BUILDING SUPPORT
FOR IMPROVED SURVEILLANCE

IMPROVING
SURVEILLANCE SYSTEMS:
BUILDING SUPPORT FOR
IMPLEMENTATION

A USERS' GUIDE

Improving Surveillance Systems:
Building Support for Implementation

A User's Guide

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PART A

USING ADVOCACY TO BUILD SUPPORT FOR IMPROVING PUBLIC HEALTH SURVEILLANCE AND ACTION SYSTEMS

WHAT IS THE PURPOSE OF THE ADVOCACY PRESENTATION?

The advocacy presentation on building support for improved surveillance is a tool intended to help persuade a variety of interested and influential parties to support improving their nations' public health surveillance and action systems.

A public health surveillance and action system is one that routinely collects and analyzes health data with the purpose of understanding and monitoring health events and health status, and using that knowledge to catalyze and inform public health actions. The presentation explains and demonstrates to its audiences the importance and benefits of reforming such systems and outlines how to approach reform. While it suggests steps that will increase the probability that reform will succeed – for example, improving communication among components of the public health

DEFINITION

Advocacy is a set of activities designed to increase support for an issue, usually including the support of key decision makers.

system – it does not advocate a particular reform path *per se*.

The presentation is organized into modules that can be easily adapted and customized for different audiences and purposes. The modules are listed in Box 1.

BOX 1: ADVOCACY PRESENTATION MODULES

MODULE 1: What can good public health surveillance and action do for you?

MODULE 2: What risks does an inadequate surveillance and action system create?

MODULE 3: How can you transform an inadequate surveillance and action system into a better one?

MODULE 4: Building ownership while conducting the assessment of your surveillance and action system

MODULE 5: Advocating to ensure implementation of surveillance and action system improvements

WHAT IS THE PURPOSE OF THIS USERS' GUIDE?

The users' guide is the companion document to the advocacy presentation contained in Part B. Part A explains how the process of reforming national surveillance and action systems, and, more specifically, the presentation itself, can be used to best effect to result in desired changes.

Improving surveillance and action systems is a process that entails assessment, action planning, implementation, and monitoring and evaluation. For real change to occur, many people involved with surveillance need to change their behaviors. In order for these interested parties, called stakeholders, to change, they must first commit to the objective of improving surveillance.

Opportunities to develop and increase the support of key stakeholders occur throughout the process of improving surveillance and action systems. This guide focuses on how to gain stakeholder support early-on in the process: that is, at the sequence of events leading up to and including conducting an assessment, reporting of assessment findings, and developing an action plan that responds to those findings. For each step of the process, Part A describes how those events can be leveraged to build and mobilize the support of different groups. (Box 2 presents the role of advocacy at each step.)

> **DEFINITION**
>
> Stakeholders are actors, either individuals or groups, who have a vested interest in a new policy. They include opponents, who prefer the status quo, and proponents, who may benefit if the system is reformed.

Part B of the users' guide, comprising the presentation modules and slides, explains how to use the presentation and provides speakers' notes, background information, and suggestions on adapting the presentation for different audiences and for country-specific conditions. As such, the advocacy presentation is a vital tool to engage and persuade decision makers and other stakeholders of the benefits of improved surveillance and action systems and to gain their commitment to an action plan.

Although the modules are formatted as presentations, they need not be delivered as formal presentations. Each module presents a key message that could be delivered at a small meeting or an interpersonal discussion, as well as during a presentation. Likewise, the speakers' notes, intended as the accompanying script to the visual (slide) presentation, can also be used as talking points.

BOX 2: HOW ADVOCACY CAN FURTHER THE PROCESS OF IMPROVING SURVEILLANCE AND ACTION SYSTEMS: EVENTS THAT CONSTITUTE THE ASSESSMENT AND IMPROVEMENT PROCESS

1. RECOGNIZING THE BENEFITS OF IMPROVING SURVEILLANCE SYSTEMS

Officials may need to be persuaded to conduct an assessment of their national surveillance system. Advocates can help them understand the importance of good surveillance systems, for which conducting an assessment is the first step.

2. GETTING THE RIGHT TEAM

The assessment team and policy oversight team play central roles in conducting the assessment and moving from assessment results, to action planning, to implementation. Having the right people involved from the beginning will help pave the road for implementation.

3. BUILDING OWNERSHIP AMONG THE OVERSIGHT AND ASSESSMENT TEAMS

Involving a range of key actors is necessary but not sufficient to ensure change. Members of the oversight and assessment teams must actively support improvement of national surveillance and action systems.

4. MAKING THE ASSESSMENT TEAM INTO ADVOCATES

As front-line representatives who will meet with local-level health surveillance officials, assessment team members can be trained to advocate for improving surveillance and action systems to this critical audience.

5. BUILDING LOCAL-LEVEL SUPPORT FOR IMPROVING SURVEILLANCE SYSTEMS

As assessment team members collect local-level data, they should engage their informants' feeling of ownership by explaining the assessment, how it is part of a process to improve national surveillance and action systems, and the benefits of a well-functioning system.

6. HEEDING THE FEEDBACK

Assessment team members should carefully consider the feedback received from local informants when reviewing assessment data, drawing conclusions, and making recommendations. Incorporating such ideas helps to build informants' ownership of assessment recommendations.

7. IDENTIFYING OPPORTUNITIES TO IMPROVE NATIONAL SURVEILLANCE SYSTEMS

In presenting preliminary findings to a broad group of stakeholders at a post-assessment workshop, assessment and team and oversight team members must show their audience the specific problems uncovered by the assessment and opportunities for improvement.

8. SECURING COMMITMENTS TO ACTION

During the post-assessment and action planning workshops, key actors in the surveillance system, including international donors, should be encouraged to commit themselves to actions that support improving the surveillance system.

WHO CAN USE THE PRESENTATION AND USERS' GUIDE?

This presentation and users' guide can be used by anyone who wishes to engender commitment and ownership of stakeholders to improve the surveillance and action system of a country's public health system. For example, to generate support for an assessment, this tool may be used by highly motivated individuals in the Ministry of Health or by interested international or bilateral organizations, such as the World Health Organization (WHO), the U.S. Centers for Disease Control and Prevention (CDC), or the United States Agency for International Development (USAID). As more people participate in assessing and improving the surveillance and action system, members of the assessment team or the oversight committee might decide to use the presentation and guide to build support among co-workers at different levels of the system. Eventually, even surveillance workers at the local level may use the presentation to build owner-ship among public health colleagues.

HOW DO THE PRESENTATION MODULES CORRESPOND TO THE PROCESS OF IMPROVING SURVEILLANCE AND ACTION SYSTEMS?

Each presentation module addresses a specific topic. Depending on the overall message to be relayed to a particular audience, different presentation modules or combinations of modules will be appropriate. Most steps in the process of improving a surveillance and action system are covered by a specific presentation module. Table 1 summarizes how the modules correspond to events in the surveillance and action process.

TABLE 1. PRESENTATION MODULES AND STEPS TO IMPROVE A SURVEILLANCE AND ACTION SYSTEM

EVENT IN THE ASSESSMENT AND IMPROVEMENT PROCESS	SUGGESTED PRESENTATION MODULES
1. Recognizing the benefits of improving surveillance and action systems	**Module 1**: What can good public health surveillance and action do for you? **Module 2**: What risks does an inadequate surveillance and action system create? **Module 3**: How can you transform an inadequate surveillance and action system into a better one?
2. Getting the *right* team	***No corresponding modules***
3. Building ownership among the oversight and assessment teams	**Module 1**: What can good public health surveillance and action do for you? **Module 2**: What risks does an inadequate surveillance and action system create? **Module 3**: How can you transform an inadequate surveillance and action system into a better one?
4. Making the assessment team into advocates	**Module 4**: Building ownership while conducting the assessment of your surveillance and action system
5. Building local level ownership for improving surveillance and action systems	**Module 1**: What can good public health surveillance and action do for you? **Module 2**: What risks does an inadequate surveillance and action system create? **Module 3**: How can you transform an inadequate surveillance and action system into a better one?
6. Heeding the feedback	***No corresponding modules***
7. Identifying opportunities to improve national surveillance and action systems	Presentation should be based on ***assessment findings and recommendations***. In preparation, it may be useful to refer to **Module 5**: Advocating to ensure implementation of surveillance and action system improvements
8. Securing commitments and ensuring action	**Module 5**: Advocating to ensure implementation of surveillance and action system improvements

PLANNING ADVOCACY ACTIVITIES

To best leverage the many opportunities for advocacy that exist in the reform process, system reformers should plan when and how to implement their advocacy activities. The rest of Part A is divided into sections that correspond to the events in the surveil- lance system assessment and improvement planning process that were outlined in Box 2. Each section answers a series of key questions about advocacy activities. The questions are described in Table 2.

TABLE 2. ORGANIZING ADVOCACY ACTIVITIES

Timing	During which event in the surveillance improvement process is this advocacy activity appropriate?
Strategic opportunity	In what way is this event an opportunity to increase commit- ment to improved surveillance and action?
Advocacy objective	What will be achieved by the advocacy activity?
Audience	Which person or group needs to be contacted and convinced of the need to support and contribute to reform?
Key advocacy message	What does the audience need to know?
Modules	Which of the presentation modules present the advocacy message?
Presenter	Who will deliver the message? Who will the audience respond to and find credible?
Format	What is the medium or mechanism for delivery? How will the presenter deliver the message and in what forum or occa- sion?

1. RECOGNIZING THE BENEFITS OF IMPROVING NATIONAL SURVEILLANCE AND ACTION SYSTEMS

TIMING:

While "recognizing the benefits of improving national surveillance and action systems" needs to be done throughout the process, it must *begin* in the pre-assessment phase. Discussions with decision makers cannot be simply about whether or not to undertake an assessment; the discussions must be framed around conducting an assessment as the first step toward improving national surveillance and action systems.

STRATEGIC OPPORTUNITY:

Agreement for an assessment from a minister of health or other key decision makers does not guarantee implementation of assessment recommendations. The minister must put improving the public health surveillance and action system on the national health sector agenda. This means, for example, that the minister publicly recognizes surveillance as an important problem and commits to the assessment as a first step in finding and implementing a solution.

ADVOCACY OBJECTIVE:

The immediate objective, and the focus of advocacy, is to secure official approval to undertake an assessment of the national surveillance system. The underlying objective is to build support for actions that will improve surveillance.

AUDIENCE:

The primary audience is the minister of health and other key decision makers in the Ministry of Health. This could include directors of vertical programs or high-level technical staff. The secondary audiences may include other ministries, the president, or legislature.

ADVOCACY TIP #1

Use audience-centered advocacy.
Effective advocacy depends on:
- Building a network of supporters (including key decision makers and those who influence them),
- Collecting, analyzing, and using relevant information (including information about your audiences and issues that are important to them), and
- Targeting and influencing key audiences with
  - persuasive messages,
  - credible messengers, and
  - appropriate occasions and formats for delivering messages.

KEY ADVOCACY MESSAGE:

The important information to convey to your audience is:
- The benefits of an effective surveillance and action system,
- The risks of an inadequate surveillance and action system, and
- Ideas for improving a surveillance and action system

MODULES:

These issues are discussed in Modules 1–3:
1. What can good public health surveillance and action do for you?
2. What risks does an inadequate surveillance and action system create?
3. How can you transform an inadequate surveillance and action system into a better one?

PRESENTER:

The presenter of these messages will likely be the representative of an international or donor organization, such as WHO, CDC, or USAID, but it could also be someone from the Ministry of Health, the university, or another local organization. As mentioned above, the presenter needs to discuss the assessment in relation to its contribution to improving national surveillance and action systems. Similarly, to the extent presenters discuss their organization's potential contribution, it should also be phrased in terms of the process of improving surveillance and action systems.

FORMAT:

While Modules 1–3 will be important mechanisms for delivering the advocacy message, there should be a variety of occasions, some more or less formal than others. Possible formats will include formal presentations, individual or small group meetings, briefing papers, or newspaper editorials.

2.   GETTING THE *RIGHT* TEAM

TIMING:

Once a country has agreed to an assessment, the next step is to establish a policy oversight or coordinating body and an assessment team. An advocacy activity is important to influence the selection of members for the oversight body and assessment team.

STRATEGIC OPPORTUNITY:

Implementation of reforms to a national surveillance and action system requires the support of a wide range of people. Including important decision makers and opinion leaders on the oversight body and assessment team provides an ongoing opportunity to build the support and ownership of these key individuals. If there are persons opposed to reforming the surveillance and action system – for example, proponents of vertical programs – their participation is still critical. If stakeholders are not supportive, involving them recognizes their influence and makes it possible to co-opt their support. Ignoring them, on the other hand, threatens to strengthen their opposition.

ADVOCACY OBJECTIVE:

You want to ensure that the minister of health and other relevant decision makers select appropriate people to serve on the oversight and assessment teams. For the oversight team, this implies a membership that is senior, influential, and representative of important organizations or programs. Members of the assessment team should be knowledgeable in their fields, well respected, and committed to conducting a thorough and objective assessment.

AUDIENCE:

The target for advocacy is the minister of health and others who decide, or help decide, who serves on the oversight body and assessment team.

ADVOCACY TIP #2

Identifying audiences
To focus your advocacy efforts, it is useful to consider the relative importance of different audiences. One way to distinguish among them is to separate audiences into primary and secondary.

■ **Primary audiences**
Primary audiences make decisions and create change. Since they directly affect your objectives, they are the primary targets of your advocacy efforts.

■ **Secondary audiences**
Secondary audiences are people and groups who influence your primary audience. If they are very influential over relevant decisions and actions, they should also be advocacy targets.

KEY ADVOCACY MESSAGE:

Appointments to the coordinating body and assessment team extend beyond the duration of the assessment. Members of these groups will play key roles in action planning, implementation, and monitoring. Selecting the right individuals at the outset can help ensure change later on.

MODULES:

It is unlikely that this type of advocacy, encouraging the selection of objective and qualified team members, will take place in an open forum or be appropriate for a formal presentation. Persuasive arguments will often be country-specific. Therefore, the presentation modules do not directly address this advocacy message.

PRESENTER:

As with the previous discussion on conducting an assessment, this message can be presented by a representative of WHO, CDC, USAID or another international organization. For greater impact, however, a senior person from the country who is committed to improving surveillance could act as a policy champion and deliver the message to decision makers in the country.

DEFINITION

A policy champion is someone internal to the organization responsible for reform, who works proactively to effect change.

FORMAT:

In most instances, the messenger should make the case for selecting the right team in a private meeting or individual discussion with the decision maker(s).

ADVOCACY TIP #3

Who are stakeholders?
Stakeholders for infectious disease surveillance and action systems could be grouped into the following categories:

- Public sector, including central, regional, district, and facility
- Private sector and NGO health facilities and laboratories
- Labor organizations and professional associations
- Politicians, both central and local
- International organizations and donors

Categories can be further disaggregated if groups have different interests, or consolidated if they share similar interests.

Stakeholders are particularly important if
- They have a strong interest in national surveillance and action systems, and
- The resources and authority to help or hinder the improvement process.

It is critical to know whether stakeholders support, oppose, or are undecided regarding the proposed reforms to the surveillance and action system.

3. BUILDING OWNERSHIP IN THE OVERSIGHT AND ASSESSMENT TEAMS

TIMING:

After the oversight and assessment teams are appointed and before the assessment occurs, there will be a preparation period, including a pre-assessment workshop, which are occasions for working with the members to build support.

STRATEGIC OPPORTUNITY:

Members of the oversight and assessment teams have agreed to serve in their respective capacities. To take advantage of the participation of these key actors, they need to be convinced of the importance of improving national surveillance and action systems and be willing to proactively promote improved surveillance as a policy objective.

ADVOCACY OBJECTIVE:

To act as policy champions for improved surveillance and action, oversight and assessment team members must understand the benefits and process of improving a national surveillance and action system, and they should understand how they, as individuals, can contribute to furthering the reform of the surveillance system.

AUDIENCE:

The oversight and assessment team members are the targets for these efforts to build support and ownership of improved surveillance and action systems.

KEY ADVOCACY MESSAGE:

The ideas to present to team members are:
- Why an effective surveillance and action system is important
- What risks an ineffective system creates
- How an ineffective system can be improved, especially focusing on the role of building ownership

MODULES:

These issues are discussed in Modules 1–3:
1. What can good public health surveillance and action do for you?
2. What risks does an inadequate surveillance and action system create?
3. How can you transform an inadequate surveillance and action system into a better one?

The speaker's notes may be adapted to reinforce specific opportunities where oversight or assessment team members can further the reform process by advocating and building ownership.

PRESENTER:

As assessment preparations progress, leaders for the oversight body and assessment team will emerge. Ideally, these leaders would make the presentations and advocate to their fellow members. Absent strong leadership early in the process, the international representatives could again act as messengers.

FORMAT:

Presentations should be incorporated into the pre-assessment workshop agenda. These would be accompanied by interactive sessions that allowed workshop participants to discuss, analyze, and process the content of the presentations.

4. PREPARING THE ASSESSMENT TEAM TO ADVOCATE AT THE LOCAL LEVEL

TIMING:

Training the assessment team in advocacy skills needs to occur as part of the workshop to train team members in the assessment methodology.

STRATEGIC OPPORTUNITY:

Since assessment team members serve as the front line in dealing with local-level surveillance officials for the assessment, they are ideally situated to act as policy champions for the process of improving national surveillance and action systems.

ADVOCACY OBJECTIVE:

To be effective, assessment team members need information and skills that enable them to advocate on behalf of improving national surveillance and action systems. Building advocacy skills is the objective of this activity.

AUDIENCE:

The members of the assessment team are the audience for this capacity-building activity.

KEY ADVOCACY MESSAGE:[1]

Team members will need skills and experience in:
- Conducting audience research,
- Adapting the presentation to specific circumstances and audiences,
- Making public presentations, and
- Communicating persuasively.

MODULES:

Module 4, "Building ownership while conducting the assessment of your surveillance and action system,"

provides an introduction to the skill-building sessions by setting the stage for conceiving of the assessment as an opportunity to build critical support for the eventual recommendations and, especially, for implementation.

FORMAT:

Train the assessment team on how to advocate and use the presentation modules to build ownership. This will also provide an opportunity to pre-test the presentation.

ADVOCACY TIP #4

What is audience research and how do you do it?

Information on target audiences is critical for tailoring effective messages. You will want to learn what your audiences know and think about the current surveillance and action system and proposed improvements to it.

- Knowledge: What do they know about the current surveillance and action system, its strengths and weaknesses?
- Attitude: What reforms to the surveillance and action system would they support or oppose?
- Interests: What is their interest in the surveillance and action system? How does its functioning affect them?

You can learn about your target audiences through informant interviews and focus groups.

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[1] Since this step requires a training activity and not an advocacy effort, we have not suggested a presenter and have replaced the description of the advocacy message with recommended skills to be transferred during the training.

5. BUILDING LOCAL-LEVEL OWNERSHIP FOR IMPROVING SURVEILLANCE AND ACTION SYSTEMS

TIMING:

When assessment teams are in the field collecting data, they can also use their interactions with local surveillance workers and health officials to build support for improving national surveillance and action systems.

STRATEGIC OPPORTUNITY:

Using these initial discussions and meetings with local stakeholders as an occasion to build their ownership increases the likelihood that later they will support implementation of recommended changes for improving surveillance.

ADVOCACY OBJECTIVE:

It is important to develop local ownership for the process of improving surveillance and action systems, so support will extend into the critical implementation stage. Local informants should understand their essential role in the assessment, by contributing vital information on local-level problems and potential solutions, and their importance to the success of implementing reforms to the system.

AUDIENCE:

The audience will be everyone contacted by the assessment teams at the local levels, including regional-, district-, and facility-level health officials and health workers.

KEY ADVOCACY MESSAGE:

The concepts to convey to local stakeholders are:
- How they would benefit from an effective surveillance and action system,
- How an inadequate system puts them at risk, and
- The process of transforming an inadequate surveillance and action system into a better one, focusing on the role that they can play.

MODULES:

These issues are discussed in Modules 1–3:
1. What can good public health surveillance and action do for you?

ADVOCACY TIP #5

Tailoring message content to your audience
There can be many reasons for improving a country's surveillance and action system, such as to better
- Recognize outbreaks and epidemics,
- Respond to outbreaks and prevent epidemics,
- Monitor disease trends,
- Allocate health resources, and
- Evaluate the impact of disease control activities.

However, different audiences each have different interests in improving surveillance and action systems. When developing messages for a target audience, ensure that the message reflects their particular interests and perspective.

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2. What risks does an inadequate surveillance and action system create?
3. How can you transform an inadequate surveillance and action system into a better one?

The speaker's notes can be adapted to emphasize the input and importance of local-level stakeholders in specifying problems and, especially, in defining and implementing improvements.

PRESENTER:

Members of the assessment teams will act as presenters.

FORMAT:

Assessment team members should make formal presentations as part of their introduction to the assessment for local health officials and workers. They can elaborate on and clarify the information presented during their individual interviews and discussions with informants.

6.   HEEDING THE FEEDBACK

TIMING:

When the assessment team is analyzing results and writing their preliminary report, they should be sure to incorporate relevant ideas, opinions, and suggestions from their local informants.

STRATEGIC OPPORTUNITY:

While this stage is not an opportunity for advocacy *per se*, it is an opportunity to build the credibility of the assessment team, which is important to its ability to effectively advocate for improving surveillance. Local-level health officials and workers will feel greater ownership of efforts to improve their national surveillance and action system if they believe they are part of the process of reform. When the assessment team incorporates quantitative and qualitative input from informants into their analysis and recommendations, they demonstrate the important role informants can play in improving systems.

ADVOCACY TIP #6

What information should your advocacy message include?
Messages should be simple and concise, using language that is appropriate for the target audience. Messages should state:

- **What** you want to achieve: your objective
- **Why** you want to achieve it: the expected benefit
- **How** you propose to achieve it: your strategy
- **What action** you want the audience to take: their *specific* contribution

7. RECOGNIZING OPPORTUNITIES FOR IMPROVEMENTS IN NATIONAL SURVEILLANCE AND ACTION SYSTEMS

TIMING:

During the post-assessment workshop the assessment team will present preliminary findings. The presentation of findings should be more than an occasion for one-way information dissemination. The findings should be presented so as to encourage discussion about opportunities and means for improving the national surveillance and action system.

STRATEGIC OPPORTUNITY:

All the key stakeholders will be together to discuss surveillance. The workshop should allow participants to work toward a consensus on necessary actions to improve the surveillance and action system. Participants should be encouraged to state publicly and specifically their intended support for improving systems.

ADVOCACY OBJECTIVE:

Participants at the workshop should:
- Leave the meeting with a better understanding of the specific problems and opportunities for improvement facing their nation's surveillance and action system, and
- Commit to the process of action planning and to implementation of the proposed reforms.

AUDIENCE:

Participation in the workshop should include a broad range of stakeholders, such as Ministry of Health officials from central, regional, and district levels, representatives of facility-level health workers responsible for infectious disease surveillance, officials from other ministries, NGOs, academic institutions, private practitioners, laboratories, WHO, USAID, CDC, other donors, U.N. agencies, etc.

KEY ADVOCACY MESSAGE:

The substance to be presented to the audience is:
- Your nation's surveillance and action system needs help, and
- These are the steps you can take to begin to improve your system.

MODULES:

The presentation should focus on the assessment findings and recommendations. To help prepare the presentation, it may be useful to refer to Module 5, "Advocating to ensure implementation of surveillance and action system improvements."

PRESENTER:

The assessment team should present the information, since it is based on their research, analysis, conclusions, and recommendations. The oversight team should also have a prominent role in the workshop, to reinforce their ownership and leadership as the process moves into action planning and implementation.

FORMAT:

Primary information from the assessment will be presented in formal presentations. Interactive discussions should follow the presentation, to allow participants to air issues. There also could be a forum that encourages stakeholders to make firm commitments to action planning and implementation.

ADVOCACY TIP #7

Making effective presentations
You may only have one opportunity to talk with your target audience. Prepare accordingly and make the most of it.

- **Step 1: Know your audience**. Learn what arguments will persuade them.
- **Step 2: Focus on your message**. Keep it simple and specific.
- **Step 3: Plan your delivery**. Purposefully select messenger, timing, and format.
- **Step 4: Practice**. Rehearse, solicit feedback from colleagues, improve.

(Adapted from Sharma, n.d.)

8.   SECURING COMMITMENTS AND ENSURING ACTION

TIMING:

The teams have completed the assessment, identified problems, and recommended solutions. In some instances, unfortunately, this is where the process of reforming surveillance and action systems stops. This is the critical juncture for moving from recommendations to action.

STRATEGIC OPPORTUNITY:

Since the assessment team has worked to build the support of a range of stakeholders throughout the assessment process, this post-assessment juncture is the opportunity to leverage the progress made. General support for improved surveillance needs to be translated into specific actions that contribute to the implementation of improvement strategies for the system.

ADVOCACY OBJECTIVE:

The key objective at this stage is to mobilize primary stakeholders to push the process into implementation. It is important for participants in the assessment to recognize that reform of the surveillance and action system is a process. Supporters can contribute by building and sustaining momentum for improvements and undertaking specific activities within their control.

AUDIENCE:

The primary audience is those critical actors who would play a fundamental role in implementing changes to the surveillance and action system. Their willingness to act is the object of the advocacy efforts at this stage and ultimately critical to successful implementation.

The secondary audience is influential, stalwart supporters who can persuade the critical actors to make the necessary changes. These supporters can be identified from among those involved in the assessment process.

KEY ADVOCACY MESSAGE:

The message for the critical actors is that they must take the specified actions to implement improvements to the system. Since these actions flow from the recommendations of the assessment teams, it is important to sustain the momentum developed during the assessment and begin timely implementation.

MODULES:

Module 5, "Advocating to ensure implementation of surveillance and action system improvements," discusses the process of improving the system and emphasizes the importance of sustaining support and momentum. It is appropriate to mobilize secondary audiences, those supporters who can influence critical actors.

PRESENTER:

Leaders from the assessment team or coordinating body can present the messages. It is important that the presenter be someone convinced of the importance of improved surveillance and aware of the challenge of moving from recommendations to action.

FORMAT:

The presentation of the message can be in either a formal or informal meeting. In either case, what is important is that the presentation be central to any discussion of "what are the next steps?" or "where do we go from here?"

PART B

USING THE PRESENTATION MODULES FOR ADVOCACY AND ADAPTING THEM FOR COUNTRY-SPECIFIC SITUATIONS

WHAT IS THE PURPOSE OF PART B OF THE USERS' GUIDE?

Part B of the users' guide contains information that will help presenters of the advocacy presentation to use it more effectively, in terms of both the content of the presentation, for example, offering information additional to what is presented on each slide; and the operation of the presentation, for example, using the MS PowerPoint program's capabilities to best capture the attention of the audience.

HOW IS PART B OF THE USERS' GUIDE ORGANIZED?

Part B is organized by presentation module, and, within each module, by slide. For each slide, there is information to help the presenter to discuss the slide. First, there is information pertaining to the existing slide text: a succinctly stated objective; background information and technical guidance to expand the speaker's knowledge about the topic and help to make the PowerPoint presentation more effective; and speaker's notes, which provide the presenter a script to accompany presentation of the slide. The second type of information is how the text in the slide can be adapted to specific country situations, to make the presentation more relevant to a particular audience, and thus more effective.

TABLE 3. ORGANIZATION OF USERS' GUIDE PART B CONTENT	
Objectives	This succinctly explains the objectives of the given slide. You may adapt the slide text to suit your local conditions, but the objective in the original message should be maintained.
Background information	This includes sources for information in the slide, or other information to enhance your presentation of the information in the slide.
Speaker's notes	The speaker's notes are the script you can deliver when showing the slides. The notes expand upon what is displayed in the slides, which are designed to be uncluttered and easy to read. The speaker's notes are presented in text boxes in this guide; they are the same as the text in the notes section in PowerPoint.
Adaptation guide	Some slides are adaptable to a local context. Adaptation might be as simple as using local definitions for surveillance, or more extensive, such as modifying the data used in the case studies or creating your own studies to reflect local data and realities.

MODULE 1

WHAT CAN A GOOD PUBLIC HEALTH SURVEILLANCE AND ACTION SYSTEM DO FOR YOU?

OBJECTIVES OF THIS MODULE:

To create a common language about public health surveillance and action systems and to highlight why they are important.

WHEN CAN YOU USE THE INFORMATION IN THIS MODULE?:

The slides in this module can be used for formal audio-visual presentations, or the material contained in them can be used as talking points for formal oral presentations or informal discussions. The contents of this module is most useful when trying to get key stakeholders to recognize the benefits of improving surveillance and action systems, building ownership among oversight and assessment teams, and building local ownership for improving surveillance and action systems.

What can good public health surveillance and action do for you?

BUILDING SUPPORT
FOR IMPROVED SURVEILLANCE

SLIDE 1.1
WHAT CAN GOOD PUBLIC HEALTH SURVEILLANCE AND ACTION DO FOR YOU?

OBJECTIVES
To introduce the presentation and to highlight what will be covered in this module.

SPEAKER'S NOTES

Hello, my name is ……..
This presentation will highlight how a good public health surveillance and action system can assist managers, workers, and other stakeholders throughout the health system to make better decisions and take more timely action.

I will talk about public health surveillance and action:

■   What it is
■   What it consists of
■   What it can do for you

What is public health surveillance?

Surveillance is:

▲ the ongoing and systematic collection, analysis, and interpretation of health data

▲ understanding and monitoring health events and health status

▲ catalyzing and informing public health action (response and planning)

SLIDE 1.2
WHAT IS PUBLIC HEALTH SURVEILLANCE?

OBJECTIVES
To develop a common vocabulary for the terms that will be used to describe public health surveillance.

BACKGROUND INFORMATION
This definition was adapted from: U.S. Centers for Disease Control and Prevention. May 6, 1988. "Guidelines for Evaluating Surveillance Systems." *Morbidity and Monitoring Weekly Report Supplement* 37:s-5.

SPEAKER'S NOTES

Surveillance is a continuous watching over of something for the purpose of taking action! It is a set of activities that together allow you to collect, analyze, and interpret data, and communicate findings and conclusions so that appropriate public health action can be taken.

- Surveillance of diseases is ongoing and systematic.
- Surveillance of diseases allows you to understand and follow changes in disease patterns.
- Surveillance of diseases allows you to take proper action (be it for control of epidemics or for making programmatic decisions).

Surveillance is not collecting data for data's sake, but for interpreting data and communicating information so that it is used for decision making.

ADAPTATION GUIDE:
If you feel that this slide is too complex for your audience, you may want to consider a simpler version that provides a more straightforward definition. You can change the text in the slide by simply clicking that portion of the slide with your mouse and then editing the text.
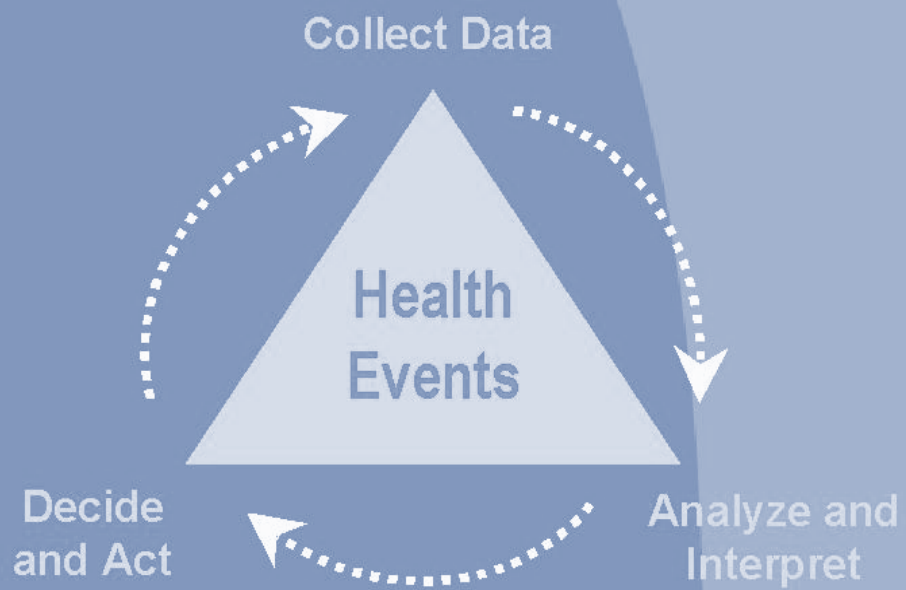
SLIDE 1.3
SURVEILLANCE AND ACTION ACTIVITIES

OBJECTIVES

To understand the relationship between the various activities functions of the public health surveillance and action system.

BACKGROUND INFORMATION

This is a simple visual representation of the text described in the previous slide. It is included because some people in your audience may respond better to a graphic representation than to words or may need more than one format to comprehend the material. The key to using this slide is to explain that it represents two important aspects of the surveillance and action process: the points of the triangle represent activities (things one does); the arrows represent the flow of information that is crucial to these activities and ties them together. The activities are all necessary and integral components of a surveillance system. The system could not function if one of them were removed, nor if information around them did not flow.

SPEAKER'S NOTES

Now let us look more closely at the activities that make up the public health surveillance and action system. There are three main types of activities that start with health events in the community (represented by the triangle):

■   Collecting data about health events

■   Analyzing and interpreting that data

■   Making decisions and taking action based on the analysis

All three components must work well for the system to work well.

In addition to the activities themselves, a critical component of surveillance and action is the *flow* of information that *must* accompany these activities.

■   From collecting data to analyzing data, very often there is a reporting mechanism (when data are not analyzed at the point of collection)

■   From analyzing and interpreting to action, there is the very crucial link of communicating information and messages about what action needs to be taken

■   From action back to the point of initial data collection is feedback on findings, conclusions, actions, and results.

Surveillance and action activities

Collect Data

Health Events

Reporting

Decide and Act

Analyze and Interpret
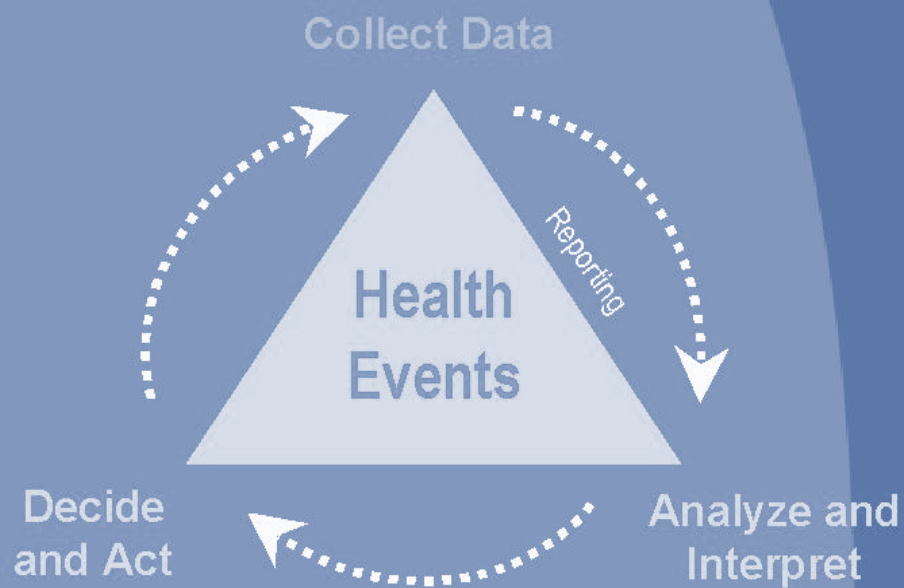
- Identify new case-patients
- Detect case-patients not responding to treatment
- Monitor disease trends
- Confirm case-patients

SLIDE 1.4
SURVEILLANCE AND ACTION ACTIVITIES

OBJECTIVES
To understand the kinds of specific activities that fall into "collect data."

BACKGROUND INFORMATION
This slide outlines the specific kinds of activities that could be included in "collecting data." This is where a health event in the community triggers the surveillance and action process.

SPEAKER'S NOTES

Let us look more closely at what we mean by "collecting data." This is where a health event, or events, in the community launch surveillance and action. Health workers collect information by:

■ Identifying new cases: noting when new cases of "epidemic" diseases occur.

■ Detecting cases that do not respond to treatment: noting when patients whose diagnosis was confirmed and who were treated with the correct drug are not recovering – i.e., detecting possible antimicrobial resistance.

■ Monitoring disease patterns: recording information about health events on an ongoing basis – monthly reporting, etc.

■ Confirming cases: determining whether the diagnosis of a specific health event is correct, particularly if further laboratory work is needed.

The first two activities occur where patient care is being provided, but the last two could take place at several levels of the health care system (facility, intermediate, and central levels). The results of this data collection must then flow (through *reporting*) to where the next set of activities will take place (analyze and interpret).

ADAPTATION GUIDE:
For this slide or the next two slides (1.4, 1.5, 1.6), you may want to modify the speaker's notes to reflect what level of authority actually exists at the various levels (facility, intermediate health office, central level) in your situation.

Surveillance system functions

Collect Data

Health Events

Decide and Act

Communicating information and messages

Analyze and Interpret
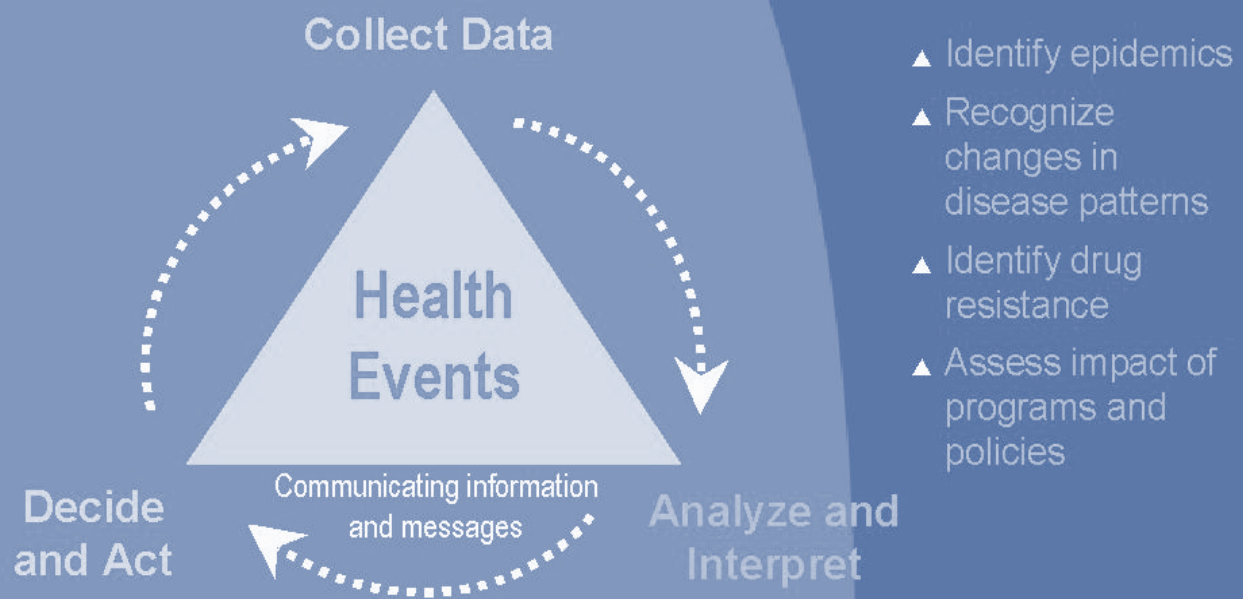
- Identify epidemics
- Recognize changes in disease patterns
- Identify drug resistance
- Assess impact of programs and policies

SLIDE 1.5
SURVEILLANCE AND SYSTEM FUNCTIONS

OBJECTIVES
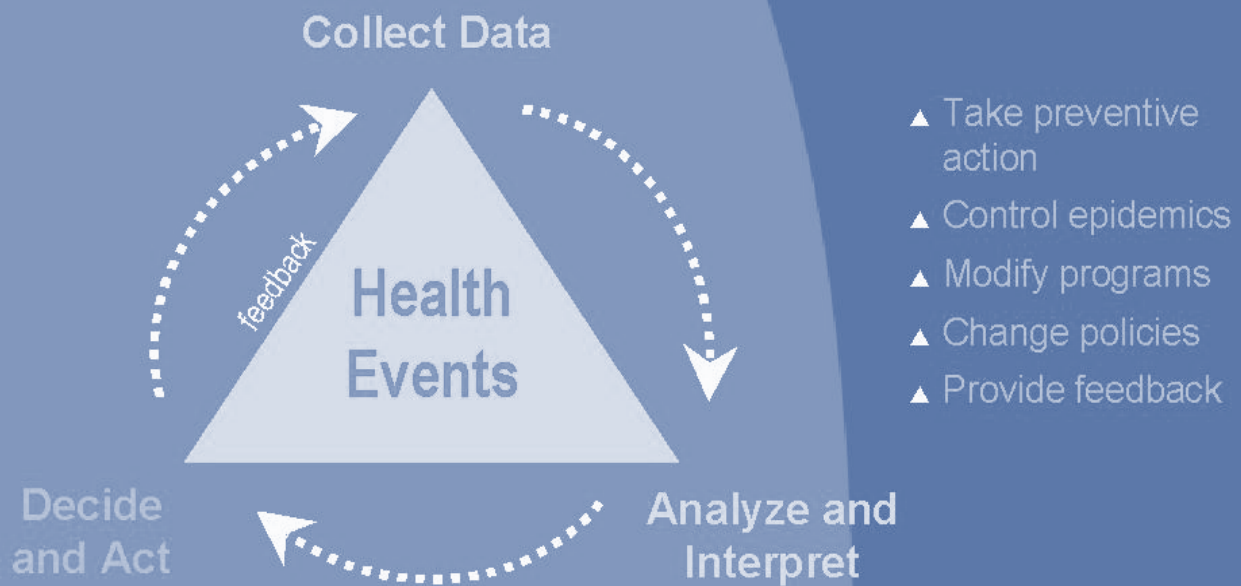To understand the types of specific activities that fall into "analyze and interpret information."

SPEAKER'S NOTES

As we move around the triangle, we now examine the activities corresponding to analyzing and interpreting the meaning of a health event or group of health events: looking at the data and seeing what it is telling us.

■ Identifying epidemics: recognizing that the number of cases exceeds that expected in a routine situation.

■ Recognizing changes in disease patterns: seeing if patterns of a disease or health problem are changing or the relative burden of disease in a particular target population is changing.

■ Identifying drug resistance: determining whether there is a pattern of cases not responding to treatment, which indicates that the treatment is no longer effective.

■ Assessing impact of programs and policies: looking at patterns of diseases in target intervention areas to see whether interventions have had the desired effect on those disease patterns.

The first two activities can be done at all levels of the health care system, while the last two may require larger geographical areas or more sophisticated techniques and are done at higher levels. Now this information must be communicated effectively to those who must take action.

Surveillance system functions

Collect Data

Health Events

feedback

Decide and Act

Analyze and Interpret

▲ Take preventive action
▲ Control epidemics
▲ Modify programs
▲ Change policies
▲ Provide feedback

SLIDE 1.6
SURVEILLANCE AND SYSTEM FUNCTIONS

OBJECTIVES
To understand the types of specific activities that fall under "decide and act."

SPEAKER'S NOTES

Making decisions and taking action is the ultimate aim of any surveillance system. There are many types of activities here, but they fall into two categories: interventions and programmatic changes.

Intervention-type action includes:

- Taking preventive action: do not wait for problems to occur again; implement prevention programs to block occurrence in the future.
- Controlling epidemics: take immediate and clear actions to stop the spread of disease (treatment, isolation, preventive measures for others in the area).
   Programmatic changes include:
- Modifying programs: based on assessments of impact, change or eliminate programs that are not effective.
- Changing policies: change treatment policies when drug resistance emerges, or change health priorities as disease patterns change.

Many of these actions can be taken at any level of the health care system, while some require a certain level of authority to carry them out. Again, information flow is also critical, so provide feedback: *Let those who provided information in the first place and those who will be affected by any actions know what the problems are, what the impacts have been, and what actions have been taken.*

When can you use your surveillance and action system?

Short-term → Medium-term → Long-term

Short-term
- Identify and investigate epidemics and drug resistance
- Implement control measures
- Take preventive action

Medium-term
- Monitor routine disease trends
- Collaborate across borders

Long-term
- Assess and modify disease prevention and control programs, strategies, and policies

SLIDE 1.7
WHEN CAN YOU USE YOUR SURVEILLANCE AND ACTION SYSTEM?

OBJECTIVES
To understand that the surveillance and action system has uses over various timeframes – it is not only for addressing acute disease outbreaks.

BACKGROUND INFORMATION
Surveillance is often associated only with identifying and possibly controlling acute disease outbreaks. However, it has a variety of uses, and its full potential is only reached when all the various uses are taken advantage of.

TECHNICAL GUIDE
To use this slide most effectively, use the animation to look at each "timeframe" separately: project the added text as you are ready to speak about it. This will keep people focused, since the slide is quite full of text.

SPEAKER'S NOTES

While identifying and controlling acute infectious disease outbreaks is one very important use of surveillance, it is not the only use. Because of its ongoing nature, a surveillance system can assist you at many points in time:

In the short term (with the data of today, this month) you can:
■ Identify and investigate epidemics and drug resistance
■ Implement control measures to address outbreaks
■ Take action to prevent future outbreaks
■ Take other preventive action

In the medium term (looking at data for 1–3 years), you can:
■ Identify changes in trends in diseases
■ Collaborate across borders

In the long term (3–10 years), you can:
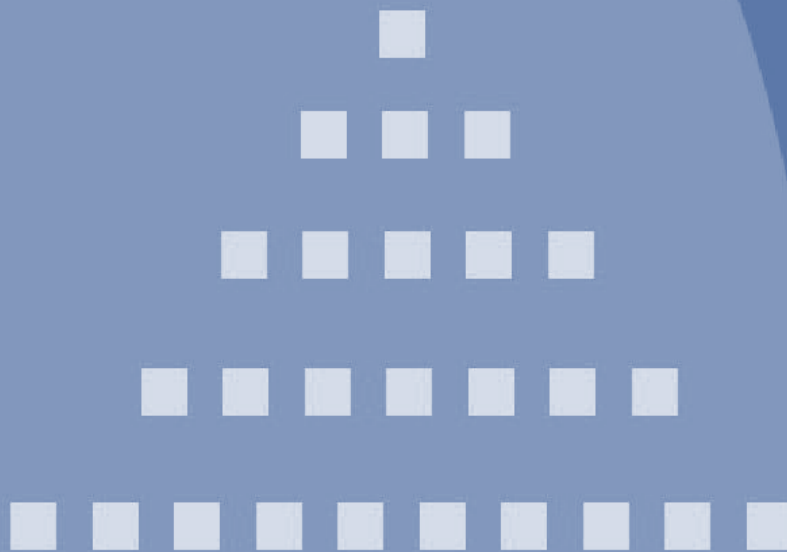■ Assess the impact of your programs (treatment, control, and prevention) and make program modifications as needed

To summarize, we have looked at what activities constitute surveillance and action, and when these activities can be used.

National surveillance and action system

MOH

National disease control programs

Intermediate health office

First-line health facility

Community

SLIDE 1.8
NATIONAL SURVEILLANCE AND ACTION SYSTEM

OBJECTIVES
To understand that disease surveillance is a system with many parts and many actors.

BACKGROUND INFORMATION
This slide is designed to help participants start to move from thinking about *"what happens"* to *"who makes it happen and how*."

SPEAKER'S NOTES

Public health surveillance and action are not just a collection of individual activities but rather a system that involves many different actors. The system encompasses the related activities of various organizations and individuals. How well the various parts work together will determine how well the system will function.

Let us examine how the various players in the system work together to make sure that when there is a public health need in the community, the health system can address it in an appropriate and timely manner.

At the bottom is the community, where health events take place. The first line of contact with the health services is where a health event or group of events is first detected. The health care facility staff recognize the problem and may be able to make an accurate diagnosis, or they may require assistance to confirm the diagnosis at a higher level. Analysis and interpretation of the health event (or events) may also be done at the facility level or may require further analysis at a higher level. The analysis leads to development and implementation of strategies for action, which, again, may take place at the health facility or at a higher level. In addition to providing assistance, the higher level should provide feedback about how this event related to others in other communities. It may also be reported to regional and international bodies as part of collaboration.

ADAPTATION GUIDE:
You may want to modify how you refer to these various levels in your presentation to reflect how your country is divided and/or how the surveillance system works. You may also want to adapt the text in the speaker's notes to more accurately describe the more complex relationships. This will depend on the audience to whom you are presenting.

Who can make use of public health surveillance and action?

- ▲ Community members
- ▲ Health facilities
- ▲ Intermediate health offices
- ▲ Central health offices
- ▲ Regional and international organizations

SLIDE 1.9
WHO CAN MAKE USE OF PUBLIC HEALTH SURVEILLANCE AND ACTION?

OBJECTIVES
To draw individuals in the audience in, by showing them that not only others, but they themselves can make good use of the surveillance system.

SPEAKER'S NOTES

The surveillance system is not just for use by the central level or by individual disease control programs. Many organizations and individuals can use it for their own needs. The more people see the information being used, the more effort they will make to ensure the information is accurate:

■ Community members: community leaders, local governments, religious organizations can use the information about what is happening in their community to take community-level action in control and prevention

■ Health facilities: health posts, health centers, hospitals

■ Intermediate health offices: districts, regions

■ Central health offices: individual disease control programs, central medical stores, broader policymakers

■ Regional and international organizations: they can use information from an individual country in conjunction with information from other countries to develop regional and international initiatives to control and/or prevent diseases.

The next several slides will focus on some specific levels, providing more detail about how you can use surveillance information for action at your level.

ADAPTATION GUIDE:
Depending on the audience, you may want to drop one or more of the next several slides or add another one to cover someone else. For example, if the presentation is being used for advocacy with facility-level people, you may want to shorten the presentations for other levels.

How can health facilities make use of surveillance and action?

- ▲ Identify and investigate potential epidemics and drug resistance
- ▲ Take preventive action
- ▲ Request additional assistance
- ▲ Make changes in your activities related to changes in disease patterns
- ▲ Assess impact of disease control activities
- ▲ Communicate to communities and health workers

SLIDE 1.10
HOW CAN HEALTH FACILITIES MAKE USE OF SURVEILLANCE AND ACTION?

OBJECTIVES
To show facility-level staff that they too can use the surveillance information.
To show higher-level staff that facility staff can and should be using the information for their own purposes.

SPEAKER'S NOTES

There are many ways health facility staff can make use of the surveillance and action system:
- Identify and investigate potential epidemics and drug resistance: notice a change in number of cases indicating a possible epidemic or when a number of patients are not responding to treatment.
- Take preventive action: use resources available to treat and/or isolate cases, and implement other preventive activities.
- Request additional assistance: if you do not have what you need, use surveillance information to justify the need for more resources.
- Make changes in your activities related to changes in disease patterns: use this information to make changes in drug orders or staffing use.
- Assess impact of disease control activities: use the information to see if there are reductions in the number of cases (over a long enough period of time) that you can relate to your activities.
- Communicate to communities and health workers: use the information to tell community leaders and members about diseases in their community; use the information to let staff know what is happening or about results of their activities.

ADAPTATION GUIDE:
Adapt the content of the speaker's notes or even the slides to correspond to what *can be* done (not *is being* done) in your context.

How can intermediate health offices make use of surveillance and action?

- ▲ Investigate and confirm new case-patients
- ▲ Organize epidemic responses
- ▲ Evaluate and modify disease prevention and control programs
- ▲ Allocate resources effectively and efficiently based on identified changes in disease patterns at the intermediate level
- ▲ Discuss implications with health workers and facilities

SLIDE 1.11
HOW CAN INTERMEDIATE HEALTH OFFICES MAKE USE OF SURVEILLANCE AND ACTION SYSTEM?

OBJECTIVES

To show intermediate health office staff that they too can use the surveillance and action system in a variety of ways.
To show facility- and higher-level staff that intermediate health office staff can and should be using the information for their own purposes.

SPEAKER'S NOTES

There are many uses for surveillance information at the intermediate health office level:

- Investigate and confirm new case-patients: use your laboratory and other resources to assist facilities and communities to confirm cases.
- Organize epidemic responses: provide resources and technical assistance to facilities and communities for control and containment measures.
- Evaluate and modify disease control programs: use the information from the totality of your facilities to gauge impact of disease control and prevention measures that were implemented and change priorities or change activities based on assessments of program effectiveness.
- Allocate resources efficiently and effectively based on changes in disease patterns at the intermediate level: shift resources to new priority areas if new disease patterns are emerging.
- Discuss implications of results with health workers and facilities: use the information to tell health staff at your facilities about disease patterns and results in your geographic area.

How can central health offices make use of surveillance and action?

▲ Use laboratory support to confirm cases of disease

▲ Identify changes in disease trends and modify priorities as needed

▲ Assess effectiveness of prevention and treatment protocols

▲ Modify health policies

▲ Allocate resources effectively and efficiently

▲ Discuss implications with health facilities and intermediate health offices

SLIDE 1.12

HOW CAN CENTRAL HEALTH OFFICES MAKE USE OF THE SURVEILLANCE AND ACTION SYSTEM?

OBJECTIVES

To show central health office staff all the ways they can use the surveillance information.
To show facility- and intermediate-level staff how central health office staff can and should be using the information for their own purposes.

SPEAKER'S NOTES

Central-level health offices can use surveillance information in many ways:

- Use laboratory support to confirm reported events: provide confirmation to facilities and intermediate health offices for diagnoses when they do not have adequate lab.
- Determine new health priorities based on changes in disease patterns at a national level: use information to shape new priorities and programs to address critical health problems and allocate resources appropriately.
- Assess effectiveness of prevention and treatment protocols: based on information on failed treatments for confirmed diagnoses, determine if there is antimicrobial resistance or, on increasing numbers of cases of preventable diseases, determine if changes in prevention protocols are needed.
- Modify health policies: use information to justify changes in priorities or in treatment protocols.
- Allocate resources efficiently and effectively: use information to reallocate resources to match changes in priorities.
- Discuss implications with health facility and intermediate health office staff: use information to advocate with those who must implement changes in policies.

Country example of good data collection and analysis, but poor response capacity: Cholera outbreak
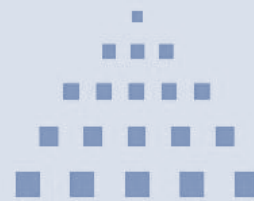
BUILDING SUPPORT
FOR IMPROVED SURVEILLANCE

SLIDE 1.13
COUNTRY EXAMPLE OF GOOD DATA COLLECTION AND ANALYSIS, BUT POOR RESPONSE CAPACITY

OBJECTIVES

To introduce a case study to illustrate the importance of an effective response capacity to avoid an epidemic of cholera, despite good data collection and analysis.

CASE STUDY HIGHLIGHTS

Taking action, which requires the capacity to respond, is an essential part of a surveillance system and is critical for avoiding epidemics.

BACKGROUND INFORMATION

Cholera is an acute, diarrheal illness caused by infection of the intestine with the bacterium *Vibrio cholerae*. The infection is often mild or without symptoms, but sometimes it can be severe. Approximately one in 20 infected persons has severe disease characterized by profuse watery diarrhea, vomiting, and leg cramps. In these persons, rapid loss of body fluids leads to dehydration and shock. Without treatment, death can occur within hours.

A person may get cholera by drinking water or eating food contaminated with the cholera bacterium. In an epidemic, the source of the contamination is usually the feces of an infected person. The disease can spread rapidly in areas with inadequate treatment of sewage and drinking water.

Source: U.S. Centers for Disease Control and Prevention, Center for Bacterial and Mycotic Diseases. www.cdc.gov

SPEAKER'S NOTES

We have presented a lot of information that is quite general about what good surveillance can do for health workers at all levels. Now, we would like to illustrate what can happen if one or more pieces of the system are not working properly.

The case we are about to present is based on real events.

Case study of epidemic response capacity: Outbreak of cholera

Background:

▲ Island country with no history of cholera

▲ Clear case definition of cholera in routine surveillance system

▲ Well-functioning reporting and analysis system

SLIDE 1.14
CASE STUDY OF EPIDEMIC RESPONSE CAPACITY: OUTBREAK OF CHOLERA

OBJECTIVES
To provide background information about the case study so participants can understand the events in context.

SPEAKER'S NOTES

Let us start with some background:

- Island country with no history of cholera: because it was isolated, there had been no cases of cholera on the island prior to the outbreak recounted here.
- Clear case definition in routine surveillance system: the surveillance system was pro-active and included a clear case definition of cholera, as demonstrated by the fact that the health facility staff were able to accurately detect the initial cases when they occurred in the community.
- Well-functioning reporting and analysis system: because the surveillance system information flows were well established, the information about the cholera cases was received at the health office in a timely manner. The health office used sound data analysis methods to interpret the data and recognize and localize the outbreak of cholera.

Case study of epidemic response capacity: Outbreak of cholera
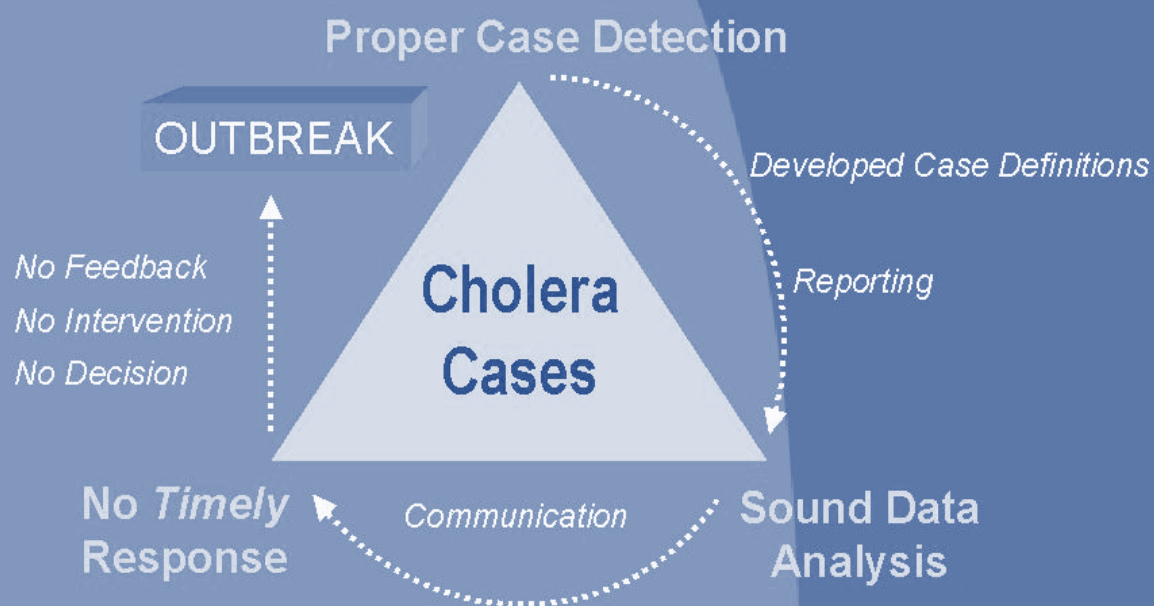
SLIDE 1.15
CASE STUDY OF EPIDEMIC RESPONSE CAPACITY: OUTBREAK OF CHOLERA

OBJECTIVES
To demonstrate graphically how the system in this country broke down and did not help the public.

TECHNICAL GUIDE
The use of transitions can greatly enhance the presentation of slides in a PowerPoint demonstration. Transitions allow for parts of text or graphics to be shown at a later point on the screen for an added effect. For example, transitions are used in this slide to highlight the points in the story that went right and went wrong. This added feature strengthens the story and emphasizes the key points in the discussion.

SPEAKER'S NOTES

Let us look at how these activities took place, using our graphic representation of the surveillance system and its various levels of operation:
- Event occurs in the community: a cholera case occurs.
- The staff at the health facility detect the case, using the case definition, and report it immediately to the health office.
- The staff at the intermediate health office receive the information, process it, and analyze it using sound methods.
- Conclusion at this stage: outbreak of cholera with potential of epidemic if no further action taken.

However, although the Ministry of Health had prepared itself to identify a cholera outbreak, it had not planned a control response – it had no supplies readily available to treat cases, no communication links to public health and water and sanitation systems to contain spread of diseases.

Outcome: The few initial cases quickly spread into a substantial outbreak.

Thus, even if your system collects good data and it is reported and analyzed in a correct and timely manner, with *no response action*, the system ultimately fails to protect the public.

Characteristics of a *good* surveillance and action system

▲ Capacity to act on information
▲ Standard case definitions and reporting protocols
▲ Basic and sound epidemiology
▲ Adequate laboratory support
▲ Efficient communication system
▲ Cost-effective resource use
▲ A network of motivated people

SLIDE 1.16
CHARACTERISTICS OF A GOOD SURVEILLANCE AND ACTION SYSTEM

OBJECTIVES
After seeing what can happen if the system is not working properly, this slide seeks to highlight what is needed to have a *good* system.

BACKGROUND INFORMATION
The slide presents a vision of what needs to be in place and begins to plant the seed for what might be addressed by an action plan.

SPEAKER'S NOTES

The case study shows what can happen if the surveillance system does not work properly. Let us now discuss what characterizes a good surveillance system, because that is what we seek to achieve:

- Capacity to act on information: first and foremost, the system must be able to act on information produced, whether it be a well-organized outbreak response, or managers using the information to make better medium- and long-term decisions.
- Standard case definitions and reporting protocols: so that what is reported is correct and timely.
- Basic and sound epidemiology: using appropriate analysis techniques and appropriate interpretation.
- Adequate laboratory support: appropriate action requires accurate detection: cases detected in the field may require more sophisticated lab for confirmation of the diagnosis.
- Efficient communication systems: information and feedback must pass quickly.
- Cost-effective resource use: the system must focus on disease control priorities and use integration where appropriate to save duplication of efforts.
- A network of motivated people: the system is only as good as the people who operate it.

Country example of resource savings
from more efficient data collection:
Focusing on priority diseases
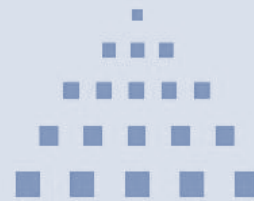
BUILDING SUPPORT
FOR IMPROVED SURVEILLANCE

SLIDE 1.17
COUNTRY EXAMPLE OF RESOURCES SAVINGS FROM MORE EFFICIENT DATA COLLECTION

OBJECTIVES
To introduce a case study that illustrates the importance prioritizing a national disease control program.

CASE STUDY HIGHLIGHTS

Determining disease control priorities can be a cost-effective approach for a national surveillance system

SPEAKER'S NOTES

We have talked about what characterizes a good system. Let us now talk about what are the advantages of improving a surveillance system. The following slides describe a second case study where the process of determining disease priorities led to a more cost-effective national surveillance system.

This case is based on a real country where reforms to the surveillance system led to a real improvement in both costs of the system and to the functioning of the system itself.

Case study of reforming system: prioritizing disease control

BEFORE REFORM

- Collecting data on over 64 diseases
- Using non-disease specific forms
- Poor specificity of reporting due to the absence of case definitions
- Descriptive statistics used for analysis
- Epidemiologists registering patient cases and filling out forms

Results: High Costs and Low Effectiveness

SLIDE 1.18
CASE OF REFORMING SYSTEM: PRIORITIZING DISEASE CONTROL

OBJECTIVES

The objective of this slide is to provide background information of the situation before the reforms of the system took place.

SPEAKER'S NOTES

Before any changes were made to the surveillance system:

- Data were collected data on over 64 diseases: whereas WHO recommends 10-15 diseases
- Non-disease specific forms were used: in other words, the forms were generic and not focused on getting information for any specific disease.
- Specificity of reporting was poor due to the absence of case definitions: some diseases had case definitions, but not all 64.
- Descriptive statistics were used for analysis: because of the volume of diseases to be reported, health office personnel were only able to do descriptive statistics, and much of the data was never really used.
- Epidemiologists registered patient cases and filled out forms: even though these tasks could have just as effectively been done by lower-level (less expensive) staff.

Consequently: poor data quality, poor analysis, difficulty to respond appropriately, and no clear ideas about disease priorities (because how could one determine what was priority?). The Director of National Surveillance came under pressure from the Ministry of Health to curb rising costs and monitor spending.
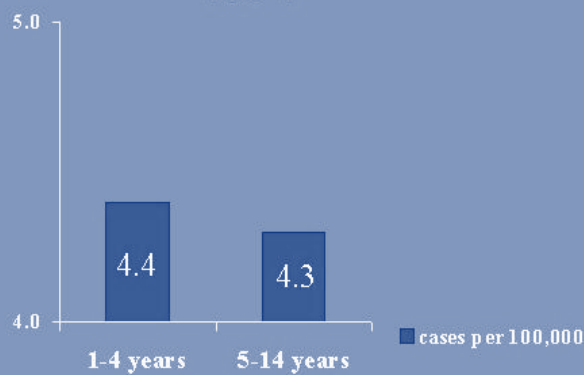
Case study of reforming system: Prioritizing disease control

Increase of Diphtheria Cases → 1993: .02 cases per 100,000
1994: 1.0 cases per 100,000

Diphtheria Incidence Rates 1994

[Bar chart: 1-4 years = 4.4; 5-14 years = 4.3; cases per 100,000]

Differences in data information
Greatest number illness and death occurred among 5-14 year olds while incidence rates show no difference

SLIDE 1.19
CASE OF REFORMING SYSTEM: PRIORITIZING DISEASE CONTROL

OBJECTIVES
To illustrate a specific example of problems occurring with the pre-reform system.

SPEAKER'S NOTES

Here is one example of the problems encountered with such a surveillance system:

■ An increase in patient-load at clinics seemed to signify a growing problem with diphtheria, but the surveillance system was not providing trustworthy data to respond effectively. The existing system was collecting case-patient and case-death data, which was not useful in terms of determining risk factors.

■ Incidence appeared to rise from 0.02/100,00 in 1993 to 1.0 /100,000 in 1994.

■ Incidence rates were similar in all age groups, while data showed that greatest morbidity and mortality occurred in children 5 to 14 years old. There was a mismatch of information.

■ Despite having collected this data, ministry and donors could not trust the data. This delayed donor contributions towards the purchase of needed diphtheria vaccine for the country.

Case study of reforming system: Prioritizing disease control

AFTER REFORM

- ▲ Prioritized diseases and reduced number from 64 to 15

- ▲ Revised reporting procedures

- ▲ Improved quality, analysis and use of data

- ▲ Improved communications

Results: Cost Savings and More Efficient System

SLIDE 1.20
CASE OF REFORMING SYSTEM: PRIORITIZING DISEASE CONTROL

OBJECTIVES
To illustrate examples of reform implementation efforts.

SPEAKER'S NOTES

To make the surveillance system more efficient and effective, several reforms were implemented in 1994:

- Diseases were prioritized and reduced in number from 64 to 15: this freed up resources for improving data collection forms and providing standardized case definitions for all 15 diseases.
- Reporting procedures were revised: reporting system improved and data flowed more efficiently and in a timely manner from the field to the district levels.
- Quality, analysis, and use of data were improved: additional resources were also used to improve data analysis skills and strengthen response capacity.
- Communication was improved: there was improved communication at all levels, which fostered feedback to the providers.
- Resources were better used: job descriptions were developed so that employees had a clear idea of assigned tasks and made better use of their time; volume of supplies and stationary also decreased.

Case study of reforming system: Prioritizing disease control

Malaria Incidence

567 Cases in 1997

First Case Detected

cases

1994   1996   1997
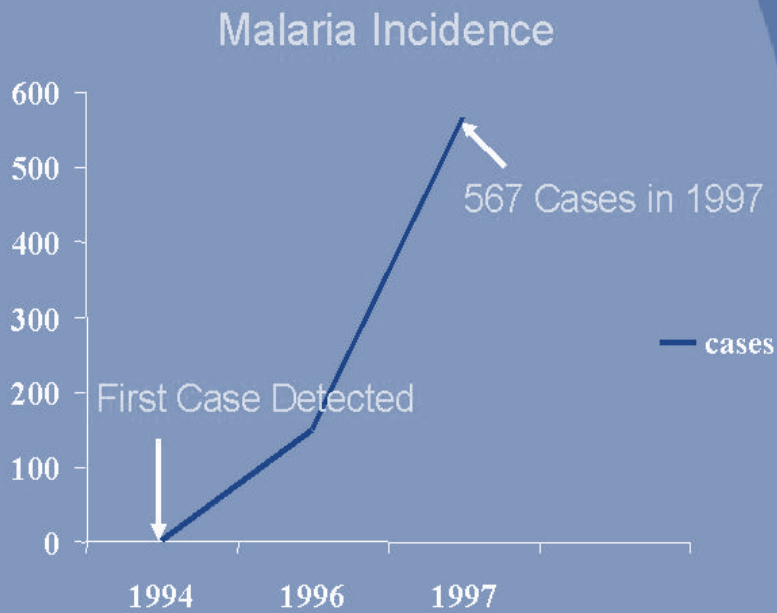
An effective surveillance system detected the emerging epidemic in a more timely manner.

SLIDE 1.21
CASE OF REFORMING SYSTEM: PRIORITIZING DISEASE CONTROL

OBJECTIVES
To give an example of how, for another disease, the reformed system worked well.

SPEAKER'S NOTES

After the reform, malaria was identified as a priority disease for the country.

Prioritizing diseases in the system: freed up resources for improving data collection forms specific to malaria and provided a standardized case definition for malaria

An efficient reporting system: reported new cases of malaria in a timely manner to health officials, allowing a more effective and efficient public health response, which saved lives and money.

Benefits of a *good* surveillance system

A good surveillance system can contribute to:

▲ Reductions in morbidity and mortality
▲ Resource savings

SLIDE 1.22
BENEFITS OF A *GOOD* SURVEILLANCE SYSTEM

OBJECTIVES

To show the advantages of having a good surveillance system and of making the effort to improve a surveillance system

SPEAKER'S NOTES

In the end, why should we care whether our surveillance system is good or not?

A good surveillance system can contribute to:

■ Reductions in morbidity and mortality: resulting from better targeted disease control activities and better informed policy decisions.
■ Resource savings:
  ■ costs of data collection can be reduced by making the system less duplicative
  ■ prevention costs can be reduced when prevention programs are better targeted
  ■ treatment costs can be reduced through both more effective prevention programs and reductions in ineffective treatments (when resistance makes current treatment protocols ineffective)

MODULE 2

WHAT RISKS DOES AN INADEQUATE SURVEILLANCE AND ACTION SYSTEM CREATE?

OBJECTIVES OF THIS MODULE:

To demonstrate examples of both public health and economic risks of inadequate surveillance and action systems and therefore highlight the need for strengthening these systems.

WHEN CAN YOU USE THE INFORMATION IN THIS MODULE?:

The slides in this module can be used for formal audio-visual presentations, or the material contained in them can be used as talking points for formal oral presentations or informal discussions. The contents of this module is most useful when trying to get key stakeholders to recognize the benefits of improving surveillance and action systems, building ownership among oversight and assessment teams, and building local ownership for improving surveillance and action systems.

ADAPTATION:

The cases in this module can be presented in any order or can be replaced or modified to be more relevant to a specific country situation.

What risks does an inadequate surveillance system create?

BUILDING SUPPORT
FOR IMPROVED SURVEILLANCE

SLIDE 2.1
INTRODUCTION

OBJECTIVES

To introduce the presentation and to highlight what will be covered in this module.

SPEAKER'S NOTES

This presentation uses case studies that demonstrate the public health and economic risks of inadequate surveillance and action systems, in order to encourage support for strengthening these systems.
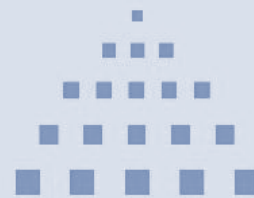
Introduction

- Three country-level case studies show the effects of an inadequate surveillance and action system
  - based on true country-level situations
  - illustrate specific benefits of having a good surveillance and action system and costs of an inadequate one
  - highlight changes needed for an effective system
  - generate lessons that can be applied to other countries

SLIDE 2.2
INTRODUCTION TO COUNTRY CASE STUDIES

OBJECTIVES

To introduce three country-level case studies in this module.

SPEAKER'S NOTES

Presentation contains three country-level case studies that address an inadequate surveillance and action system.

- Based on actual country-level examples
- Case studies illustrate specific benefits of having a good surveillance and action system and the costs of an inadequate system
- Highlights changes necessary for an effective system
- Examples are generalizable lessons that can be adapted to other countries

Strengths and weaknesses of a surveillance and action system

BUILDING SUPPORT
FOR IMPROVED SURVEILLANCE

SLIDE 2.3
CASE STUDY OF SYSTEM STRENGTHS AND WEAKNESSES: HEPATITIS A

OBJECTIVES

To introduce a case study that illustrates the many places in the surveillance and action system where events can go right and go wrong and the implications these problems have for the population.

CASE STUDY HIGHLIGHTS

System strengths and weaknesses have big implications for effective disease control.

BACKGROUND INFORMATION

The case study that follows describes an outbreak of hepatitis A in a neonatal intensive care unit of a children's hospital. It is based on an actual outbreak, which begins with a man donating blood, later becoming ill, and several days later learning that he has hepatitis A. The study presents three scenarios: a best case, a worst case, and a description of the actual occurrence. In the best case scenario, the surveillance and action system works well, and the hepatitis A is contained. In the worst case and real case scenarios, the one case of hepatitis A turns into a large outbreak of the disease. These various scenarios illustrate where system efficiencies exist or where breakdowns can occur – and what outcomes result, due to system strengths or weaknesses.

SPEAKER'S NOTES

The following case study illustrates how surveillance and action can save lives when it works perfectly, or imperil lives, when it does not work well. The case study presents the best case scenario, a worst case scenario and then what really happened.

ADAPTATION GUIDE

The story's format can be adapted to fit a country-specific example where system weaknesses and strengths exist in a disease control program.

BEST CASE SCENARIO
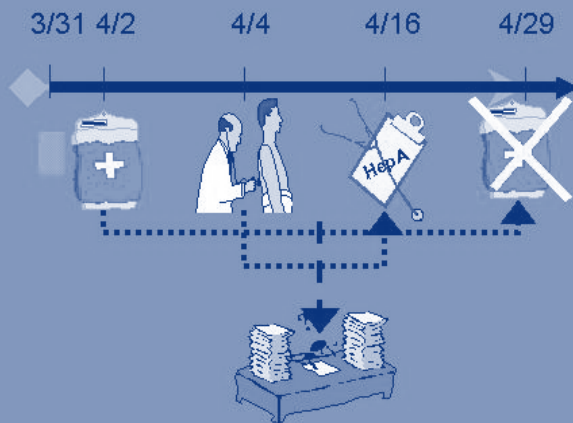
March 31: Hepatitis A virus appears in a 44-year-old man's blood stream

April 2: Man donates blood.

April 4: Man becomes ill and sees a physician.

April 16: Diagnosis of hepatitis A confirmed. Physician reports the case to **the** health department.

April 29: Donated blood is destroyed

IMPACT: 1 case of hepatitis A

SLIDE 2.4
CASE STUDY OF SYSTEM STRENGTHS AND WEAKNESSES: PRESENTATION OF THE BEST CASE SCENARIO

OBJECTIVES
To provide a description of a system that works well and stopped the spread of infection.

BACKGROUND INFORMATION
Hepatitis A virus is spread from person-to-person by anal/oral contact, by putting something in the mouth that has been contaminated with infected feces (stool), and by fecal contamination of food and water. Fruits, vegetables, or other uncooked foods that have been contaminated with hepatitis A during handling can also spread the disease. Diaper changing tables, if not cleaned properly or the covering changed after each use, may facilitate the spread of the disease. Most transmissions result from contact with a household member or sexual partner who has hepatitis A. Casual contact, as in the usual office, factory or school setting, does not spread the virus. In rare instances, transmissions can also be bloodborne.

Source: U.S. Centers for Disease Control and Prevention website: www.cdc.gov

SPEAKER'S NOTES

This best case scenario tells the story of a 44-year-old man who decides to donate blood.

On March 31, unbeknownst to the man, hepatitis A virus becomes present in his bloodstream.

On April 2, he visits a blood bank and donates blood.

On April 4, he develops a fever and starts to experience abdominal discomfort, nausea, and a yellowish tinge in his eyes. He decides to see his physician. The physician takes a blood specimen for testing.

On April 16, a diagnosis of hepatitis A is confirmed. The physician notifies the health department, as required by state law.

The health department promptly follows up with the patient and learns that he donated blood.

On April 29, the blood bank is notified, and the blood is located and discarded.

Impact: Only one case of hepatitis A occurs.

The best case: what went right?

▲ What went right?

- ▲ Physician immediately notified health department
- ▲ Health department followed up quickly to get epidemiological information
- ▲ Health department quickly notified the blood bank to destroy contaminated blood.

▲ Why did things go right?

- ▲ Physician understood his critical responsibility in reporting hepatitis A
- ▲ Reporting system was user-friendly
- ▲ Health department had adequate personnel for quick response
- ▲ Strong communication between health department and blood banks

SLIDE 2.5
THE BEST CASE: WHAT WENT RIGHT?

OBJECTIVES
To illustrate places in the system where events went right in the best case scenario.

SPEAKER'S NOTES

What went right:
- The physician immediately notified the health department about the diagnosis, filling in all the necessary paperwork.
- The health department used the information from the physician to contact the patient and interview him about other contacts who may be at risk of infection, as well as such factors as blood donation.
- The health department immediately followed up with the blood bank where the infected blood was stored so that the contaminated blood could be destroyed.

Why did things go right?
- The physician understood the critical role individual physicians play in reporting hepatitis A to initiate health department investigation and containment of the spread of outbreaks. The reporting system was user-friendly so that a busy physician could easily report the data and transmit it to the health department for action. The health department had adequate personnel to respond immediately to the reported case with epidemiological follow-up.
- Strong administrative links between the health department and the blood banks led to quick communication and response to destroy the contaminated lot of blood.
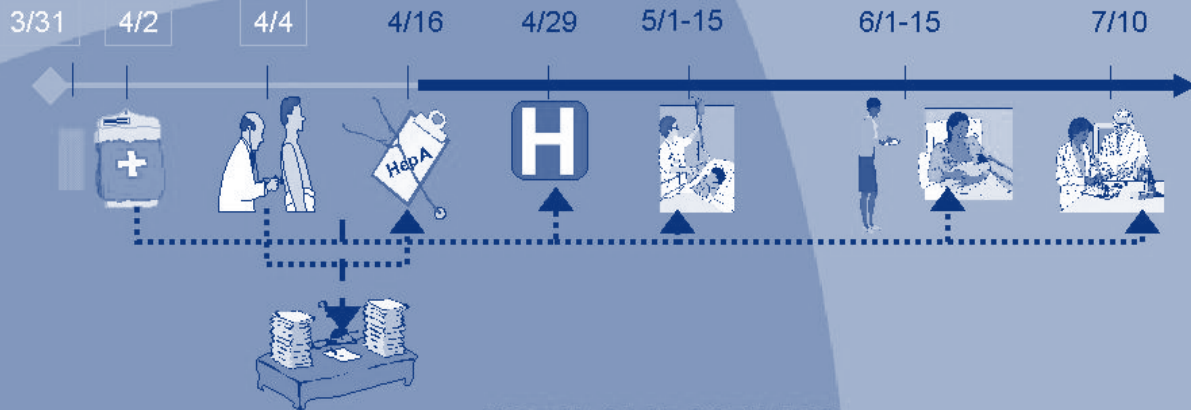
WORST CASE SCENARIO

April 16: Man is confirmed with Hepatitis A. Physician does **NOT** notify health department

April 29: Contaminated blood sold to neonatal care unit of a children's hospital

May 1-15: 15 babies receive blood products and become infected

June 1-15: 5 nursing staff and 15 parents become ill as secondary cases

July 10: 10 additional hospital staff also become ill as tertiary cases

July-August: Other staff and patients contract disease

IMPACT: 91 cases of hepatitis A

SLIDE 2.6

CASE STUDY OF SYSTEM STRENGTHS AND WEAKNESSES: PRESENTATION OF THE WORST CASE SCENARIO

OBJECTIVES

To provide background information about all the things that could have gone wrong.

SPEAKER'S NOTES

In this worst case scenario, we will see all the possibilities of things that can go wrong. The beginning of this story is the same as before, with a man donating blood at a blood bank, falling ill two days later, and seeing his physician. However, at this point the story begins to change.

- Physician fails to notify the health department: he did not feel it was so important; he felt the forms were too complicated, etc.
- The blood bank sells the blood to a children's hospital on April 29. (Note: at the time, there was no screening test for hepatitis A viremia. Because hepatitis A is asymptomatic in infants, no one realizes what has happened.) Over the next two weeks, the hospital uses the blood for transfusions to 15 babies in the neonatal intensive care unit, who all become infected. Subsequently, from June 1-15, five nurses and 15 parents also become ill as secondary cases by caring for the babies).
- The hospital notifies the health department of the cases among their nursing staff, as required by law.
- By July 10, 10 additional hospital staff become ill as tertiary cases from their contact with infected hospital staff and infants.
- The health department is slow to respond to track down source.
- Additional hospital staff and patients are infected over the next several months.

Impact: 91 cases of hepatitis A occur from one source.

The worst case: what went wrong?

What went wrong?

- Physician did not report case to health department
- Health department did not respond in a timely manner

Why did things go wrong?

- Physician did not understand his critical responsibility to report hepatitis A
- Reporting forms were too complicated
- Inadequate communication

SLIDE 2.7
THE WORST CASE: WHAT WENT WRONG?

OBJECTIVES

To illustrate places in the system where events went right and wrong in the worst case scenario.

SPEAKER'S NOTES

What went wrong:
- Physician did not report the case in a timely manner to health department
- The health department did not respond in a timely manner to the reported cases at the hospital.

Why did things go wrong?
- Physician did understand his responsibility in reporting hepatitis A.
- The reporting system was not user-friendly and made it less likely for busy practitioners to report.
- An inefficient database caused further data analysis delays in health department procedures, and there were no clearly established administration linkages with other institutions

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ADAPTATION GUIDE

Other examples can be incorporated into the story based on a country-specific situation.
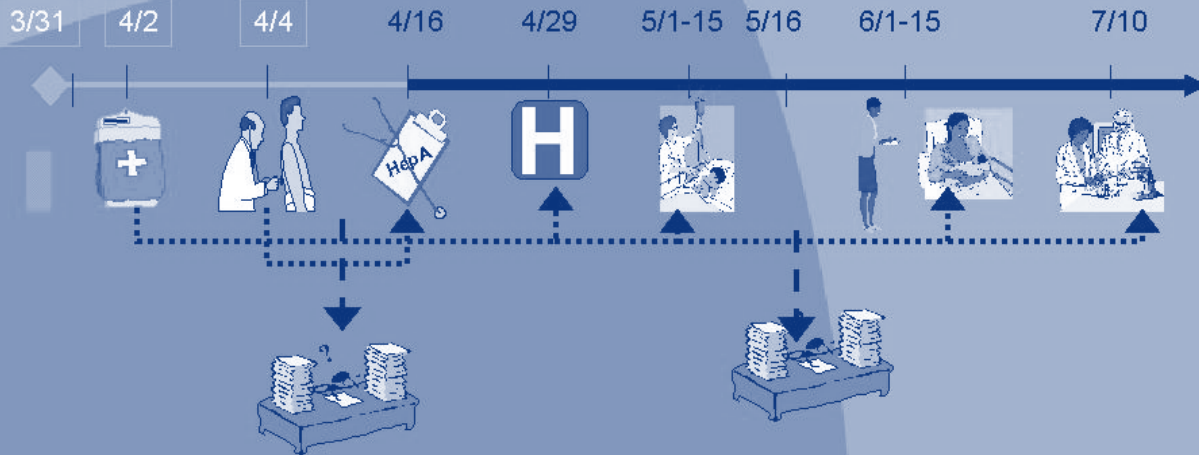
TRUE CASE STUDY

April 16: Man is confirmed with hepatitis A. Physician does **NOT** notify health department
April 29: Donated blood sold to children's hospital
May 1-15: 15 babies receive blood transfusions and become infected
June 1-15: 5 nursing staff and 15 parents become ill as secondary cases
June 16: Hospital staff report cases to state health department
July 10: 10 additional hospital staff become ill as tertiary cases

IMPACT: 46 cases of hepatitis A

SLIDE 2.8

CASE STUDY OF SYSTEM STRENGTHS AND WEAKNESSES: PRESENTATION OF A REAL CASE SCENARIO

OBJECTIVES

The objective of this slide is to illustrate the true story of the case study.

SPEAKER'S NOTES

In the real situation, the outcome is somewhere between the best and worst cases. As before, a man donates blood and then falls ill and visits his physician two days later.

- However, when the lab work comes back with a diagnosis of hepatitis on April 16, the physician fails to notify the health department.
- The blood bank sells the blood to a children's hospital on April 29.
- The hospital uses the blood to give transfusions to 15 babies in the neonatal intensive care unit.
- All 15 babies become infected; five nurses and 15 parents also become infected by caring for the babies.
- The hospital immediately notifies the health department of the cases, as required.
- Ten additional hospital staff become ill as secondary cases on July 10.
- Health officials quickly determine the source of the infection and ensure no further transmission from those in contact with infants who received the contaminated blood.

Impact: 46 cases of hepatitis A occur from one source.

Real case: what went right and wrong?

What went right?
- Health department determined the source of the infection
- Strong response capacity contained outbreak by determining source

What went wrong?
- Physician did not report case to health department

Why did things go wrong?
- Physician did not understand his responsibility in reporting hepatitis A
- Reporting forms were too complicated
- Inadequate communication

SLIDE 2.9
THE REAL CASE: WHAT WENT WRONG AND RIGHT?

OBJECTIVES
To illustrate places in the system where events went right and wrong in the real case scenario.

SPEAKER'S NOTES

No situation is either all black or all white. In the true story, some things worked and some things did not.

What went wrong and why?
- The doctor did not report the case to the health department because he did not feel it was important and there were no incentives to report.

What went right and why?
- The health department quickly responded and located the source of infection due to a strong action capacity and good data analysis skills

Case study of system strengths and weaknesses: outbreak of hepatitis A

Worst -- 91 cases

True -- 46 cases

Best -- 1 case
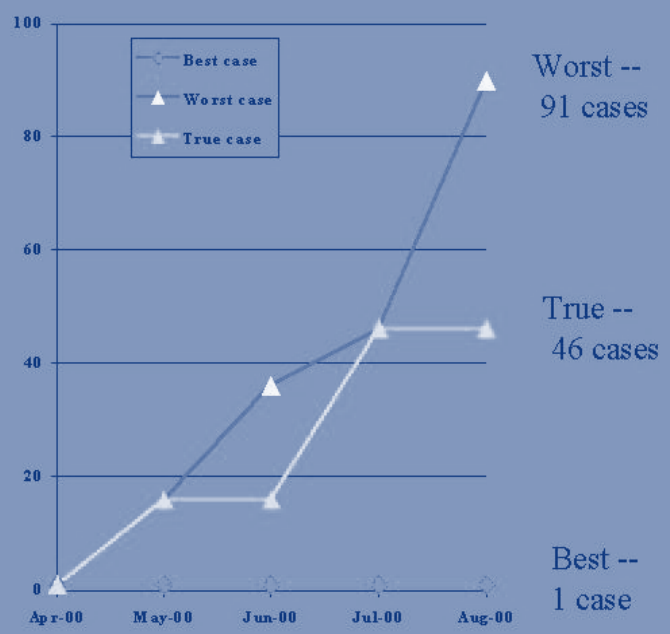
Every part in the system has important role to play

Delays in reporting or action can have a big impact

SLIDE 2.10
CASE STUDY OF SYSTEM STRENGTHS AND WEAKNESSES: OUTBREAK OF HEPATITIS A

OBJECTIVES
To graphically illustrate the scenarios and summarize the main points of the case study.

SPEAKER'S NOTES

The graph illustrates the outcomes of the three cases: best, worst, and real.

■ The red line shows the number of cases of hepatitis A that developed over time in the best case scenario.

■ The purple line shows the large number of cases that developed in the worst case scenario, in which an efficient system was not in place and the physician, the hospital and the health department did not communicate.

■ The green line shows the results of the true story, which lies somewhere between the best and worse cases.

We see that the best case scenario, in which all the parts of the system work well, limited the number of hepatitis A cases to one. In the other scenarios, where parts of the system broke down, more cases occurred. When the surveillance and action system is not well designed or does not function well, the outcome can be devastating in terms of public health repercussions.

Economic impacts of an outbreak
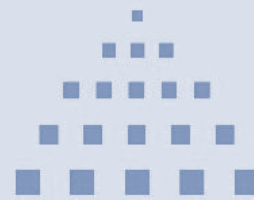
BUILDING SUPPORT
FOR IMPROVED SURVEILLANCE

SLIDE 2.11
CASE STUDY OF ECONOMIC IMPACT OF AN OUTBREAK: PLAGUE

OBJECTIVES

To introduce a case study which illustrates the economic implications of an outbreak of plague.

BACKGROUND INFORMATION

Plague is primarily a disease of rodents and their fleas, which can infect humans. Humans are extremely susceptible to plague and may be infected either directly or indirectly. The most common route of transmission between plague-infected rodents and humans is indirect, through the bite of a flea. Effective treatment methods enable almost all plague patients to be cured if diagnosed in time.

Source: World Health Organization. 2000. *Report on Global Surveillance of Epidemic-prone Infectious Diseases.* Geneva.

CASE STUDY HIGHLIGHTS

A functioning system can detect and anticipate initial cases before outbreak occurs to reduce public hysteria and economic losses.

SPEAKER'S NOTES

This case study examines the economic consequences of poorly functioning surveillance and action systems. Here the consequence is not just people falling ill and being unable to work, but the detrimental impact that the disease is having on the country's economy.

Case study of economic impacts: failure to heed early warnings of plague

Government-supported report warns of plague in rodents

Report recommends continuous surveillance but only one center exists in country

Health workers report increase in rodent deaths

First cases of bubonic plague not reported

Early Warnings NOT Heeded

SLIDE 2.12
CASE STUDY OF ECONOMIC IMPACT OF AN OUTBREAK: EARLY WARNINGS

OBJECTIVES
To present some early warnings of plague that were not apparent to the surveillance and action system.

BACKGROUND INFORMATION
There are three main forms of plague in humans, namely bubonic, pneumonic, and septicaemic. Bubonic plague is the result of a bite from an infected rodent or flea, and first affects the lymphatic system. Pneumonic plague occurs when the lungs are infected with the plague bacillus. Pneumonic plague may develop from bubonic plague, or it can be transmitted directly from person to person via infected air droplets or through infected clothing and other contaminated articles. The septicaemic form of plague occurs when the plague carrier deposits the bacillus directly into the bloodstream, or when another form of the plague moves into the bloodstream. All forms of plague respond to treatment with antibiotics; however, because septicaemic plague kills so quickly, this form of the disease is almost always fatal.

Source: World Health Organization. 2000. *Report on Global Surveillance of Epidemic-prone Infectious Diseases.* Geneva.

SPEAKER'S NOTES

In this case study, the government had commissioned a report, which showed the existence of plague bacteria in wild rodents and forewarned that conditions were ideal for an outbreak of plague.

The report recommended continuous surveillance in the specific province where an outbreak was most likely to occur.

However, the country's only surveillance unit was far away from that geographic area, so routine local surveillance was not possible.

Over time, health workers in the affected province reported a large number of rodent deaths and the existence of fleas.

However, the first cases of bubonic plague were not reported to the central surveillance unit.

Case study of economic impacts: description of events

August 5:
Health workers warn of rodent deaths

↓

August 25:
First 107 cases of bubonic plague

↓

September 21:
Outbreak of pneumonic plague with 46 deaths

September 25:
614 infected; 12% of residents flee city

↓

October 2:
Estimated 1,500 cases and 1 death

↓

Panic buying of antibiotics; countries ban flights

✓54 fatalities
✓500 patients hospitalized
✓Infection spreads to 7 states
✓More than 1,500 cases

SLIDE 2.13
CASE STUDY OF ECONOMIC IMPACT OF AN OUTBREAK: DESCRIPTION OF EVENTS

OBJECTIVES
To present the background of the events that lead to the outbreak.

BACKGROUND INFORMATION
A person with bubonic plague usually begins to display symptoms of illness two to six days after being infected: the plague bacillus travels through the person's lymphatic system to the nearest lymph node, where it forms a swelling, and then hemorrhaging under the skin. In pneumonic plague, spread by airborne droplets of sputum and more contagious than bubonic, infection of the lungs with the plague bacterium causes a severe respiratory illness: the infected person may experience high fever, chills, cough, and breathing difficulty, and expel bloody sputum. As noted above, if the patient is not given specific antibiotic therapy, the bacteria of either form can invade the bloodstream, causing septicaemic plague. When plague bacteria multiply in the bloodstream, they spread rapidly throughout the body and cause severe symptoms and, often, death.

Source: U.S. Centers for Disease Control and Prevention webpage: www.cdc.gov

SPEAKER'S NOTES

The following events led to the outbreak of plague:
- On August 5, health workers warn of rodent deaths – a clear sign of plague.
- By August 25, 107 cases of bubonic plague are diagnosed
- By September 21, neighboring district has outbreak of pneumomic plague resulting in 46 deaths; 614 cases occur by September 25; news of plague spreads quickly and over 12% of district's population flees, spreading infection.
- By October 2, there is one death and more than 1,500 cases in seven provinces.
- National public panic and fear spurs buying of antibiotics, increase of patients in hospitals and clinics
- News of outbreak reaches outside of the affected country; some neighboring countries cancel flights to and from the affected country, while others screen passengers arriving from that country.
- Impact: 54 deaths, more than 500 hospitalizations, and more than 1,500 cases

Case study of economic impacts: total economic losses

OUTBREAK OF PLAGUE

+ more than 45,000 tourists cancelled visits
+ 20% reduction in hotel reservations
+ losses in domestic air travel
+ export losses
==============================

Estimated TOTAL LOSSES = $1.7 Billion

SLIDE 2.14
CASE STUDY OF ECONOMIC IMPACT OF AN OUTBREAK: ECONOMIC IMPACT

OBJECTIVES
To present the economic impacts of the outbreak of plague.

SPEAKER'S NOTES

The economic costs from the outbreak are enormous:
- More than 45,000 tourists cancel visits.
- Tourist cancellations lead to a 20% reduction in hotel occupancy rates and daily losses for domestic airlines.
- More than $1.7 billion in losses are estimated.

Country's economic image is tarnished because of the plague.

Case study of economic impacts: what went wrong

- Warnings not heeded
- Public health system response was slow
- Lack of integration between public health system
  - Lack of urban sanitation to control rodent population
- Only one surveillance unit in country
  - Poor monitoring
  - Feedback from health worker not heeded
- No central government response

SLIDE 2.15
CASE STUDY OF ECONOMIC IMPACT OF AN OUTBREAK: WHAT WENT WRONG

OBJECTIVES
To illustrate weaknesses in the surveillance and action system that lead to the outbreak.

BACKGROUND INFORMATION
The first untreated cases of bubonic plague developed pneumonic infections. The more deadly cases of pneumonic plague soon appeared in a nearby district. Without treatment, death followed within three to four days.

SPEAKER'S NOTES

The outbreak of plague resulted from several weaknesses in the surveillance and action system:
- Several warnings were not heeded by surveillance and action system.
- Despite identifying initial bubonic plague cases, public health system was not able to respond quickly to contain cases; these first untreated cases developed into pneumonic plague.
- Public health system did not have clear links to the urban sanitation system; there was no system to monitor and control wild rodent population.
- Lack of surveillance facilities and resources; the country's only surveillance unit was not in areas that contained rodents that carry plague; health worker feedback and warnings went unnoticed.
- There was no timely central-level response; lack of immediate response raises public's fears.

Long-term infectious diseases and the consequences of poor surveillance and response

BUILDING SUPPORT
FOR IMPROVED SURVEILLANCE

SLIDE 2.16
CASE STUDY OF IMPACT OF SURVEILLANCE AND ACTION ON LONG-TERM INFECTIOUS DISEASES: TUBERCULOSIS

OBJECTIVES

To introduce a case study that illustrates the consequences of a poor surveillance and action system for chronic disease control.

BACKGROUND INFORMATION

Tuberculosis (TB) is an infectious disease with a long pathogenicity. It is caused by bacteria called *Mycobacterium tuberculosis*. Transmission occurs by airborne spread of infectious droplets of bacteria. The greatest risk of infection occurs from exposure to a person with sputum smear-positive pulmonary TB (person with TB of the lung). Persons with TB may be infected for many years and yet remain asymptomatic. However, infected persons can develop active TB at any time, especially when their immune systems are weakened. Without treatment, after five years 50% of pulmonary TB patients will die; 25% will no longer suffer symptoms; and 25% will remain ill with infectious TB.

Source: World Health Organization and International Committee of the Red Cross. May 2000. *Tuberculosis in Prisons*. Geneva: WHO Global Tuberculosis Programme.

CASE STUDY HIGHLIGHTS

Effective surveillance and action for chronic diseases are dependent upon sound linkages within the public health system

SPEAKER'S NOTES

The following case study will highlight the important role that surveillance and action play in controlling long-term infectious diseases. Surveillance and action are integrally linked here to the public health system and poor surveillance and action can have large impact.

Global significance of TB and importance of surveillance and action systems

- Resurgence of TB globally
  - high costs of containment and treatment
- HIV/AIDS crisis ➜ TB resurgence
- Globally Multiple Drug Resistant TB increasing at alarming rate
  - MDR TB patients more likely to fail treatment and infect others
  - treatment is complicated and can last 6-9 months
- Average costs of MDR treatment in US – $180,000/patient

Increasing pressure on surveillance and action system to monitor, control, and prevent cases and contain costs

SLIDE 2.17
CASE STUDY OF IMPACT OF SURVEILLANCE AND ACTION ON LONG-TERM INFECTIOUS DISEASES: GLOBAL SIGNIFICANCE OF TB

OBJECTIVES
To illustrate the global significance of TB generally and multiple drug resistant (MDR) TB in particular, and the important role of a surveillance and action system in control and prevention of disease.

BACKGROUND INFORMATION
A recent WHO study found that drug resistance is prevalent all over the world and multiple drug resistance is increasing at an alarming rate. The study also found that resistance is higher in countries with poor disease control programs. TB bacteria naturally develop resistance to drugs over time. However, this natural process can accelerate due to inconsistent or partial treatment. MDR TB occurs when the TB becomes resistant to at least two anti-TB drugs, isoniazid and rifampicin.

Source: World Health Organization and IUATLD. 1998. *Anti-Tuberculosis Drug Resistance in the World.* Geneva: WHO Global Tuberculosis Programme.

SPEAKER'S NOTES

Let us talk a bit about TB and its increasing re-emergence as a major public health problem.

According to WHO:
- 30 million people could die of TB in the next 10 years.
- Someone becomes infected every second; 2 million die each year.
- Cost of treatment and surveillance keep rising due to an increase of cases and increased resistance.

HIV/AIDS is accelerating the spread of TB; immunity is compromised so that someone infected with HIV/AIDS and TB is more likely to become sick with TB.
- TB is a leading killer of women, youth, and people infected with HIV/AIDS; it accounts for 15% of AIDS deaths worldwide.

Multiple drug resistant TB is increasing at an alarming rate. A 1997 WHO study of 35 countries found that in one-third of the countries, MDR cases comprised between 2% and 14% of all cases.
- Treatment is complicated and has an extended treatment period.
- Treating MDR strains is resource intensive, requiring second- and third-line drugs that are more expensive and more toxic.

Surveillance and action plays a critical monitoring, control, and containment role in TB and MDR TB control.

Case study of TB and MDR TB transmission

Patient 1 — TB undetected, spends 4 weeks in prison, and dies shortly after release

Patient 2 — At another prison, TB detected and successfully treated.

Patient 3 — Released from prison with TB, starts Rx but does not complete, develops MDR

Patient 4 — Successfully treated at local health center

Patient 5 — Lost to follow-up because moves to another community
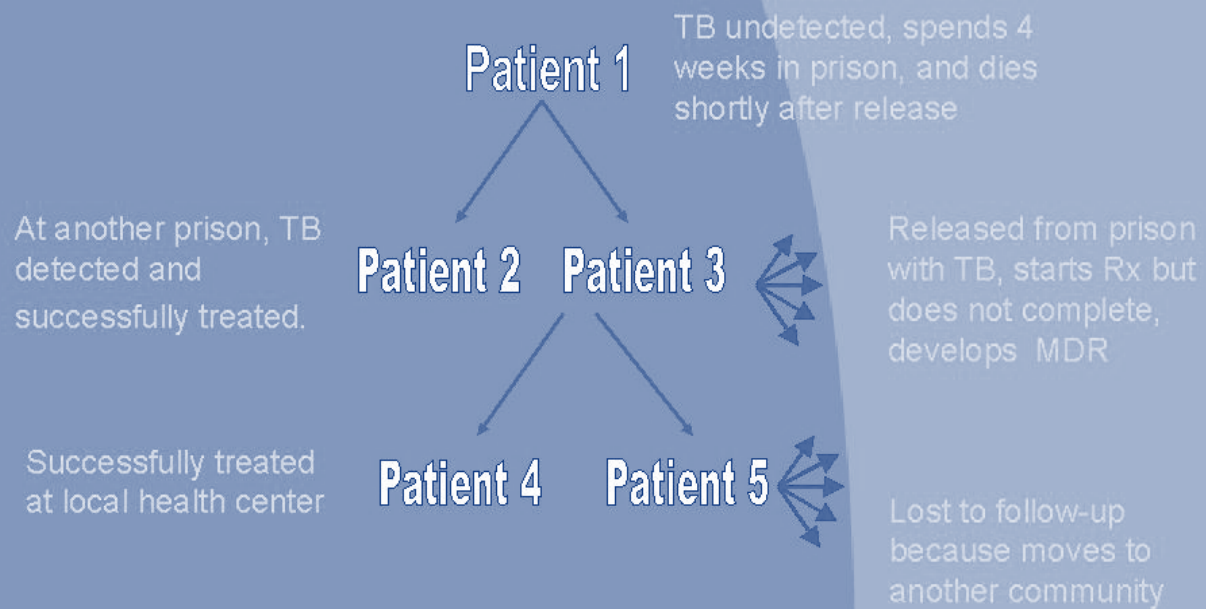
SLIDE 2.18
CASE STUDY OF IMPACT OF SURVEILLANCE AND ACTION ON LONG-TERM INFECTIOUS DISEASES: TB AND MDR TB TRANSMISSION

OBJECTIVES

To describe a case study of MDR and TB transmission that began in a prison and eventually spread to the community.

SPEAKER'S NOTES

Let us look at what happens when surveillance and action are not adequate. The following case study is based on events in a prison population where TB was initially contracted while patients were incarcerated.

Patient 1: The first patient has TB, although neither he nor the prison officials knows it. He is placed with the general prison population for four weeks. He passes away several months later. However, while he is in prison, he infects two other prisoners.

Patient 2: Patient 2 contracts TB from Patient 1. He is later transferred to another prison where his infection is detected. That prison puts him on a six-month supervised therapy. When he is released from prison, follow-up is continued and all his contacts are screened for TB.

Patient 3: Patient 3 also contracts TB from Patient 1. He is released directly from the first prison, without treatment. He later receives initial TB treatment from a local health clinic but does not continue. As a result, he develops multiple drug resistant TB and spreads infection to two other persons in his community.

Patient 4: Patient 4 contracts TB from Patient 3. He consults the local health clinic, receives supervised therapy, and completes his treatment.

Patient 5: Patient 5 also contracts TB from Patient 3. He starts treatment from local health clinic, but, while in therapy, he moves to another community, becomes lost to follow-up, and infects others in new community.

Thus, even though several patients are successfully treated, Patients 3 and 5 continue to infect others. Patient 3 infects others with MDR forms of TB.

Case study of TB and MDR TB: what went right and wrong

What went right

▲ Patient 2
  - ▲ proper case detection; successful supervised therapy
  - ▲ adequate patient follow-up prevented other cases

▲ Patient 4
  - ▲ supervised therapy administered efficiently
  - ▲ sufficient resources for laboratory analysis

What went wrong

▲ Patient 1
  - ▲ inadequate screening/case detection

▲ Patient 3
  - ▲ inadequate screening before release
  - ▲ inadequate supervision and follow-up led to non-compliance
  - ▲ no proper follow-up to prevent other cases

▲ Patient 5
  - ▲ no good linkage and inadequate follow-up across borders

SLIDE 2.19
CASE STUDY OF TB AND MDR TB: WHAT WENT RIGHT AND WRONG?

OBJECTIVES
To provide background information about all what was right and was wrong in the surveillance and action system.

SPEAKER'S NOTES

In this case study, what went right in the surveillance and action system?
- Patient 2's TB infection was detected by providers at the second prison facility, which had access to efficient laboratory facilities that confirmed infection; patient received full supervised therapy treatment of six months; patient was followed after therapy to ensure that all his contacts were TB-free.
- Patient 4 also received effective supervised therapy; sufficient resources were available for case detection and treatment; skilled personnel were available to conduct laboratory analysis.

What went wrong in the surveillance and action system?
- Health services in the first prison did not have clear case definitions nor did they screen routinely for TB. Thus, they were not able to detect Patient 1's TB infection.
- Patient 3's TB also was not detected while in the same prison, for the same reasons. Although he started treatment after release, his local public health system did not properly supervise therapy and did not do adequate follow-up. As a result, the patient's continued non-compliance with the therapy led to development of MDR TB.
- Patient 5 began supervised therapy by public health system but it was interrupted and not consistent; lack of cross-jurisdictional collaboration within the public health system meant failure to follow patient and to ensure completion of treatment.

Case study of TB and MDR TB: implications for the surveillance and action system

Implications for surveillance and action system

- Tracking of MDR TB patients over time is essential
- Monitoring TB requires culture laboratories and skilled personnel to detect MDR strains
- Interstate, intrastate, and international cooperation critical for MDR TB monitoring and prevention
- Longitudinal studies essential to detect drug resistance trends in population
- Both prevention and treatment require strong linkages to public health system

SLIDE 2.20
CASE STUDY OF TB AND MDR TB: IMPLICATIONS FOR THE SURVEILLANCE AND ACTION SYSTEM

OBJECTIVES
To illustrate overall implications for the surveillance and action system.

SPEAKER'S NOTES

There are several overall implications for a surveillance and action system that this case highlights:

- Tracking of patients with multiple drug resistant TB is essential to stop transmission; high-risk TB patients need supervised therapy in order to avoid non-compliance and prevent MDR strains to develop.
- A system needs resources to ensure adequate laboratory services and skilled personnel who can analyze data.
- Coordination across jurisdictions is essential in order to follow patients to monitor treatments and prevent further transmission.
- System must conduct long-term studies to monitor drug resistance and identify high-risk areas; this will facilitate planning and better allocation of resources.
- Strong links with the public health system is critical for screening, treatment, and prevention.

Surveillance system requirements: special needs for long-term infectious diseases

- Surveillance and action linked at the provider level for each patient

- Long-term infectious diseases require long-term monitoring of trends

SLIDE 2.21
SURVEILLANCE AND ACTION SYSTEM REQUIREMENTS: SPECIAL NEEDS FOR LONG-TERM INFECTIOUS DISEASES

OBJECTIVES
To illustrate that the major differences for surveillance between long term infectious diseases and acute outbreaks.

SPEAKER'S NOTES

Surveillance and action systems should distinguish between acute disease control activities and those for diseases with long-term infections:

In the TB and MDR TB case study, surveillance and action activities are dependent upon a strong public health system. The screening, treatment, and follow-up of patients are conducted at the provider level. The prevention of transmission is also dependent upon quality public health services.

The spread of MDR infections can also be addressed at the provider level. Supervised therapy sessions and other compliance issues are the responsibility of the public health service.

Long-term infectious diseases also require longer-term monitoring of disease trends to facilitate better resource planning and identify disease control priorities for the national surveillance and action system.

Summary

3 country-level case studies highlight the risks of inadequate surveillance and action systems:

▲ increased morbidity and mortality: Hepatitis A, Plague and TB

▲ lost or wasted resources:
  ▲ treatments for cases that could have been prevented: Hepatitis A, Plague, TB
  ▲ increased cost of treatment: MDR TB
  ▲ larger economic impacts: Plague

SLIDE 2.22
SUMMARY

OBJECTIVES
The objective of this slide is to summarize results from this module.

SPEAKER'S NOTES

This presentation uses three country case studies to illustrate the risks of inadequate surveillance and action systems:

- The impact of an inefficient system increases morbidity and mortality rates: Hepatitis A, plague and TB
- An inefficient system wastes resources and has broader economic impacts; for example:
    - treatments for cases that were preventable: hepatitis A, plague, TB
    - increased treatment costs: MDR TB
    - broader economic impacts: plague

IMPROVING SURVEILLANCE SYSTEMS

MODULE 3

HOW CAN YOU TRANSFORM A POOR SURVEILLANCE AND ACTION SYSTEM INTO A BETTER ONE?

OBJECTIVES OF THIS MODULE:

To provide information about what one needs to do to actually improve the surveillance and action system.

WHEN CAN YOU USE THE INFORMATION IN THIS MODULE?:

The slides in this module can be used for formal audio-visual presentations, or the material contained in them can be used as talking points for formal oral presentations or informal discussions. The contents of this module is most useful when trying to get key stakeholders to recognize the benefits of improving surveillance and action systems, building ownership among oversight and assessment teams, and building local ownership for improving surveillance and action systems.

How can you transform a poor surveillance and action system into a better one?

BUILDING SUPPORT
FOR IMPROVED SURVEILLANCE

SLIDE 3.1

HOW CAN YOU TRANSFORM A POOR SURVEILLANCE AND ACTION SYSTEM INTO A BETTER ONE?

OBJECTIVES

To introduce this part of the presentation and highlight what will be covered in this module.

SPEAKER'S NOTES

We have discussed what public health surveillance is and what it does. We have also discussed the risks that a poor surveillance and action system poses to a country's public health and economic systems. In this presentation we will discuss how to transform a poor public health surveillance system into a better one.

The keys to this transformation are to:

- Make the appropriate systemic improvements
- Build ownership for all improvements at every level
- Train personnel in order to develop public health competencies and
- Ensure availability of resources

We will focus on building ownership through empowerment in order to *sustain* the improvements.

By implementing sustainable improvement

SLIDE 3.2
BY IMPLEMENTING SUSTAINABLE IMPROVEMENT

OBJECTIVES
To highlight the need for sustainable improvements.

SPEAKER'S NOTES

Transformation by definition means change. If no change is made, the surveillance and action system will continue to function poorly, with the associated public health risks and detrimental effect on the economy.

What do we mean by sustainable improvements? Improvements are sustainable when they continue over time. In order for a system to maintain the improvements, it must have capacity, motivation, and resources.

If systemic changes are made but not sustained, improvements will be lost and the system will either revert to its prior state or perhaps get worse.

Question: How do you build sustainable improvements?

Answer:
1) Develop and maintain local competencies
2) Ensure ongoing local financing
3) Build national and local ownership

SLIDE 3.3
HOW DO YOU BUILD SUSTAINABLE IMPROVEMENTS?

OBJECTIVES
To highlight the importance of ownership and support for sustainable improvements.

SPEAKER'S NOTES

So, how do you build sustainable improvements? How can improvements in the public health system be implemented at all levels and stand the test of time?

Many factors influence sustainability. Local competency and resource availability are necessary but not sufficient.

Another key factor is:

■ National ownership, which motivates stakeholders to maintain the improvements over time.

The rest of the presentation focuses on ownership.

What do we mean by national ownership?

■ Ownership results when people know and care enough about their surveillance and action system to fund actions toward implementing improvements.
■ Ownership should be built at each level of the system: national, regional, and local.
■ Ownership should be built by all parties: those who record data, those who analyze data, and those who use the data to make decisions.

Build national ownership when you:

▲ Assess current surveillance and action activities
   – Determine country-specific conditions
   – Recognize strengths, synergies, and gaps
▲ Develop a plan-of-action
▲ Implement the plan-of-action

SLIDE 3.4
BUILD NATIONAL OWNERSHIP WHEN YOU...

OBJECTIVES
To demonstrate building ownership in all phases of the surveillance and action improvement process

SPEAKER'S NOTES

Building ownership should be ongoing, working to increase commitment and strengthen capacity to improve the public health surveillance and action system at each step in the process.

Transforming a poor system into a good one involves the following steps:

- Assessing the current surveillance and action activities: the first step is knowing what and how surveillance and action activities are being performed.
  - Determining country-specific conditions: in what context is the public health surveillance system working?

  - Recognizing strengths, synergies, and gaps: where does the system work well? Where is there overlap?

- Developing a plan-of-action: lay out the priorities, strategies, and timing for implementation of action steps to transform the system into a better one.
- Implementing the plan-of-action: the best plan-of-action needs monitoring over time.

Now, let us look at each of these phases and see how we can use them to build national ownership.

Assess current surveillance and action activities

Involve key personnel from
- MoH surveillance and action
- Vertical programs
- Laboratories
- Special projects

SLIDE 3.5
ASSESS CURRENT SURVEILLANCE AND ACTION ACTIVITIES

OBJECTIVES
To highlight stakeholder involvement in the assessment of current activities.

BACKGROUND INFORMATION
The technical components of assessment are described in: World Health Organization. February 1999. *Assessment Protocol for National Communicable Disease Surveillance Systems and Epidemic Preparedness and Response*, version 0.2.

SPEAKER'S NOTES

The assessment of surveillance and action activities involves asking several questions about the system and its performance (what exists and how well it is used) such as:

■ Are there case definitions? Have epidemic thresholds been defined for response? Are there protocols for actions? What are the norms and expectations for communication?

Assessment to understand the system is a crucial opportunity to involve key stakeholders. Improving public health surveillance means examining the whole system and its component parts. So, who are these key partners?

■ Ministry of Health disease surveillance and action personnel: those who collect data and those who respond to trends identified through surveillance.
■ Managers of vertical programs such as immunization, diarrheal diseases, and tuberculosis.
■ Staff of laboratories that confirm cases.
■ Special projects personnel such as sentinel surveillance or limited geographic surveillance. These projects are generally action-oriented and well funded.

ADAPTATION GUIDE
This slide's list of key partners should be adapted to indicate all types of key partners relevant to your country's surveillance activities.

Recognize strengths, synergies, and gaps

Listen to the feedback
- What works well and doesn't?
- Can we build on cross-cutting support activities?
- What needs to happen, but is not?
- Where can we find synergy?

SLIDE 3.6
RECOGNIZE STRENGTHS, SYNERGIES, AND GAPS

OBJECTIVES

To show how commitment can be gained through the processing of assessment results.

BACKGROUND INFORMATION

The previous two slides focused on the collection of information for understanding the current situation. This slide addresses the processing of information prior to deciding on a course of action that is tailored to the situation, i.e., not pre-conceived.

SPEAKER'S NOTES

Now that much information has been collected, it is time to analyze and interpret that information. What strengths and opportunities exist for synergy? Where are the gaps in performance?

This phase empowers ownership by listening to feedback. Using what people have told you and involving them in the process of interpretation empowers ownership of both the problems and the solutions.

This phase focuses on:
- What works well and doesn't? *Identify what works so that the resulting plan-of-action builds on existing capacity and strength. Communicating with people who work in the system on a daily basis will provide this information.*
- Can we build upon cross-cutting support activities? *Are there common elements among surveillance activities that can be built upon or consolidated – standard setting, training, supervision, communications, or resource management?*
- What needs to happen that is not? *What are the gaps in the system? Is there capacity to act? Do standard case definitions exist? Is the epidemiology process sound? Is there enough lab support? Is there an effective communication system? Are resources being used well? Are people trained to operate the system?*
- Where can we find synergies? *Are there opportunities to share resources, such as personnel, equipment (such as PCs), or transport ?*

Develop a plan-of-action

Build on successes

- Build on existing successful activities
- Focus on strengthening core and support activities
- Consider short-term and long-term needs
- Establish priorities and realistic goals for surveillance and action activities

SLIDE 3.7
DEVELOP A PLAN-OF-ACTION

OBJECTIVES

To highlight how an incremental approach that builds on past success can empower ownership for the future succcesses.

BACKGROUND INFORMATION

This slide focuses on the need for an incremental approach to improvement.

SPEAKER'S NOTES

Now that information is available on the current status and it has been reviewed for opportunities to strengthen what exists and build on it, it is time to develop a plan-of-action.

Building ownership involves empowering key personnel to incorporate the existing strong components and take the information from the assessment to develop a plan-of-action.

Essential components of a plan-of-action include:

- Building on existing strengths
- Focusing on strengthening essential core and support activities
- Considering short- and long-term needs: *surveillance is not just for epidemic response, but also for medium- and long-term goals of identifying disease trends and modifying programs and policies.*
- Establishing priorities and realistic goals: *it is not possible to do everything, and trying weakens performance. Instead, focus on major health concerns that are:*
    - of public health importance (morbidity, mortality, DALY, WHO policy, i.e., eraditication, elimination,
    - where public health actions can be taken: vaccination, prevention, education,
    - where lab, health facility, environmental or other relevant data are available.
    - for which surveillance and actions are worth the effort they require

Implement plan-of-action

Foster support and gain commitments

▲ Communicate the plan

▲ Encourage buy-in

▲ Secure commitments

▲ Establish partnerships

▲ Develop monitoring approach

▲ Implement

▲ Monitor progress and results

▲ Adapt, as appropriate

SLIDE 3.8
IMPLEMENT PLAN-OF-ACTION

OBJECTIVES
To indicate the opportunities for building ownership and commitment during the implementation phase of improving disease surveillance and action.

SPEAKER'S NOTES

Developing a plan-of-action is just the beginning. For improvements in public health surveillance and action to be effective, they must be implemented and sustained. Sustained improvements require commitment to building ownership of the system.

This is a critical time to fostering support and gaining commitments.

- Communicate the plan-of-action: *meet with stakeholders and participants in the assessment phase and share the draft plan-of-action with them for feedback. Use this opportunity to share the draft with other key players with whom you may not have yet talked.*
- Encourage buy-in of the plan-of-action: *consider this a draft plan-of-action and let key stakeholders have the time and opportunity to make comments and suggestions. Accommodate their suggestions where feasible or explain why their suggestions cannot be made.*
- Secure commitments of leadership, resources, and action: *Be specific about who is responsible for each portion of the plan-of-action, who is funding each action, and in what timeframe the implementation will proceed.*
- Establish partnerships: *recognize those who are working with you and plan future action together.*
- Establish monitoring approach: *set up a monitoring approach to measure the implementation phase – are activities being implemented as planned?*
- Implement the plan: *get started.*
- Monitor progress and results: *collect data to see if implementation is going as planned and if the "improvements" are making a difference.*
- Adapt as needed: *Use the monitoring information to provide feedback to users and stakeholders of the system. Make changes and modifications as needed.*

In summary, continue to listen, heed feedback, and communicate to ensure that improvements are sustained.

MODULE 4

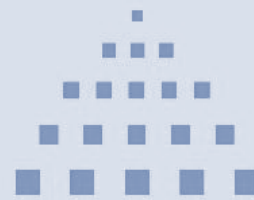# BUILDING OWNERSHIP WHILE CONDUCTING AN ASSESSMENT OF YOUR SURVEILLANCE AND ACTION SYSTEM

OBJECTIVES OF THIS MODULE:

To show how to build ownership to create sustainable improvements in the surveillance and action system.

WHEN CAN YOU USE THE INFORMATION IN THIS MODULE?:

The slides in this module can be used for formal audio-visual presentations, or the material contained in them can be used as talking points for formal oral presentations or informal discussions. The contents of this module is most useful when training and working with the assessment team before they commence the assessment. This module provides information about how to become an effective advocate.

Building ownership while conducting the assessment of your surveillance and action system

BUILDING SUPPORT
FOR IMPROVED SURVEILLANCE

SLIDE 4.1
BUILDING OWNERSHIP WHILE CONDUCTING THE ASSESSMENT OF YOUR SURVEILLANCE AND ACTION SYSTEM

OBJECTIVES
To introduce this part of the presentation and highlight what will be covered in this module.

BACKGROUND INFORMATION
This module will be used primarily in preparing individuals who will actually conduct the assessment, as part of their training.

SPEAKER'S NOTES

Transforming your surveillance and action system into a better system will require:
- Building ownership for changes and improvements at all levels: *appropriate changes will be determined through the assessment of the current system and interpretation of findings. But the implementation of changes and their sustainability will depend on the ownership of the changes. The assessment itself provides many opportunities to build ownership among stakeholders, policymakers, and staff operating the surveillance and action system.*
- Making appropriate changes and improvements

ADAPTATION GUIDE
The text in the introductory slide may need to be modified, depending on the timing and context in which this module is being presented. For the purpose of this guide, we assume it will be used during training or an introductory meeting of the assessment team.

Assessing surveillance and action systems

- Plan the assessment
- Choose the assessment team
- Train the team members
- Conduct the assessment
- Analyze the information and make recommendations

SLIDE 4.2
ASSESS THE SURVEILLANCE AND ACTION SYSTEMS

OBJECTIVES
To highlight the steps of assessing the surveillance and action system.

BACKGROUND INFORMATION
More detailed description of these steps is available in: World Health Organization. February 1999. *Assessment Protocol for National Communicable Disease Surveillance Systems and Epidemic Preparedness and Response,* version 0.2.

SPEAKER'S NOTES

Once a decision has been made to reform the surveillance and action system, an assessment of the existing system involves several steps:

1. Plan the assessment (provides technical direction)
2. Select the assessment team
3. Train team members how to collect and analyze the data
4. Conduct the assessment (collect the data)
5. Analyze the information and make recommendations

Each step offers opportunities for advocacy and building ownership for improvements in the system.

ADAPTATION GUIDE
These are the WHO recommended steps to assessment. This slide should be adapted if your set of steps is not exactly the same or does not use the same wording.

Advocating for improved surveillance and action during assessment

Plan the assessment	⇒	Generate commitment
Select the assessment team	⇒	Find the right people
Train team members	⇒	Convince team members to become advocates
	⇒	Build team members' advocacy skills
Conduct assessment	⇒	Build local ownership during fact finding
Analyze information and make recommendations	⇒	Heed the feedback
	⇒	Identify opportunities for improvement

SLIDE 4.3
ADVOCATE FOR IMPROVED SURVEILLANCE AND ACTION DURING THE ASSESSMENT

OBJECTIVES

To provide a map of how advocacy can be integrated into each of the steps of conducting an assessment.

BACKGROUND INFORMATION

More details on the advocacy steps can be found in the Users Guide Part A.

SPEAKER'S NOTES

Each step of the assessment offers specific opportunities to build ownership among the various stakeholders involved in surveillance and action.

1. While planning the assessment, we can build ownership of the assessment among stakeholders.
2. While selecting the oversight and assessment teams, we can ensure that members are influential and representative of important organizations and programs.
3. During training of the assessment team, we can build team members' ownership of reform of the surveillance and action system and prepare them to advocate throughout the assessment process.
4. While conducting the field assessment, we can build local ownership for improvements by sharing our purpose and the goals.
5. While analyzing results and making recommendations, we can listen carefully, take note of what is said, and choose improvements coming from stakeholders (where appropriate).

ADAPTATION GUIDE

Adapt the slide to reflect the language and sequence of steps you are using for the assessment.

Planning the assessment

Generate commitment

- Benefits of improved surveillance and action
- Improved surveillance and action as health sector priority
- High-level support
- Assessment as first step in change process

SLIDE 4.4
PLAN THE ASSESSMENT

OBJECTIVES
To highlight the types of advocacy activities and objectives during the planning phase of the reform effort.

SPEAKER'S NOTES

During the planning phase, we want to ensure agreement to embark on efforts to improve our public health surveillance and action system.

How can we know if agreement and commitment are there?
- Key policymakers and stakeholders understand the benefits of improved surveillance and action.
- Improved surveillance and action are stated as a health sector priority.
- We have the support of high levels in the Ministry of Health and other stakeholders.
- Policymakers see the assessment as the first step in the reform process.

How do we arrive at this agreement?
- Make formal presentations
- Hold individual or small group meetings
- Share briefing papers
- Submit editorials to newspapers

ADAPTATION GUIDE
Depending on when this presentation is used, these efforts can either be oriented towards building a strategy to carry out these activities or as a review of what has happened.

Select both the oversight and assessment teams

Find the right people

Oversight Team
▲ senior
▲ influential
▲ representative

Assessment Team:
▲ knowledgeable
▲ respected
▲ objective

SLIDE 4.5
SELECT THE OVERSIGHT AND ASSESSMENT TEAMS

OBJECTIVES
To highlight the the types of advocacy activities and objectives during the team selection phase of the assessment.

SPEAKER'S NOTES

Getting the right team is very important for ensuring the technical appropriateness of the results and the political viability and sustainability of the recommendations.

Two types of teams will be involved:
1. Oversight team – provides guidance to the assessment team
2. Assessment team – collects and analyses the data

What do we need as characteristics of oversight team members?
■ Have seniority and decision-making authority
■ Be respected and influential leaders (others listen to them)
■ Be representative of the important stakeholders in surveillance and action

What are the characteristics of assessment team members?
■ Be knowledgeable (can determine what data is needed)
■ Be respected (others will hear what they have to say)
■ Be objective (not biased by preconceived notions)

Members could even include those in opposition, providing an opportunity to influence them through the assessment process.

Members should include those with advocacy ability: contacts, experience, inclination, personality, etc.

Train team members: part 1

Empowering team members to become advocates

- Importance of improving surveillance and action
- Influence of team members
- Opportunities for influence

SLIDE 4.6
TRAIN TEAM MEMBERS: PART 1

OBJECTIVES
To highlight the types of advocacy activities and objectives during the team training phase of the assessment.

SPEAKER'S NOTES

Training team members to be effective advocates for improving surveillance and action has two aspects: Empowering them to become advocates and giving them the skills to become advocates.

The first aspect involves learning their individual perspectives on their role as assessment team members and the importance of this role in advocating for change among those in the system with whom they come in contact.

- Team members should understand the importance and benefits of improving the surveillance and action system.
- Team members should to be aware of their own ability to influence others (by virtue of who they are and their role in the assessment process).
- Team members should to be able to recognize advocacy opportunities, to see where they can advocate for improved surveillance and action as they are participating in the assessment process.

Train team members: part 2

Turn assessment team members into advocates

Advocacy:
- Define the issue
- Set objectives
- Identify and research audience
- Use relevant info to develop targeted messages
- Deliver messages
- Build alliances
- Evaluate activities and adjust approach

SLIDE 4.7
TRAIN TEAM MEMBERS: PART 2

OBJECTIVES

To highlight the types of advocacy activities and objectives during the team training phase of the assessment.

BACKGROUND INFORMATION

Additional information about the advocacy process can be obtained from: Scribner, S. and B. O'Hanlon. September 2000. "Advocacy Guidelines." In *Policy Toolkit for Strengthening Health Sector Reform*. Washington, DC: USAID Latin America and Caribbean Regional Health Sector Reform Initiative; and from Sharma, Ritu. n.d. *An Introduction to Advocacy: Training Guide*. Washington, DC: USAID Support for Analysis and Research in Africa Project and Health and Human Resources Analysis for Africa Project.

SPEAKER'S NOTES

In addition to empowering oversight team members and assessment team members to assist in improving the system by taking advantage of opportunities to advocate, we must also build their competence in advocacy.

Advocacy means influencing decision makers and other stakeholders to change a policy, system, or organization. It is not so much a series of activities, but rather a strategic approach to making appropriate change happen. Advocacy is characterized by: 1) knowing the audience, 2) delivering targeted messages, and 3) following up.

Advocacy is not so much a series of activities as it is a strategic approach to making appropriate change happen.

- Define the issue: *Clarify the problem; in our case, it's the surveillance system.*
- Set advocacy objectives: *state what you hope to achieve as the result of your advocacy efforts – here, an improved surveillance system.*
- Identify and research audiences: *we have already mentioned many audiences; now you must be more specific about who these people are, what they know, their attitudes and what they care about, so you can tailor your messages appropriately.*
- Use relevant information in the development of targeted messages: *some information available through these modules and other information from the assessment itself should be used to develop messages that will convince your audience.*
- Deliver messages: *think about who your target audience will most readily listen to and be influenced by, and what medium would be most effective.*
- Build alliances: *co-opt your supporters to become advocates as well.*
- Evaluate activities and adjust approach: *check to see that the messages you are sending are being received and internalized.*

Conduct assessment

Build local ownership during fact finding

- Support for assessment
- Support for surveillance improvements

SLIDE 4.8
CONDUCT THE ASSESSMENT

OBJECTIVES
To highlight the the types of advocacy activities and objectives during the data collection phase of the assessment.

SPEAKER'S NOTES

The process of collecting data during the assessment offers a good opportunity for the assessment team to build local ownership for improving the national surveillance system.

The assessment team will interact with front-line surveillance and action workers. This interaction provides an excellent occasion to build ownership for improvements.

- Build ownership of the assessment:
  - Local officials should understand the benefits of improved surveillance and take part in the assessment.
  - Local officials should be be encouraged to be open and "up front", i.e, give accurate information about strengths and weakness of the current system so the assessment team can make appropriate, effective recommendations.

- Build ownership of surveillance improvements:
  - Respondents should be excited about changes to the system and to be committed to implementing improvements.
  - Respondents should feel empowered and that their comments and suggestions will be heeded and considered.

Analyze the information and make recommendations

Heed the feedback

- Incorporate local informants ideas and recommendations
- Demonstrate their importance

Identify opportunities for improvement

- Build on successes
- Rely on supporters

SLIDE 4.9
ANALYZE THE INFORMATION AND MAKE RECOMMENDATIONS

To highlight the the types of advocacy activities and objectives during the data analysis and interpretation phase of the assessment.

SPEAKER'S NOTES

In the final phases of data analysis and the development of recommendations, there are two additional ways of building ownership for an improved surveillance and action system.

Heed the feedback: *it is important the respondents see that their inputs are viewed as worthwhile if they are to "buy-in" to the improvement process*.

■ Look for worthy ideas from those provided by respondents during the assessment.
■ Incorporate these into the analysis and recommendations *and* give credit for their source.

Identify opportunities for improvement: *there may be many, many possibilities for improvements in the system, but to continue to build ownership for improvement, one needs to pick wisely*.

■ Look for recommendations that will show *visible* improvements.
■ Start with small victories in areas where there is support for the improvement (avoid controversial recommendations at the onset of change).

MODULE 5

ADVOCATING TO ENSURE THE IMPLEMENTATION OF SURVEILLANCE AND ACTION SYSTEM IMPROVEMENTS

OBJECTIVES OF THIS MODULE:

To show how the assessment team and oversight committee can leverage progress made to date by convincing people to do their part to support the process of improving surveillance and action systems.
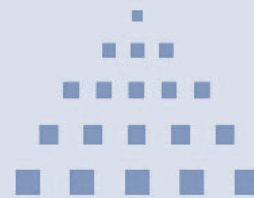
WHEN CAN YOU USE THE INFORMATION IN THIS MODULE?:

The slides in this module can be used for formal audio-visual presentations, or the material contained in them can be used as talking points for formal oral presentations or informal discussions. The contents of this module is most useful when starting to identify opportunities to improve surveillance and action systems (post-assessment) and when trying to secure commitments and ensure implementation of improvements.

BACKGROUND INFORMATION:

At this point in time, the assessment will be completed, the problems identified, and recommended solutions developed (although they may not be prioritized). The assessment and oversight committee will have already been building ownership among relevant parties during the assessment process.

Advocating to ensure implementation of the surveillance and action system improvements

BUILDING SUPPORT
FOR IMPROVED SURVEILLANCE

SLIDE 5.1
ADVOCATING TO ENSURE THE IMPLEMENTATION OF SURVEILLANCE AND ACTION SYSTEM IMPROVEMENTS

OBJECTIVES
To introduce this part of the presentation and highlight what will be covered in this module and to highlight that the purpose of all these efforts is to implement improvement strategies for the surveillance system.

BACKGROUND INFORMATION
This module is designed to prepare those who will be working to secure commitments and implement actions.

SPEAKER'S NOTES

A great deal of effort has been made in conducting an assessment and working with those involved in the surveillance and action system at all levels. Now we must ensure that these efforts are not for naught.

We must understand that policy change and implementation do not happen on their own. We must see how we can ensure that the momentum we have initiated is leveraged to reach our goals of improving the surveillance and action system and protecting our communities.

Improving surveillance and action systems

Pre-assessment

▲ Recognize the need to improve the surveillance and action system

Assessment

▲ Conduct a surveillance and action system assessment

▲ Make assessment recommendations

Post-assessment

▲ Make decisions to improve surveillance and action system

▲ Implement surveillance and action changes

▲ Monitor and evaluate system improvements

SLIDE 5.2
IMPROVING SURVEILLANCE AND ACTION SYSTEMS

OBJECTIVES
To provide a context for the upcoming information by showing a simple presentation of the process of improving a surveillance and action system.

BACKGROUND INFORMATION
This slide is designed to give participants the "whole" picture of their efforts, from pre-assessment through the assessment itself and, finally, to the post-assessment period.

SPEAKER'S NOTES

Improving a surveillance and action system, like any reform, is a process.

It begins with the recognition that the system needs to be improved and a decision made to undertake an assessment to inform the nature and direction of necessary changes.

The assessment is critical for determining important information and generating recommendations for improvement.

We must remember, however, that assessment recommendations are only as good as their implementation. What is important in this post-assessment period is for policymakers to take decision and implement actions that will lead to appropriate improvements to the surveillance system. They must monitor whether the actions are implemented and evaluate whether those actions result in the necessary improvements to the system.

Advocating to ensure the implementation of post-assessment

Make decisions to improve surveillance and action response system → Consolidate supporters

Prioritize recommendations

Implement surveillance and action changes → Deliver messages and secure commitments

Expand circle of influence

Monitor and evaluate system improvements → Sustain ownership

Monitor advocacy efforts

SLIDE 5.3
ADVOCATE TO ENSURE THE IMPLEMENTATION OF THE POST-ASSESSMENT

OBJECTIVES
To outline the activities one needs to focus on to ensure implementation of change.

BACKGROUND INFORMATION
These are not necessarily a linear set of activities but relate back to the actions presented for the post-assessment period.

SPEAKER'S NOTES

We have completed the pre-assessment and assessment periods. We have worked hard to build ownership while conducting the assessment and while developing recommendations. Now it is time to bring supporters and messages together to secure the policy changes needed to improve the system, and to ensure their implementation.

During the post-assessment period there are several things we can do to advocate for implementation. These are not linear steps and we can work on them simultaneously. Policymakers have the assessment and its recommendations. They must decide whether and how to improve the system. To influence decision toward action, we can:
- Consolidate our supporters: *identify who is with us and who can be counted on to carry the messages*.
- Prioritize recommendations: *without a focused list of generally agreed-on policy steps, we risk having no action.*

Once decisions have been taken, stakeholders throughout the surveillance system must implement the changes. To facilitate implementation, we can:
- Deliver our messages of priority action steps and secure commitment to action by appropriate stakeholders.
- Expand our circle of influence to ensure that policies are transformed into action steps that are implemented: *Who else can help us? Who still needs to be convinced?*

As implementation proceeds, policymakers and stakeholders must monitor the results. To stay involved in improving the surveillance system, we can:
- Sustain ownership: *we have worked hard to develop a broad base of support and we need to keep our supporters involved and informed. We will need their support if actions are not taken or are not effective and need to be adjusted*.
- Monitor our advocacy activities: *as we redouble our advocacy efforts to sustain the momentum generated, we need to pause to examine the results to determine if we are effectively persuading stakeholders to take action*.

Make decisions to improve surveillance and action system: part 1

Consolidate supporters to maintain momentum

▲ Recognize core supporters

▲ Identify policy champions

▲ Confirm willingness to advocate

▲ Keep champions involved

SLIDE 5.4
MAKE DECISIONS TO IMPROVE SURVEILLANCE AND ACTION SYSTEM: PART 1 - CONSOLIDATE SUPPORTERS TO MAINTAIN MOMENTUM

OBJECTIVES
To outline key themes for consolidating support in order to maintain momentum created during the assessment towards policy change.

SPEAKER'S NOTES

Throughout the assessment, we have been building support among top-level decision makers, disease control specialists, regional and district managers, and front-line health workers. Now it is time to take stock of which supporters we can count on and how we can leverage their support through the rest of the policy process.

1. Recognize core supporters: *who on the assessment and oversight teams has been actively involved? Who among those interviewed during the assessment process showed enthusiasm and support for the reform process? Who else has shown consistent interests and support for reforming the surveillance system?*
2. Look for policy champions: *a policy champion is someone who demonstrates leadership, who has clout (either personally or because of their position). Policy champions are articulate, can influence colleagues, have good networks of contacts. These individuals will be needed for key roles in delivering our messages and expanding the circle of influence.*
3. Confirm willingness to advocate: *among core supporters and policy champions, be sure to verify that they are truly supporters (and will not give mixed messages) and that they are willing to participate in pushing the policy process to its conclusion. Talk to them about how they might contribute to building and maintaining support during implementation. Solicit their ideas and suggest others.*
4. Keep champions and supporters involved: *it is not enough to have people just state their intentions. They will lose interest if they are not actively engaged. Develop mechanisms to involve supporters in the decision-making process.*

Make decisions to improve surveillance and action system: part 2

Prioritize recommendations to make policy actions clear

- ▲ Avoid too many recommendations
- ▲ Develop consensus on a limited number of focus areas
- ▲ Confirm choices with key supporters

SLIDE 5.5
MAKE DECISIONS TO IMPROVE SURVEILLANCE AND ACTION SYSTEM: PART 2 - PRIORITIZE RECOMMENDATIONS TO MAKE POLICY ACTIONS CLEAR

OBJECTIVES
To highlight the need and mechanisms for prioritizing recommendations.

SPEAKER'S NOTES

With your supporters and policy champions, it is time to make some strategic choices about which actions are integral to improving the surveillance system, and which are relevant but more peripheral to the process.

It is important to initially focus on this limited number of priorities, instead of trying to tackle every problem and weakness at once. Prioritizing allows your team to concentrate its efforts, makes it easier to craft messages – and increases the likelihood of early success that can be used to mobilize further support. Without priorities, you risk having no action taken because the project seems too overwhelming and costly, or actions taken that waste efforts because they are not the most important.

To ensure success for the priorities, these priorities should represent a consensus of stakeholder concerns. That is, there should be a constituency for these priorities.

To achieve consensus, you can use the following steps:

1. Brainstorm choices for priority activities from a variety of stakeholders (individually or in a group or groups).
2. Assess the advantages and disadvantages for each possible area.
3. Apply criteria for inclusion in the priority list: *sequencing (whether the activity logically should precede or follow other activities), extent of the problem (is it critical or just not functioning optimally?), feasibility (is it amenable to change or especially interactable?), likely to produce relatively quick, visible results (quick results are good for building further support for additional changes and for tackling more difficult issues), and likely to have support (or not have much opposition).*
4. Select a very few priority areas and keep a list of priorities for further phases.

Finally, be sure to confirm the choice with key supporters to gain broad agreement and willingness to advocate.

Implement surveillance and action changes: part 1

Deliver messages and secure commitments to action

- Who needs to be convinced?
- What is the best way to engage them?
- What do they need to hear?
- What else do we need to do to "secure" their commitment

SLIDE 5.6
IMPLEMENT SURVEILLANCE AND ACTION CHANGES: PART 1 - DELIVER MESSAGES AND SECURE COMMITMENTS TO ACTION

OBJECTIVES
To summarize the steps to message construction, media choice and message delivery.

BACKGROUND INFORMATION
For additional information on advocacy communication, see Murphy, Elaine M. May 1994. *Communicating Population and Family Planning Information to Policymakers*. Policy Paper Series No. 4.Washington, DC: USAID OPTIONS II Project; Scribner, S. and B. O'Hanlon. September 2000. "Advocacy Guidelines." In *Policy Toolkit for Strengthening Health Sector Reform*. Washington, DC: USAID Latin America and Caribbean Regional Health Sector Reform Initiative; and Sharma, Ritu. n.d. *An Introduction to Advocacy: Training Guide*. Washington, DC: USAID Support for Analysis and Research in Africa Project and Health and Human Resources Analysis for Africa Project.

SPEAKER'S NOTES

Once you have identified priority areas, it is time to engage appropriate decision makers about these priorities and solicit their input and commitments (decisions) to action. There are several questions you need to ask yourselves:

1. Whom do you need to convince and what action do you want that person (or persons) to take? For the priority areas, you will need to determine who needs to take action and what specific actions are needed to allow implementation of surveillance system improvements. Which high-level decision makers should be involved? Which intermediate- or lower-level decision makers?
2. What is the best way to engage these individuals? Do you want to confront them in a large meeting? Would it be better to meet with the individually first? Would it be better for them to hear it from their closest advisors, colleagues, or subordinates?
3. What messages will convince them to commit to action? Are they already convinced that there is a problem with the surveillance and action system? Do they need justification for action? Will they require information about resource commitments? Will they want to know who else is supporting this? This is what is known as audience research – finding out more about your audience so you can tailor your messages to maximize effectiveness.
4. What else do we need to do to secure their commitment? Besides getting them to say "yes," from experience, what else will need to be brought to bear to ensure that the decision does not remain only on paper? This is the start of your plan for follow-up.

Implement surveillance and action changes: part 2

Expand the circle of influence to facilitate implementation

- Expand allies
- Develop networks
- Consider coalitions
- Assign advocacy tasks to partners

SLIDE 5.7
IMPLEMENT SURVEILLANCE AND ACTION CHANGES: PART 2 - EXPAND THE CIRCLE OF INFLUENCE TO FACILITATE IMPLEMENTATION

OBJECTIVES
To highlight mechanisms for continuing momentum for policy implementation.

BACKGROUND INFORMATION
Networks can be defined as loose associations of individuals and organizations that share goals and work together to achieve them. Coalitions are groups of like-minded organizations working together to achieve a common goal, under more formal agreements.

For more information on coalition and network building, see Murphy, Elaine M. May 1994. *Communicating Population and Family Planning Information to Policymakers*. Policy Paper Series No. 4.Washington, DC: USAID OPTIONS II Project; and Scribner, S. and B. O'Hanlon. September 2000. "Advocacy Guidelines." In *Policy Toolkit for Strengthening Health Sector Reform*. Washington, DC: USAID Latin America and Caribbean Regional Health Sector Reform Initiative.

SPEAKER'S NOTES

After policymakers have committed to surveillance and action system improvements, we need to ensure that they actually implement the new policies. To ensure that changes are implemented, maintained, and sustained, it will be necessary to continually expand your group of supporters:

- Look for supporters at the implementation levels.
- Ask core supporters and policy champions to "recruit" more people for continued advocacy efforts.
- Build networks with others interested in surveillance among individuals in ministries, private sector, NGOs, and donors. For example, you might get support from a Ministry of Tourism or Ministry of Finance if they can see the importance of the issues.
- Consider creating networks of those involved in the assessment, either as data gatherers or as data sources.
- Look for possible coalition opportunities with other organizations – local, regional, or national.

Expanding the circle of supporters will maintain pressure to implement – and implement effectively – the policies of change.

Monitor and evaluate system improvements: part 1

Sustain ownership

- ▲ Involve key stakeholders
- ▲ Communicate to supporters
- ▲ Advocate for adaptations
- ▲ Advocate for the next priorities

SLIDE 5.8
MONITOR AND EVALUATE SYSTEM IMPROVEMENTS: PART 1 - SUSTAIN OWNERSHIP

OBJECTIVES
To highlight some of the concerns that should be addressed as implementation proceeds.

SPEAKER'S NOTES

As implementation progresses over time, the surveillance system should begin to change. So will stakeholders and their positions. We need to maintain a base of support.

■   Are the right people involved? As implementation occurs, are key stakeholders still working toward implementation? Have new stakeholders gained importance in the process? Who are they? Are they being involved?

■   Are you communicating with supporters? Do they know the status of surveillance system improvements? Successes and shortcomings? Sustaining ownership depends on effective communication with supporters.

■   If improvements are not working as planned, what can be done? Involve supporters in modifying the approach to change. Use your supporters to advocate for changes.

■   What happened to those recommended actions that were not selected as priorities? Many are important and still need to be addressed. Some of your allies may support issues that were not priorities. Solicit their assistance in advocating to move these recommendations into implementation.

Monitor and evaluate system improvements: part 2

Monitor advocacy efforts

- ▲ Confirm audiences
- ▲ Check messages
- ▲ Consider presenters
- ▲ Adjust advocacy strategy

SLIDE 5.9
MONITOR AND EVALUATE SYSTEM IMPROVEMENTS: PART 2 - MONITOR ADVOCACY EFFORTS

OBJECTIVES
To remind the audience that advocacy efforts themselves need to be monitored and suggest some points to address in looking at advocacy.

SPEAKER'S NOTES

As implementation proceeds and stakeholders change, we need to consider whether we are still targeting the right audiences.

■   Do key audiences still need to be persuaded? Should we continue to dialogue with them to keep them focused on implementation? Are there new stakeholders who should be the target of advocacy?

■   Are our messages still appropriate? Do changes in the surveillance system necessitate new messages for reform?

■   What about our presenters and messengers? Are they still the best choices? Are there other supporters who have recently gained credibility or prominence? Could a new messenger energize the process?

■   Finally, is advocacy working? If not, we need to rethink our strategy – identify new audiences, develop new messages, select new messengers – and try again.

Keys to implementation

- ▲ Conducting assessment only first step
- ▲ Focus on priorities
- ▲ Establish capacity
- ▲ Accumulate resources
- ▲ BUILD AND MAINTAIN OWNERSHIP

SLIDE 5.10
KEYS TO IMPLEMENTATION

OBJECTIVES
To summarize and reinforce the themes of this module.

SPEAKER'S NOTES

Throughout the assessment process, remember that the assessment is not the end, it is the beginning of implementation. Conduct the assessment with an eye toward the future and use the assessment as a guide for highlighting problems and potential solutions in implementation.

It is impossible to change all aspects of a surveillance and response system simultaneously. Selection of priorities should be informed by the problems identified by the assessment and the support of different stakeholders for different reforms generated and discerned during the assessment.

Surveillance and response systems depend on the good work, dedication, and cooperation of many individuals at all levels of the system. Even with their support, however, many improvements may not be possible without increasing staff capabilities. Part of implementing reforms is ensuring that the many critical actors have the skills to do their jobs differently and better.

Improving surveillance and response systems takes money and other resources. Actively solicit resources from interested national and international parties. Then, plan implementation according to the resources available.

Finally, reforms require that many people behave in different ways or do their jobs differently. For reforms to become sustained improvements, these individuals must feel ownership of the reforms so they are willing to make changes and maintain those changes over time.

NOTES

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