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## Emergency Preparedness Training, contingency planning and exercises

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### Regional Workshop on FMD and other TADs

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## Some terms and questions for the start...

What is prepeardness?

“A state of readiness, preparation for an event“ Getting ready for something.



What is prepeardness planing?

„It is preparing for extraordinary incidents that cannot be managed with ordinary resources and routines alone“

What is an emergency preparedness plan?

In general a “A high level document that includes all the activities required to prepare for the occurrence of one ore more diseases“

From a veterinary perspective it is a plan that “outlines what a **government needs to do** before an outbreak of a disease - **in order to be prepared**“

What is a prepeardness program?

It is the overarching program which makes priorities (preparedness policy) into actions.



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## Some terms and questions for the start...

What is a contingency?

“An unusual and unpredictable event; something liable, but not certain, to occur”

Some difference

What is a contingency plan (~ crisis management plan)?

It is a particle tool that can be used when an extraordinary incidence occurs.

From a veterinary perspective this plan details “what a government will do in the event of an incursion of a disease, beginning from the point when a suspect case is reported.”

What is an Standard Operation Procedure (= operational manual)?

This is a comprehensive set of instructions produced by the government that instructs field staff and others how to undertake specific tasks required by the contingency plan.



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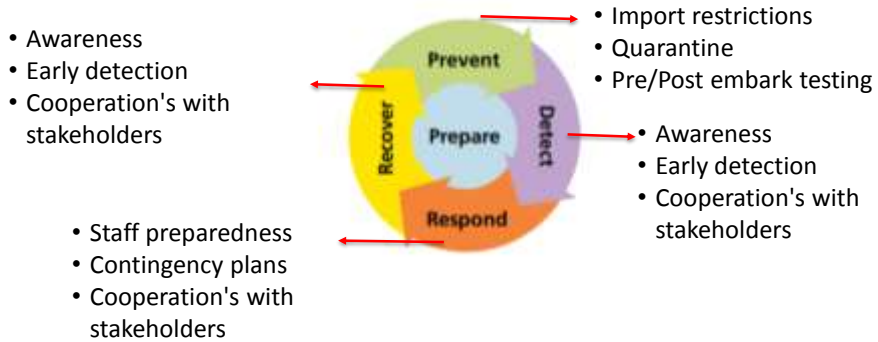
**"Plans are nothing; planning is everything."**

**What this sentence actually means...**

## Some terms and questions for the start...

### Emergency **Management** Cycle

Cycle of good emergency management planning and disease control



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## Some terms and questions for the start...



### Emergency **Preparedness** Cycle

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## Getting started to be prepared

### Good Emergency Management Practice



<http://www.fao.org/docrep/014/ba0137e/ba0137e00.pdf>

### Comprehensive Preparedness Planning



[https://brs.dk/eng/Documents/Comprehensive\\_Preparedness\\_Planning.pdf](https://brs.dk/eng/Documents/Comprehensive_Preparedness_Planning.pdf)

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## So how do I manage my preparedness?

Know what you want to be prepared for! Have clear objectives

Risk analysis will help to define what you want to be prepared for.

Have a preparedness policy and preparedness program!

At what level do you want to set your preparedness? What is the level you are satisfied with?

How much are you willing to put in - How much do you expect out of

Prioritize your resources

Prioritize on diseases and focus on common elements.

Cost-benefits analysis – try to estimate the costs and benefits of being

Prepared. It is similar to insurance

Follow-up implementation regularly!

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## Training

The aim is “to ensure that relevant competencies are developed and maintained”

**Which** competent skills do you want your staff to have?

General (tracing/surveillance in zones/monitoring emergency vaccination) and disease specific (recognizing clinical signs, disease transmission)

**Who** needs to be trained?

Central – Medium – Local level official veterinarians?

Private veterinarians?

Other stakeholders?

**How** do you want to deliver it and how will you maintain it?

Face-to-face or on-line. Regular training program or Just in Time Training



## Example: On-line FMD Emergency Preparation Course in Russian language by EuFMD

**Who is the course for?**

Veterinarians who are involved in diagnosing and investigating an outbreak of foot and mouth disease. The course is for field or regional veterinarians and also for veterinarians at central veterinary services.

**What does the course cover?**

- FMD aetiology and pathogenesis
- Clinical diagnosis, lesion ageing
- FMD epidemiology, outbreak investigation
- Biosecurity
- Vaccines and vaccination for FMD
- Introduction to the Progressive Control Pathway

**What does the course involve?**

**12 hours to complete.**

**Up to 150 participants**

**Open for 4 weeks**

Endemic and free countries of West Eurasia were invited to take a course (*Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Turkmenistan, Uzbekistan, Tajikistan, Moldova, Ukraine*)

**The course was run in middle of October 2017.**





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## How do adults learn?

### Independent/ self-directed / autonomous

Make own choices related to what they want to learn

- Involve trainee in setting objectives of training



### Make use of pre-existing knowledge and life experiences

Objectives are directed by background, ambition, interest, and guided by mentors

- Consider diversity of Trainees in training
- Use the wide range of experiences of participants during the training

### Goal-oriented

Look how they are going to use the training in current profession

Personal interest

- Steps of knowing, understanding, be able to do at the end



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## How do adults learn?

### Relevance and impact on life

When tasks/assignments are directly related to an interest or will be directly useful in personal or professional life

- Examples that relate to the Real-world of Trainees are important
- Training should be problem-centred for Trainees to see immediately how instructions will help them to solve problems

### Balancing theoretical concepts with practicality

Internal motivation to learn and different types of students

- Provide "How to ...." (not only "What is ...")

### Mentor/tutor/trainer as a colleague

Collaborative and respectful relationship with Trainer

- Acknowledge contribution to training, include Trainees in developing your programme, make use of experience already present



## Learning styles

- **Activist**

- Learn by doing
- Pro-active
- Short attention spans



- **Pragmatist**

- Like to know 'Why?'
- Direct application to own situation



- **Reflector**

- They stand back and take in (contemplate, making notes)



- **Theorist**

- Analysts of audience
- Want to know who, why, when, how
- Need instructions, references, further reading, fact sheets



## Learning styles

- **Activist**

- Learn by doing
- Pro-active
- Short attention spans



- **Activist**

- Need exercise, action, puzzle
- Wants to move on

- **Pragmatist**

- Like to know 'Why?'
- Direct application to own situation



- **Pragmatist**

- Explain upfront why you train/teach
- Need for debrief as to explain why it is relevant to them

- **Reflector**

- They stand back and take in (contemplate, making notes)



- **Reflector**

- Ask feedback, opinion after a break, or ask questions before training
- Require regular breaks

- **Theorist**

- Analysts of audience
- Want to know who, why, when, how
- Need instructions, references, further reading, fact sheets



- **Theorist**

- Provide references, further reading materials
- Instructions to activities need to be very clear, debriefs very structured and comprehensive



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## Contingency Plans

What are the characteristics of a good contingency plan?

- Action – oriented
- Comprehensible
- Up-to-date
- Accessible
- Realistic
- Read and understood
- Tested



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## Lumpy Skin Disease Contingency Plan template

[http://www.fao.org/fileadmin/user\\_upload/reu/europe/documents/LSD\\_template.pdf](http://www.fao.org/fileadmin/user_upload/reu/europe/documents/LSD_template.pdf)

### Table of Contents

#### Chapter 1: General description of the lumpy skin disease

- 1.1 Clinical signs
- 1.2 Economic importance
- 1.3 Causative agent
- 1.4 Persistence of the virus
- 1.5 Epidemiology
  - 1.5.1 Host range
  - 1.5.2 Transmission
  - 1.5.3 Geographic distribution

#### Chapter 2: Legislation

- 2.1 General legislation
  - 2.1.1 National legal classification of LSD, including the official list of notifiable diseases
  - 2.1.2 Powers to enter affected holdings and take samples on suspicion
  - 2.1.3 Powers to impose quarantine on infected and suspect premises
  - 2.1.4 Powers to impose movement controls
  - 2.1.5 Powers to cull all susceptible stock on infected premises/units/villages
  - 2.1.6 Powers to require compulsory vaccination
  - 2.1.7 Powers to regulate importation of animals, animal products and other sources
  - 2.1.8 Legal basis for compensation for culled animals and materials destroyed in disease control options
  - 2.1.9 Legal requirements for importation of vaccines and authorization for use
  - 2.1.10 Legal basis for registration of bovine farms and identification of bovines

#### Chapter 3: Legal acts indicating government budget(s)

- 3.1 Personnel costs
- 3.2 Transport costs
- 3.3 Farmers' compensation for cattle culled or died of LSD
- 3.4 Equipment and consumable items
- 3.5 Vaccines and vaccination campaign
- 3.6 Cattle identification, vaccination, movement and health recording database

#### Chapter 4: Chain of command and disease control

- 4.1 Structure of the Veterinary Services and Competent Veterinary Authority (CVA)
- 4.2 National Disease Crisis Center (NDCC) and the chain of command



## Contingency Plans

### Chapters:

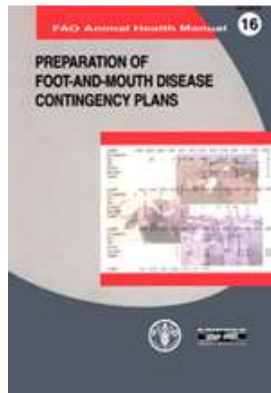
- General Description of LSD
- Legislative background
- Legal acts indicating government budget
- Chain of command and disease control
- Overall policy for Lumpy Skin Disease
- Chain of notification on LSD in case of suspicion or occurrence
- NRL and sample collection from suspected animals

### Chapters:

- Lumpy skin disease control strategy
- Prevention Measures
- Training and awareness
- Surveillance measures
- Lifting of zones
- Epidemiological investigation
- Evaluation of the contingency plan
- Suggested annexes



## FAO CP publications on TADs



<http://www.fao.org/docrep/006/Y4382E/y4382e00.htm>



<http://www.fao.org/3/a-i1196e.pdf>

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## Exercise

Preparing to manage an extraordinary event – outbreak of FMD.

It is a tool to develop your:

- Staff
- Contingency plans and SOPs
- Equipment and technology
- Cooperation with external partners!

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## Simulation exercises – what is it good for?

Is a tool that helps to:

- improve overall the emergency response of an organization;
  - train the veterinary staff on the relevant procedures, specific tasks and responsibilities and assess the capabilities of emergency response;
  - build an emergency team;
  - improve resource planning;
  - acquire and develop managerial, training and coaching skills
  - extend knowledge on different approaches in animal disease control and their practical applicability for the country/region;
  - test and assess the contingency plans and the SOPs in place;
  - test and improve the chain of command;
  - test newly adopted disease control strategies and related procedures;
  - test equipment;
  - identify procedural, administrative, training gaps and needs
  - improve inter-institutional cooperation
  - raise public awareness (increase risk perception)
- apparently a lot of things... lets sort this out a bit



## Simulation exercises – what is it good for?

Is a tool that helps to make your overall response better

- improve overall the emergency response of an organization;
- train the veterinary staff on the relevant procedures, specific tasks and responsibilities and assess the capabilities of emergency response;
- build an emergency team;
- improve resource planning;
- acquire and develop managerial, training and coaching skills
- extend knowledge on different approaches in animal disease control and their practical applicability for the country/region;

NDCC  
LDCC  
Field Ops



Setting up DCCs  
Suspicion visit to a  
farm



## Simulation exercises – what is it good for?

Is a tool that helps to find what did not go so well so next time it will go very well

- test and assess the contingency plans and the SOPs in place;
- test and improve the chain of command;
- test newly adopted disease control strategies and related procedures;
- test equipment;
- identify procedural, administrative, training gaps and needs



## Simulation exercises – what is it good for?

Is a tool that helps to:

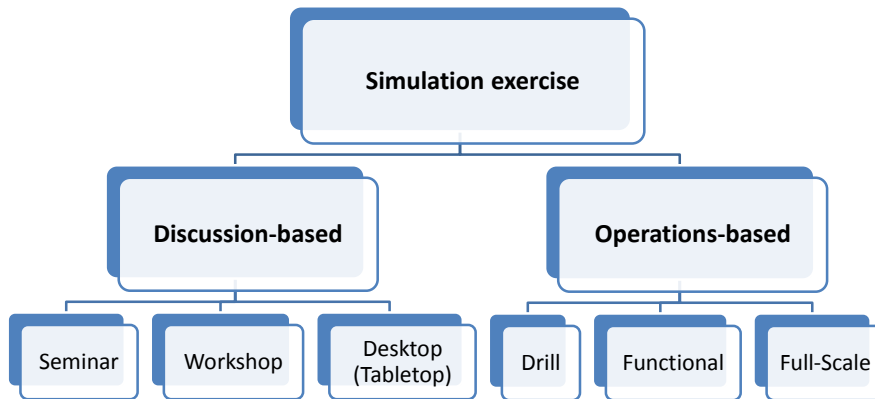
Make new friend before the crisis occurs  
and let the public know that you are doing your part

- improve inter-institutional cooperation
- An FMD outbreak in an FMD free country without vaccination will very likely out scale the capacities of a Veterinary Service
- raise public awareness (increase risk perception)





## Type of Simulation Exercises

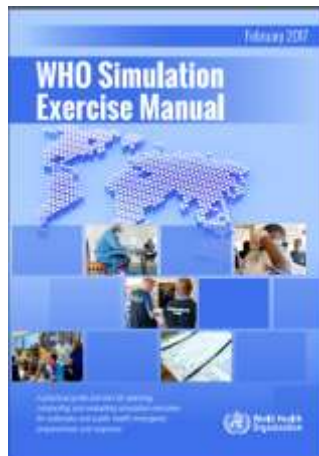


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## WHO SimEx Manual



WHO Simulation Exercise Manual. Geneva: World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO.  
<http://www.who.int/ihr/publications/WHO-WHE-CPI-2017.10/en/>



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## Drill

- It is a functional exercise
- Can be simple, or more complex as a component of a larger field exercise
- At its most simple designed to test a single activity Tests person and instruction
- Can be a circuit/carousel of drills
- Can be Incorporated into training

(+) immediate result/feedback; can be easily re-run on the day (low cost); validates training; validates instructions/SOP; popular with participants; easy to set up; can be done locally

(-) doesn't fit well into command structure except operational (less good for tactical/strategic)

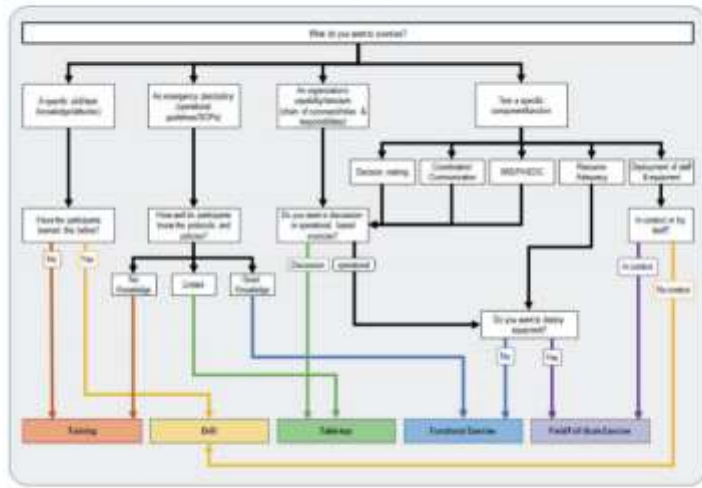


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## Desktop (tabletop)

- Participants learn by thinking and discussing (rather than by doing)
- Held in an informal setting where key personnel are gathered to discuss simulated emergency situations in a relaxed atmosphere
- Can also be used for educational - enhance general awareness
- The focus is on problem solving
- Can be with or without a scenario
- Varies in size – therefore complexity (planning) varies, but it is less than a functional exercise
- (+) Participants do not need a lot of pre-preparedness
- (+) Expenses depend on travel cost of the participants and meeting place costs, but this is rather inexpensive to carry out
- (+) You have on-the-spot feedback and produced materials
- (+) Better involvement/understanding of more complex exercises in the future
- (-) ~~Discussing is always easier than doing therefore further exercises would be needed to get participants prepared~~

Fig. 5. Exercise decision tree



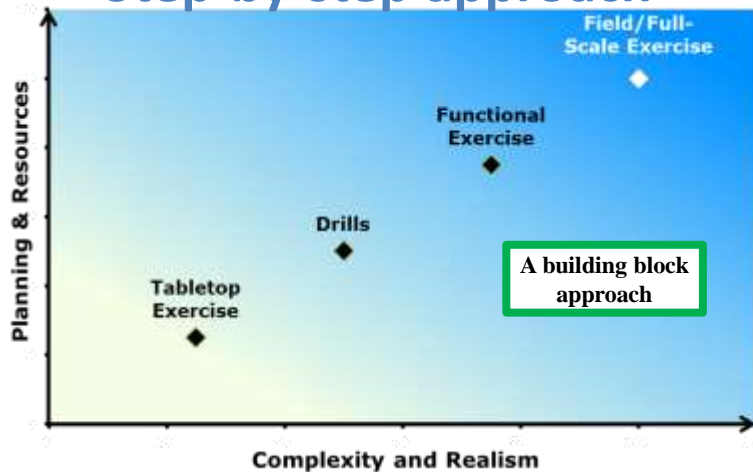
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WHO Simulation Exercise Manual. Geneva: World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO. <http://www.who.int/ihr/publications/WHO-WHE-CPI-2017.10/en/>



Food and Agriculture Organization of the United Nations

## Step-by-step approach



WHO Simulation Exercise Manual. Geneva: World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO. <http://www.who.int/ihr/publications/WHO-WHE-CPI-2017.10/en/>



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## How to plan an exercise

- Define the **AIM** based on the need identified...
- “The aim is a statement of intent that gives direction to what will or is desired to be achieved in the exercises”
- One sentence
- Only ONE aim (there is no „and”)
- It has a **purpose** and a **context**
- It should start with a (one) verb (test/assess/practice/develop/review ect.)
- Positive, clear, concise and achievable
- **Practice the local veterinary office’s ability to respond to an FMD outbreak in the their region**
- Should specify which part of the contingency plan is to be exercised
- Objectives will branch from here



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## How to plan an exercise

### Define the **OBJECTIVES**

- This greatly depends in the type of the exercise and also on funding
- What is to be achieved by individuals, groups or agencies participating
- Objectives flow from the aim, not the reverse!
- There can be more than one objective, but not too many
- Agree early on!
- The objectives determine all future planning
- Must be clear and simple (commonly understood)
- should follow SMART (or SMARTER)





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## SMART(ER)

- S pecific (Simple)
- M easurable (Manageable)
- A chievable (Appropriate)
- R ealistic (Relevant)
- T imely (Time based/bound, Task related)
  
- E valuation
- R eview



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## Exercise Scope

- Describes the boundaries of the exercise
- Inclusions
- Exclusions (RR)
  
- Avoids 'exercise creep'



## Outbreak of FMD in your country

### Discussion Based

- An outbreak of FMD has been declared on a farm
- The farm has been closed off
- Culling to commence tomorrow morning
- 3km and 10 km zones are being established



## Scenario / Event/ Inject

**What has happened? / Where it has happened? / When it has happened? / Who is immediately affected? / How it has happened?**

- Scenario
- Have background information leading up to the event (inst. participants)
- Lay down the consequences of the event (= FMD outbreak), such as control measures already taken
- Time and place (location) of the scenario
- Check that your assumptions are correct
- Create a timeline of (expected) events
- How to deal with time? (time jumps)



## Exercise Injects

- Create situations arising from the scenario to test of validate the plan
- Inject team
- Realistic
- Specifically directed
- Methods – face to face, telephone, test, email, note
- Timing
- Flexibility – vary depending on how exercise is going
- Master events list
  
- Many shapes and sizes
- Materials needed for the injects!

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Inject no: AM1	Date / Time	12/07/2016 10:00	Time sent			
From:	DS	On behalf of:	AM LDCC			
Recipient:	AM NDCC					
Title	SimEx TCC 2016: Confirmation of 1 FMD outbreak Armenia					
Content:	<p><b>Exercise – Exercise – Exercise</b> Dear Head of NDCC,</p> <p>We had a suspicion of FMD in <u>Zoraket</u> village, <u>Amasia</u> Rayon, <u>Shirak</u> Marz on Monday. Samples were taken. The NRL confirmed now that it is FMD. The serotype up to this point is unknown. I send you attached the epidemiological investigation from completed by the local official veterinarian.</p> <p>With kind regards, Head of the LDCC</p>					
Means of communications:	Web page	E-mail: AMNDCC@mail.com	Fax:	Phone	Other:	
Purpose:	Activation of NDCC					
Expected reaction:	NDCC is activated. NDCC reacts on findings. CVO is notified of this information. OIE is not notified at this point as serotype unknown.					
Observed reaction:						
Comments:						

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## The GET Prepared Pathway

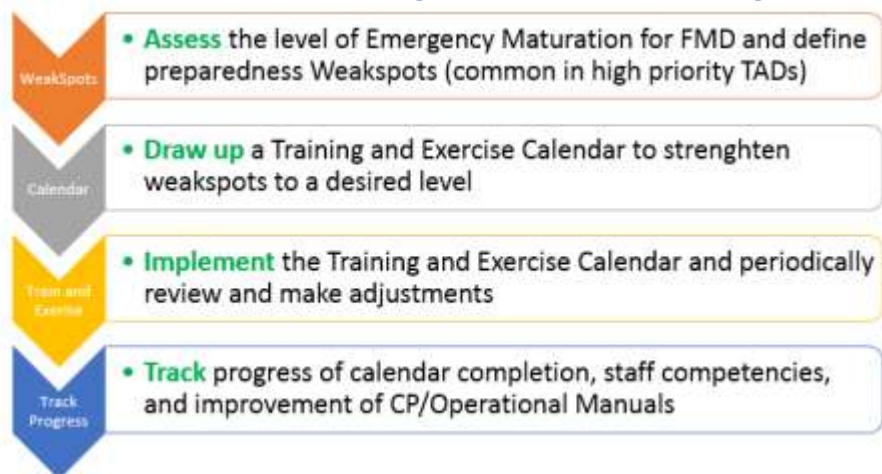
In progress...

The concept:

- 1) Nearly all MSs have a legal obligation to do SimExs
- 2) The know-how for veterinary services is not widespread
- 3) SimExs are a great capacity building tools
- 4) There are several type of exercises not just the "BIG ONE"
- 5) Staff (victims and directing staff) need to be prepared for exercises
- 6) SimExs should not be standalone events but should be in a series of training and exercises to achieve a set goal
- 7) The goal needs to be established based on reviewing "weakspots" in preparedness
- 8) Cross synergies between TADs should be taken into account based on priorities
- 9) Progress needs to be tracked



## The GET Prepared Pathway





## The GET Prepared Pathway



## Acknowledgement

Keith Sumption and  
the European Commission for the control of Foot-  
and-Mouth disease (EuFMD)

<http://www.fao.org/ag/againfo/commissions/eufmd/commissions/eufmd-home/en/>





**Thank you for your attention**