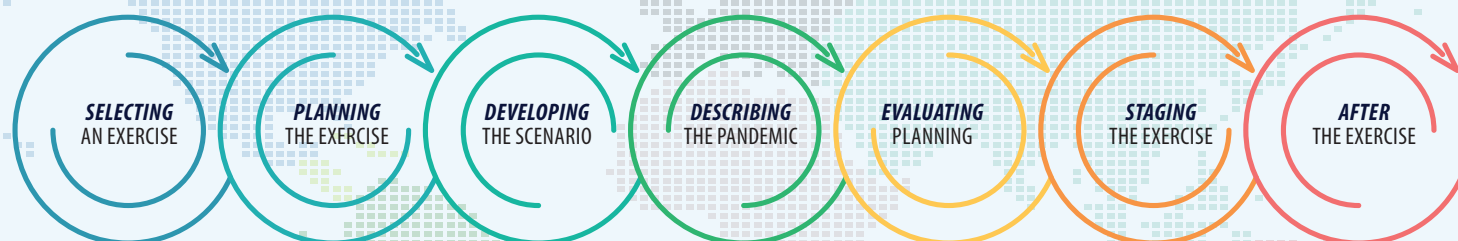


# GLOBAL INFLUENZA PROGRAMME



A practical guide for developing and conducting **simulation exercises** to test and validate pandemic influenza preparedness plans



World Health  
Organization

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**Selecting an exercise** describes considerations to take into account when choosing an appropriate exercise for the plan being tested, and setting exercise aims and objectives.



**Planning the exercise** outlines key steps to take when planning and managing the exercise.



**Developing the scenario** provides guidance on how to research and plan the exercise scenario and injects.



**Describing the pandemic** outlines different pandemic influenza-specific variables that can be incorporated into the exercise scenario.



**Planning the evaluation** describes the steps needed to build an evaluation team and develop a robust evaluation plan for the exercise.



**After the exercise** suggests a process to take use the outcomes of the exercise to initiate the review and improvement and pandemic influenza preparedness plans.



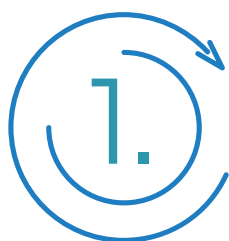
**Staging the exercise** outlines key actions needed to set up and conduct the exercise.

## Developing and conducting simulation exercises to test and validate pandemic influenza preparedness plans

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# Introduction

## 1.1 Overview

Influenza pandemics are recognized as unpredictable but recurring events that can have serious consequences on human health and economic well-being worldwide. Advance planning and preparedness is critical for countries to mitigate the risk and impact of a pandemic, ensuring that they have sustainable and resilient capacities for an efficient pandemic **response**.

Considerable efforts and resources have been invested by countries around the world in developing national pandemic influenza preparedness plans and the capacities needed to respond to an influenza pandemic. However, to be effective, plans need to be tested, validated and updated periodically through simulation exercises.

In 2017 and early 2018, WHO published several key documents to support global pandemic preparedness efforts. The pandemic influenza risk management (PIRM) document (1) and its supporting checklist (2) update the previous WHO pandemic preparedness guidance and checklist with lessons learned from the 2009 influenza pandemic, introduce the strategies and approaches in pandemic influenza risk and impact management, and emphasize the importance of national risk and severity assessments in guiding the national response actions. The *WHO simulation exercise manual* (3) provides guidance on the concepts and principles for conducting and managing simulation exercises. This current guide is derived from those guiding documents. It focuses on developing and conducting simulation exercises to test and validate national pandemic preparedness plans – an essential step in the pandemic influenza preparedness planning process (4).

## 1.2 How to use this guide

### 1.2.1 Purpose

The purpose of this guide is to support countries in their testing and updating of their national pandemic influenza preparedness plans. It is intended to provide guidance on how to select, plan, conduct and evaluate simulation exercises specific to pandemic influenza, and how to set up a process for using the outcomes of these exercises to review and improve pandemic plans.

This guide should be read in conjunction with the PIRM document (1), which provides specific technical guidance on pandemic planning, and the *WHO simulation exercise manual* (3), which provides such guidance on simulation exercises.

*Additional resources for pandemic influenza planning and simulation exercises can be found in Annex 1, and a glossary in Annex 2.*

### 1.2.2 Audience

This guide is intended to be used by national agencies responsible for pandemic influenza preparedness planning. It can also be used by other organizations involved in building pandemic preparedness capacity, or as a reference document for individuals or agencies involved in public health emergency planning.

## 2. Selecting an exercise

### 2.1 Scoping the exercise

Scoping the exercise involves meeting with the host organization and key stakeholders to agree on the exercise aim, objectives, scope and type. Other important issues that should be discussed include the target audience for and **participants** in the exercise, expected outcomes, timeline, budget and exercise management.

The final agreements made during this process should be circulated to stakeholders for future reference (e.g. in a **concept note**).

### 2.2 Setting the aims and objectives

Setting the aim and objectives for an exercise is an obvious first step, but is one that often does not receive enough consideration. It is essential that the aim and objectives are clear and well-defined – they are the foundation of the exercise and they describe the specific outcomes to be achieved. If the aim and objectives are ambiguous or too general, it will be difficult to understand the purpose of the exercise and to evaluate its result.

The aim defines the scope and overall planning framework of the exercise. A successful and productive exercise is directed at a specific aim; for example, to test a component or components of an existing pandemic influenza preparedness plan and identify areas for improvement.

The objectives specify how the aim will be achieved, and will determine how the exercise is designed. They influence the type of exercise chosen, who should be invited to participate, how the **scenario** is developed and how the exercise will be facilitated and evaluated. The objectives should be clear, measurable and attainable. This will allow you to develop assessment criteria to evaluate the outcomes of the exercise and identify improvements or revisions to the plan being tested.

Setting a clear aim and objectives will also help in communicating the purpose of the exercise to participants and stakeholders. If participants have a clear understanding of the aim and objectives, they will be able to perform better and will also be able to provide specific feedback on the outcomes of the exercise. Similarly, if stakeholders and senior management have such an understanding, they will be able to support and advocate for the exercise. Box 2.1 shows the aim and objectives of a sample exercise.

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