

Simulation exercises: guide to carrying out a needs assessment

No.2

A needs assessment can be carried out for a single simulation exercise, but it is recommended that it is carried out as part of the development of a multi-year simulation exercise plan. It is **STEP 1** in the process of developing a multi-year simulation exercise plan.

The needs assessment takes account of the priority disease risks, the reasons for conducting exercises, the emergency preparedness functions to be tested and any legislative requirements for exercising.

The following questions are designed to act as a checklist for the assessment, and should be tailored to your own country.

1. Which are the priority diseases, based on risk?

Risk = Likelihood of introduction x impact of disease

The impact should take account of animal health, public health, economy, society and trade. An example of a risk matrix is shown below.

Figure

Risk matrix for prioritizing diseases

LIKELIHOOD	Very Likely Once per year				Prevent or mitigate	
	Likely Every 1-10 years					
	Unlikely Once per 10-100 years	“Normal” emergency		Plan and prepare		
	Very Unlikely Once per 100-500 years					
	Extremely Unlikely Once per 500+ years				Disaster arrangements	
		Minor	Limited	Serious	Very serious	Catastrophic
		IMPACT				

Table 1: Priority diseases for your country

Priority	Disease

2. For which diseases do specific contingency plans exist? List the diseases relevant to your own country, and the status in relation to each disease.

Table 2: Contingency plans

Disease Specific Plans	New (Date drafted)	Last updated	Last exercised	Last tested in real emergency	Specific gaps identified*	Level of awareness of the plans amongst stakeholders
e.g. Foot-and-mouth disease						

* Known gaps, or gaps identified during previous outbreaks, exercises and audits - see questions 5, 6 and 7

3. What geographic area(s) or facility locations are most vulnerable to the high priority diseases? List the locations relevant to your own country.

Table 3: Geographic areas

Geographic area	Last exercised	Last tested in real emergency	Specific gaps identified*	Level of awareness of the plans amongst stakeholders
e.g. Border with x country				
Region with high density of susceptible species				

* Known gaps, or gaps identified during previous outbreaks, exercises and audits - see questions 5, 6 and 7

Table 4: Facility plans

Site Specific Plans	New	Last updated	Last exercised	Last tested in real emergency	Specific gaps identified*	Level of awareness of the plans amongst stakeholders
e.g. Laboratory						
Slaughter plants						
Markets						
Shows						

* Known gaps, or gaps identified during previous outbreaks, exercises and audits - see questions 5, 6 and 7

4. Functions - which multi-hazard emergency management functions are most in need of exercising? List the plans relevant to your own country.

Table 5: Multi-hazard emergency management functions

Plans & procedures for multi-hazard functions	New	Last updated	Last Exercised	Last tested in real emergency	Specific gaps identified*	Level of awareness of the plans amongst stakeholders
E.g. Communications						
Coordination (actions and resources)						
Crisis management (chain of command and crisis centres)						
Information management						
Legislation						
Killing						
Disposal						
Cleaning and disinfection						

*Known gaps, or gaps identified during previous outbreaks, exercises and audits - see questions 5, 6 and 7

- which disease-specific operational response plans or procedures are most in need of exercising? List the plans relevant to your own country.

Table 6: Disease-specific operational response plans

Plans & procedures for response functions specific to priority diseases	New	Last updated	Last Exercised	Last tested in real emergency	Specific gaps identified*	Level of awareness of the plans amongst stakeholders
E.g. Suspect investigation						
Infected premises controls						
Movement controls						
Wildlife measures						
Surveillance						
Vaccination						
Other						

* Known gaps, or gaps identified during previous outbreaks, exercises and audits - see questions 5, 6 and 7

5. Previous outbreaks

If your organization has experienced outbreaks in the past:

- Who gained experience, and who did not?
- What lessons were identified?
- What is needed to address them?
- What improvements were made following the outbreaks, and have they been tested?

6. Previous exercises

If your organization has participated in exercises before:

- Who participated in the exercises, and who did not?
- To what extent were the exercise objectives achieved?
- What lessons were identified?
- What is needed to address them?
- What improvements were made following the exercises, and have they been tested?

7. Previous audits

If your organization has been audited on contingency plans or outbreak management in recent years:

- What deficiencies were identified?
- What is needed to address them?
- What improvements were made following the audits, and have they been tested?

8. Legislative requirements

- Is there a legal requirement to carry out exercises? (e.g. for European Union Member States there is a legal requirement under Article 73 of [Council Directive 3003/85/EC](#) and Article 22 and Annex VII of [Council Directive 2001/89/EC](#)).

8. Players

Which organisations, agencies, departments, divisions and levels (operational, tactical or strategic personnel) need to participate in an exercise?

- Which have roles and responsibilities in your plans and procedures?
- With whom does your organization need to coordinate in an emergency?
- Have there been any changes in command structures, policies, roles and responsibilities, or staff?
- What personnel in other organisations can reasonably be expected to devote time to participate?

Conclusion

The following are identified as areas in need of exercising:

Table 7: Priority areas in need of exercising

Priority	Disease	Geographic or Facility Location	Emergency Preparedness Function	Players

References and further reading:

1. European Commission for the Control of Foot-and-Mouth Disease (2020) [Simulation exercises No.3: Guide to a Developing Multi-Year Simulation Exercise Plan](#)
2. Irish Government Department of Housing, Planning and Local Government (2016) [A Framework for Major Emergency Management Guidance Document 4: A Guide to Planning and Staging Exercises](#)
3. World Health Organization (2009) [Emergency Exercise Development](#) (Units 1 and 2)