Considerations on exercises to validate pandemic preparedness plans

Background
Since the publication of the first Pandemic Preparedness Guidelines in 1999, WHO has advocated that Member States develop preparedness and response plans to mitigate the effects of an influenza pandemic on their populations. To date considerable effort and resources have been committed to developing such plans by the majority of WHO Member States. Preparation and response planning to reduce the impact of any emergency or crisis is a complex process, which requires the coordination and action of multiple players at all administrative levels. Moreover, this process is anticipated to involve a cycle of planning, development, education, practice, testing, evaluation and periodic revision. Many WHO Member States have already begun this process and should be congratulated for their efforts.

The revised International Health Regulations (2005) also underline similar processes for preparedness and response to any Public Health Event of International Concern (PHEIC), including Pandemic Influenza.

Definitions
As pandemic preparedness and response plans are complex and multi-sectoral in nature, validation of these plans is critical to ensure operability in a crisis, otherwise they remain a collection of ideas and concepts waiting for translation into action. The process of validating and practicing a plan is an exercise programme.

An exercise programme is valuable in validating procedures, justifying resource allocation, enhancing understanding of the plan by those who use it, highlighting strengths and exposing opportunities for improvement which can then be addressed and incorporated into revisions of the plan after the exercise. Exercises provide a means to gain real-life-like experience without facing the real-life risks.

An effective exercise programme is made up of progressively more complex exercises, each building upon the previous exercise, until the exercises are as close to reality as possible. An exercise does not need to be a large or resource intensive event in order to provide substantial benefit. The type, scope and resources which are put into an exercise must match the operational capacities and capabilities available at the time of the exercise.

Exercises fall into three broad categories:

- Table-top exercises, which involve assembling the major stakeholders in the plan to talk through a scenario, describing the actions that would be taken at each point. This type of exercise is most effective in validating plans and policies, and is an effective training and validation tool for procedures.

- Functional exercises, in which the participants actually complete certain actions while working through the provided scenario. This type of exercise usually focuses on the coordination of multiple functions or organizations. The Functional Exercise strives for realism, short of actual deployment of equipment and personnel.

- Full-scale exercises, simulate an emergency event as closely to reality as possible. This type of exercise involves all the named responders in the plan, and requires deployment of personnel and equipment.

Each exercise should be more complex than the last, building upon lessons learned in previous exercises. By adopting the building block approach to exercising a plan, Member States can validate and practice their plans without making unnecessary investment in time or resources.

Conclusion

- After a pandemic preparedness plan is developed, a programme for testing the plan should be put into action.

- An exercise programme should always begin with a tabletop exercise. More complex exercises may then follow after the lessons learned from the previous exercise are incorporated into the plan.

- Member States may choose to conduct multiple table-top exercises for various individual sectors within a country and/or adopt an inter-sectoral approach.

- It is beneficial for adjacent countries or countries with strong trade/tourism relations to consider carrying out collective exercises.

- Outcomes of all exercises should be used to revise the existing pandemic preparedness plans.

WHO will continue to support Member States in the development, facilitation and evaluation of pandemic exercises. To complement this work, WHO has developed a CD based toolkit and library to assist those involved in developing exercises.

For more information on WHO support to pandemic preparedness exercises, please contact whoinfluenza@who.int.