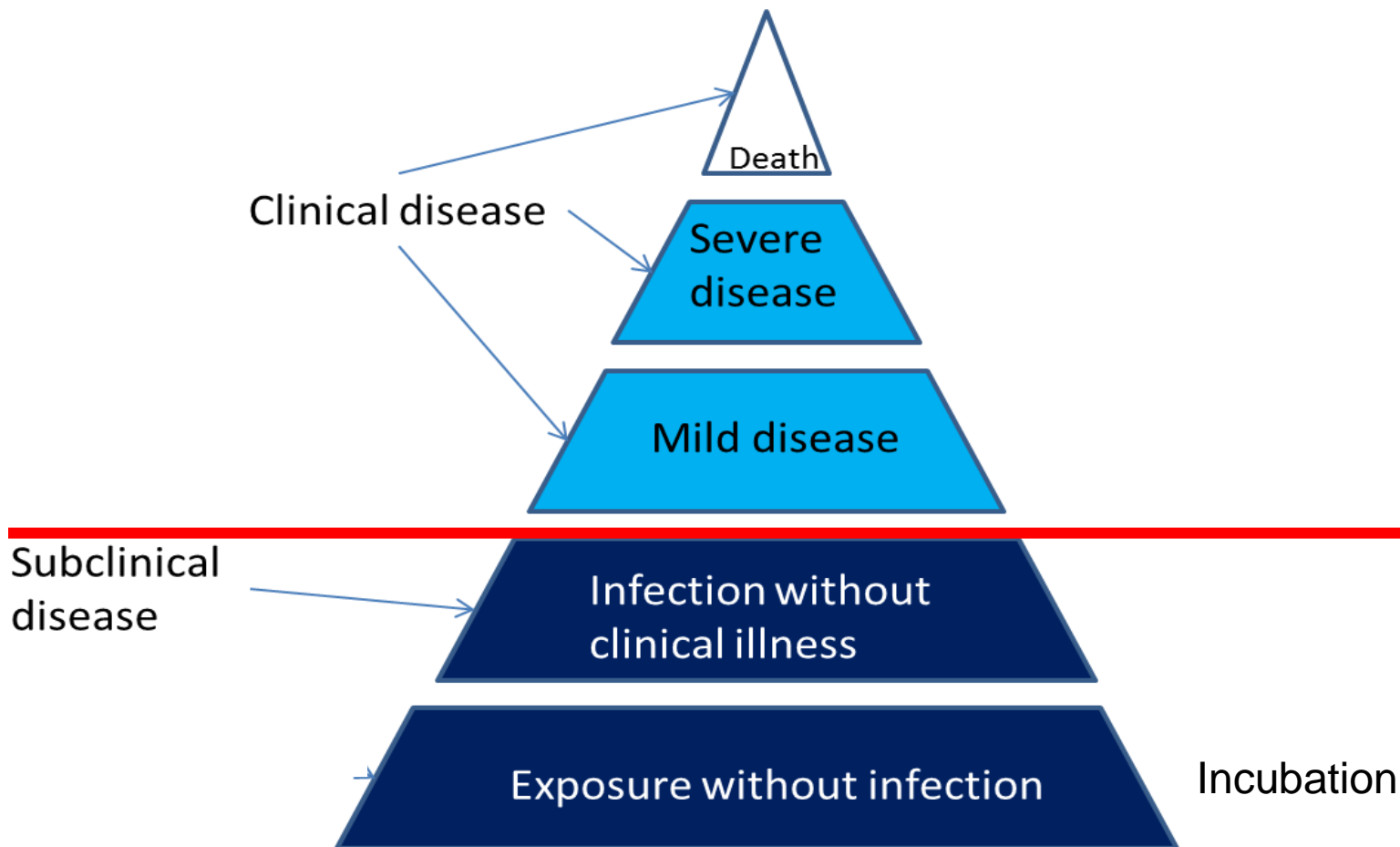
**How many faces do you see? 2,4,8, 9**



**If you search, you may find it**



# Disease



Adapted from C. Bartels



## Surveillance

### OIE Terrestrial Animal Health Code Definition

“Means the systematic ongoing **collection, collation** and **analysis** of information related to animal health and the timely dissemination of information so **action** can be taken”



Demonstrate absence of disease or determining presence of disease or early detection



Essential part of any disease control programme



## Types of Surveillance Art 1.4

- Means of data collection: Active Vs Passive, Target Vs Scanning
- Disease focus: Pathogen-specific Vs General surveillance
- Selection: Structured Vs Non-random



Plan to regularly collect and analyse information so ACTIONS can be taken



Share results (report)



## Surveillance main components

- Surveillance objectives -> Adapt the strategy
- Case definition
- Target population
- Epidemiological unit
- Means to collect data (sampling and testing, questionnaires, syndromic)
- Analysis of the data
- Two ways reporting system (national and internationally)
- Actions to be taken
- Responsibilities
- Monitoring and evaluation



## Surveillance for early detection

Collecting and analyse information so prompt actions can be taken to reduce the spread and mitigate the impact of disease

(Sentinel, passive, clinical inspections in abattoir, etc.)

### Specific requirements

- Awareness (stakeholders and vets). Reduced sensitivity
- Reporting system. Where, how and to whom report
- Field epidemiological network across the country
- Outbreak investigation- Contingency plan



## Outbreak investigation

- Systematic procedure to understand the disease in the field
- Identify the source of cases with a view to control and prevent spread
- Steps:
  1. Confirmation of the case (Clinical, sampling)
  2. Where did it come from and who else is at risk –risk factors
  3. Take actions to prevent further spread –awareness

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  4. Evaluate (impact, risk factors, extend of spread – serosurvey)

It is much more than taking samples



## Conclusion

Surveillance essential part of any disease control programme (PCP1,2,3,4,5)

### Aim

- Detect outbreaks as soon as possible
- Identify as many outbreaks as possible
- React as prompt as possible



Goal: Minimise the impact of the disease

Indicator: Good understanding of the virus and of the disease

Data -> Information -> **Knowledge**-> reporting



## Task for the group discussion

1. Split in two groups
2. Chose a rapporteur (if not voluntary select it randomly)
3. Discuss each of the questions
4. Identify at least 3 gaps in each of the topics that could be sorted by next year (be realistic and provide solutions)
5. Summarise your discussion including the gaps and report to the plenary

Suggestion: Report the variety within your group and what is the response as a Group

Aim: Better understand surveillance and outbreak investigation capacities in the region and identify gaps



# Questions

## 1. Surveillance

- Do you have an official and functional nationally coordinated FMD surveillance system?
- Is it supported by the epidemiological team (serosurvey)?
- Is it revised and amended regularly?
- Do you have a robust reporting system (from the field to central level)?
- How do you coordinate/inform your neighbours?
- How is the communication with regional and central labs



## Questions

### 2. Surveillance for early detection

- Considering the FMD situation in your country, how important is early detection for your country?
- Is your staff well trained in early detection? And the stakeholders?

### 3. Outbreak investigation

- Do you have a written protocol to investigate outbreaks, including sampling?
- Do you think is necessary to investigate all outbreaks?
- How good is your official FMD contingency plan (if any)?



# The Bishkek 6 actions for Effective Surveillance

1. Awareness of stakeholders and staff
2. Capacity building
3. Correct equipment
4. Enough resources to reach remote areas
5. Actions to enhance farm collaboration
6. Feedback staff and stakeholders



# Thank you for your contribution

