

# RISK ASSESSMENT SCENARIO

Laboratories and laboratory networks consist of independent laboratories and laboratory departments. This scenario describes a laboratory network with several independent laboratories that have varying hazards and risks.

Each group will represent the Laboratory Focal Point of the laboratory network, and will be expected to describe the role of the Laboratory Focal Point in standardizing risk assessment in the network, and consider the process required to create this standard.

### ***Scenario Description and Instructions***

The scenario describes a laboratory network with laboratories with varying responsibilities and capabilities. Consider the risks and importance of standardized biorisk management across the networks, and begin to contemplate the process necessary to create a standard across the network.

The objectives of this exercise are as follows:

1. Enable Laboratory Focal Points to consider the varying levels of risk across a laboratory network.
2. Enable Laboratory Focal Points to begin to think about the process necessary to establish a biorisk management standard across the network
3. Enable Laboratory Focal Points to better understand their role as Laboratory Focal Points in mobilizing the national veterinary laboratory network to adopt and implement biological risk assessment
4. Encourage the Laboratory Focal Points to draft a process to standardize risk assessment and biorisk management standards across the network

### ***The Laboratory Network***

The laboratory network consists of a Central Veterinary Laboratory (CVL) located in the country's capital, three regional laboratories, 10 provincial laboratories and numerous district clinical hospitals with basic diagnostic capabilities.

The CVL serves as the country's reference laboratory as well as receiving clinical samples from surrounding veterinarians and farmers. As the reference laboratory, the CVL conducts the most sophisticated diagnostic assays and receives samples from the regional, provincial, and district laboratories. This laboratory has six departments including: 1) Sample Reception; 2) Bacteriology; 3) Virology and Serology; 4) Parasitology; 5) Molecular Biology; 6) and Necropsy.

The regional laboratories can do basic diagnostic testing that consists of post mortem evaluation/necropsy, basic bacteriology using microscopy, basic microbial culturing and antimicrobial sensitivity testing, and parasitology using fecal floatation and blood smears. These laboratories also do Rose Bengal assays to test for brucellosis. The regional laboratories often process samples from provincial and district laboratories that are to be referred to the CVL. The regional laboratory is responsible for transporting samples to the capital to the CVL.

The provincial laboratories can do very minimal diagnostic testing that consists of post-mortem evaluation/necropsy, Rose Bengal assays for brucellosis testing, basic parasitology using fecal floatation and blood smear analysis, and gram staining as a method to assess bacterial infections. The provincial laboratories often refer samples to the regional laboratories and the CVL, and are therefore, responsible for transporting samples to these facilities.

The district laboratories have minimal capabilities that consists of post-mortem evaluation and parasitology. They occasionally have access to rapid kit assays that are deployed to the field, and conduct basic testing for parasites. These clinical hospitals/laboratories often refer samples to the provincial, regional, and central laboratories for analysis.

The OIE Delegate has recently nominated a new Laboratory Focal Point, the CVL Laboratory Director, who hopes to adopt and implement a risk assessment approach both within the CVL and across the national veterinary laboratory network, but the process hasn't begun yet. It is your responsibility to help the new Laboratory Focal Point establish a risk assessment process across the network.

1. What are some of the hazards and risks within this network.
2. What is the role of the Laboratory Focal Point in establishing a risk assessment and biorisk management standard?
3. What should the Laboratory Focal Point do first to begin to establish a standardized risk assessment process? Choose one and explain why.
  - a. Seek stakeholder buy-in at the laboratory level
  - b. Seek stakeholder buy-in at the Ministry level
  - c. Conduct risk assessments of all the laboratories in the network
  - d. Nominate 20 laboratory staff members to receive training from an OIE Collaborating Center so that they can conduct the risk assessments
  - e. Work with the Ministry to establish a policy to implement biorisk management across networks
  - f. Brainstorm with your OIE Delegate on what the best approach might be in establishing the process
  - g. Work to obtain resources from the Ministry
4. How should the Laboratory Focal Point seek stakeholder buy-in at the laboratory level and what are the anticipated challenges?
5. How should the Laboratory Focal Point seek buy-in at the Ministry level and what are the anticipated challenges?
6. How should the Laboratory Focal Point begin to conduct the risk assessments across the network and what are the anticipated challenges?
7. How should the Laboratory Focal Point establish policies and resources to sustain the risk assessment standard across the network and what are the anticipated challenges?

