EM 125

Exercise Program
An Introduction

What you will learn........
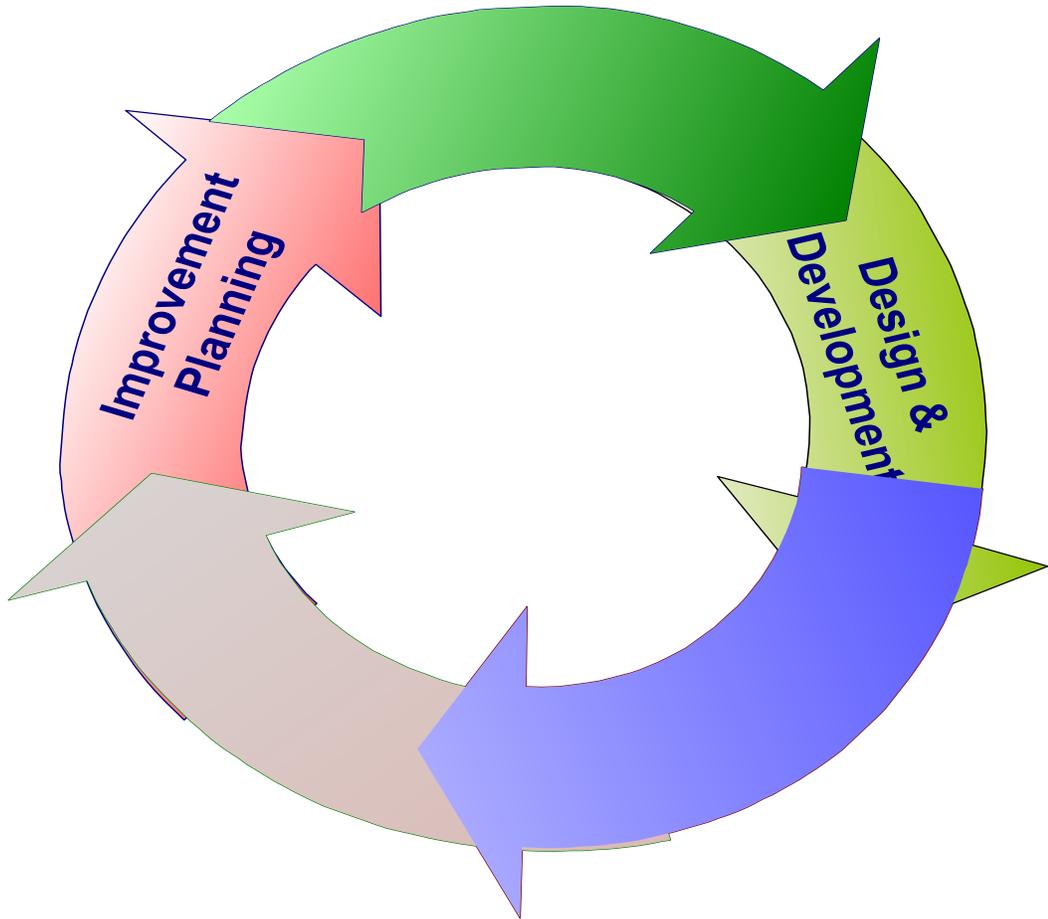
Improvement Planning

Design & Development

The Exercise Program!

Table of Contents

Introduction

> **The goal of this course is to provide you with an awareness of emergency management exercise programs.**

Several course objectives will help meet this goal. At the end of the course you will be able to:

- Demonstrate a basic knowledge of the context, core principles, concepts and processes related to the development and management of an exercise program in Canada
- Describe how to develop and manage a multi-year exercise program
- Describe how to establish the foundation of an exercise
- Outline the steps necessary to design and develop a series of exercises
- Describe how to conduct an exercise
- Outline how to evaluate an exercise
- Describe how to implement a Corrective Action Plan based on lessons-learned

In each part of this guide, you'll be introduced to some new terminology and acronyms. This guide gives you the term and acronym each time it occurs. There is a list of common acronyms towards the end of the guide, and it's a good idea to use it for your reference.

Layout of guide:
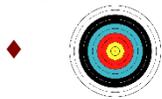
- Learning objectives - are identified by a target.

- Definitions – you'll find all definitions identified by a pen. Very easy to find!

 Examples – that illustrate the concepts   are identified by a paperclip so you can easily find them. Some of these examples are also in your toolkit.

Memory aids:

♦ **Test yourself** – at the end of each Lesson is a short exercise that will help you to reinforce the concepts that were covered.

Exam:

♦ The exam format is multiple choice/true or false - a 70% grade is needed to pass and go on to the next level.

♦ In order to take the exam:

1. Go to the following website:

   http://www.emergencymanagementontario.ca/english/professionals/Training/courses.html

2. Click on "Register for the EM125 and take the online exam". A new window will open.*****

3. If you are a new user, click on the "New User" hyperlink and fill out your profile information

4. Once you have created your profile, the system will send you a password to the email address you have provided.

5. Click on the hyperlink embedded within the email, this will take you to the training portal.

6. Click on "Login" button and enter you user name and password, this will direct you to the "My Training" page.

7. Click on "Course Catalogue" and select "EM125" from the course list

8. Select "Enrol in course".

9. 9 Select "EM 125" exam.

10. The test results are automatically generated at the end of the test. A minimum of 70% is required to pass the exam. If you are unsuccessful you may reattempt after a 24-hour period.

*Please ensure that you have your pop-up blocker disabled as this may interfere with the exam opening. To do this click on 'Tools' in the menu bar, scroll down to 'Pop-up Blocker' then 'Turn off Pop-up Blocker'.

Also please ensure that you are using Internet Explorer for optimal results.

Emergency Management Ontario has **2 course offerings. The courses are:**

EM 125 – Exercise Programs: An Introduction

This introductory self-study program will provide you with the basic concepts of exercise program management, including key terms and an overview of the exercise design process. Upon successful completion, you will be able to actively participate as a member of an exercise deign team or program committee member.

Pre-requisite: None

Delivery: Self-directed reading package

EM 225 – Exercise Program Management

This instructor led course builds on the concepts presented in the EM 125. It prepares you to design, develop, conduct, control, evaluate, and implement post exercise requirements for a discussion-based exercise, specifically a Tabletop Exercise. The course is comprised of classroom sessions and practical activities. You will also have the opportunity to design and participate in a simulated exercise.

Duration: 2 days

Pre-requisite:

- EM 125 – Exercise Programs – An Introduction
- EM 200 – Basic Emergency Management (BEM)

Delivery: Classroom

Let's get started!

Part 1   Why Exercise?

Lesson 1 Exercises & Emergency Management

At the end of this lesson, the participant will be able to:

Define an exercise

Identify the benefit of conducting an exercise

Define due diligence

State the 5 components of emergency management

What is an exercise?

An exercise is a simulated emergency, in which members of various agencies perform the tasks that would be expected of them in a real emergency. Exercises can be used to validate plans and procedures, and to practice prevention, mitigation, preparedness, response and recovery capabilities.

Why Exercise?

Well-designed and executed exercises are the most effective means of:

- **Testing and validating plans, policies, procedures, training, equipment, and interagency agreements**

- **Training personnel and clarifying roles and responsibilities, as supported by plans and procedures**

- **Improving interagency coordination and communications**

- **Identifying gaps in resources and training, and identifying areas for improvement**

- **Improving individual and organizational performance through practice**

- **Demonstrating provincial, community, and organizational resolve to prepare for emergencies as part of due diligence**

Exercises are so important in an emergency program that legislation and/or regulations govern the establishment of an exercise program. They are part of a due diligence program

What is Due Diligence?

It is the level of judgment, care; prudence, determination, and activity that a person would reasonably be expected to do under particular circumstances. As applied to an emergency program, due diligence means that all reasonable precautions are taken to address public safety risks, including during response to an emergency. This duty also applies to situations that are not addressed elsewhere in the occupational health and safety legislation.

To exercise due diligence, a plan needs to identify possible hazards and carry out the appropriate corrective action. In an emergency program, this includes the training programs and exercises for employees and other persons who provide necessary services. Training tests the procedures to be followed in emergency response and recovery activities.

Exercises are an essential component of an emergency management program and have 3 main functions:

- **VALIDATION** - To validate plans, protocols, and procedures and demonstrate resolve to prepare for emergencies

- **TRAINING** - To develop staff competencies, to give staff practice in carrying out their roles in the plans, and to assess and improve performance.

- **TESTING** - To test well-established procedures and reveal gaps that may exist.

DID YOU KNOW?

Exercises are part of the Preparedness function!

Do you remember the 5 components of emergency management?

- Mitigation- actions taken to eliminate or reduce risks and impacts posed by hazards well before an emergency or disaster occur.

- Prevention- activities performed in advance to lessen the severity and impact of an emergency.

- Preparedness - activities performed in advance to reduce or eliminate hazards.

- Response - activities performed during a crisis to save lives, protect property, and stabilize the situation.

- Recovery - activities performed after a crisis has been stabilized to return all systems to normal.

Testing your emergency plan, equipment, processes, and procedures uses the same principle. Exercises enhance teamwork and encourage the interaction and cooperation that is needed when a real emergency occurs.

Lesson 1 Test

Exercises & emergency management

1. Which of these statements best describes an exercise program? Choose all that apply.

    A. ____It demonstrates organizational resolve to prepare for emergencies, as part of due diligence.

    B. ____It is an instrument to validate plans and procedures, train for and practice prevention/mitigation, preparedness, response, and recovery capabilities.

    C. ____It can be used to assess and improve performance.

    D. ____It is a way to spend money on consultants.

2. Why do we implement an exercise program? Choose all that apply.

    A. _____Exercises demonstrate resolve to prepare for emergencies, as part of due diligence.

    B. _____ Exercises can be used to assess and improve performance.

    C._____ Exercises are used to validate plans and procedures, train for and practice prevention, mitigation, response, and recovery capabilities.

    D. ____ All of the above.

3. Complete the following statement: A simulated emergency during which players from a range of agencies perform tasks required during a real emergency is called a(n) _____.

Recap

In lesson 1 you were introduced to the following:
- Exercise
- Due Diligence
- The 4 components of emergency management

Lesson 2 *Basics of an exercise program*

At the end of this lesson, the participant will be able to:

Define an exercise program

Describe the 2 types of exercises design

List the 5 phases of an exercise

Identify the 7 steps in the evaluation process

What is an Exercise Program?

It's a risk-based process that includes a cycle, mix, and range of exercise activities of varying degrees of complexity and interaction.

Let's look at an exercise program in practical terms. As you go through this guide, you'll find that it's a process for:

- **Programming exercises** that test elements of your emergency plan, including equipment and the functions of personnel

- **Planning the best series of exercises** for your organization

- **Conducting the exercises** that you have decided to run

- **Evaluating each exercise** to see if it tested what you planned to test, and to analyze the results so that you are able to make any needed changes

- **Reporting the evaluation results** to your emergency management committee members so that they are aware of what has been tested, why, what happened, and what your recommendations are

- **Following up on exercises** to make sure that the recommendations proposed after the exercise analysis have been implemented, and then retested to see if they were the correct recommendations

Think of an exercise as a simulated emergency condition.   This involves planning, preparation, and execution. An exercise is carried out to test, evaluate, plan, develop, train, and/or demonstrate emergency management systems and individual components and capabilities. It's also used to identify areas of strength and weakness for improvement of an emergency plan.

In Exercise Design, there are 2 basic types of exercises:

- **Discussion-based**
- **Operations-based**

What are Discussions-based Exercises?

These exercises familiarize participants with current plans, policies, agreements and procedures. They are also used to develop new plans, policies, agreements, and procedures.

What are Operations-based Exercises?

These exercises validate plans, policies, agreements and procedures, clarify roles and responsibilities, and identify resource gaps in an operational environment.

Within these 2 types of exercises there are several varieties of exercises that you can use. We'll briefly take a look at them in Lessons 5-8 and give you a brief explanation of what each is best suited for.

Exercise Design has its own unique terminology. We've introduced the types of exercises, shown you some examples of exercises, and given you a definition of an exercise. Here are a few more terms that you'll be seeing as we continue:

- **After Action Report (AAR)**
- **Corrective Action Plan (CAP)**

What is an After Action Report (AAR)?

It's the formal written documentation analyzing the performance of assigned personnel after an exercise or an actual event. It is the final product of an exercise and captures observations and recommendations based on the exercise objectives as associated with the capabilities and tasks.

What is a Corrective Action Plan (CAP)? It's a process that follows an exercise to identify program shortfalls and necessary corrective actions to address those shortfalls. The Plan provides the techniques to manage the capabilities improvement process.

You'll learn more about these reports as we go through the guide. It's introduced now so that you can start to become familiar with this new language.

What is included in an Exercise Program?

1) An Exercise Program is **risk-based** and reviewed annually to see if the risks and hazards of the community/organization have changed.

2) An Exercise Program is a **multi-year exercise plan**, such as a 5 year exercise plan. Your plan should note the requirements of your exercise program and include an exercise schedule that is updated annually.

3) An Exercise Program's multi-year exercise plan is a **cycle of activity with increasing levels of complexity** using discussion based and operations based exercises.

4) In an Exercise Program, **all exercises are evaluated** so you can see if they have achieved your identified goals and to measure performance.

5) In an Exercise Program, an **After Action Report (AAR) is prepared** following every exercise – no matter how big or small.

6) In an Exercise Program, a **Corrective Action Plan (CAP) is developed, and implemented**, to address the findings and recommendations that you identified in the After Action Report (AAR). Every one wants to see measures of success. For that reason, the most immediate improvements seen to be needed should be emphasized.

Any Exercise Program **will take into account jurisdiction wide exercises**. Perhaps your program will be part of these exercises, or your program will structure its exercises to test the same elements

There **7 key principles to use in developing your own Multi-Year Exercise Program**.

1) **Coordinate your exercise schedule with other jurisdictions**. For example, perhaps you want to test cross-border response.

2) **Link a full scale operations-based exercise with other jurisdictions**, as appropriate. For example, if you test evacuation procedures, you want to work with the jurisdiction you will evacuate to so that they, in turn, can test their response to receiving evacuees from another area.

3) **Coordinate major exercise activities** through a committee structure.

4) **Conduct an annual review** of the exercise program to make sure that the objectives are being met. Revise the exercise program as required after the review.

5) Include **both discussion-based and operations-based exercises** in your exercise program.

6) Prepare an **After Action Report (AAR)** after every exercise.

7) Develop and implement a **Corrective Action Plan (CAP)** to deal with the findings and recommendations identified in the After Action Report (AAR).

There are **5 phases to an exercise**? Based on what we've already discussed, can you figure out what they would be? To get you thinking in an exercise design frame of mind, here are the phases you go through in designing any exercise:

Phase 1   Foundation

Phase 2   Exercise Design and

                Development

Phase 3   Exercise Conduct

Phase 4   Exercise Evaluation and

                Reporting

Phase 5   Corrective Action

                Plan/Improvement Plan
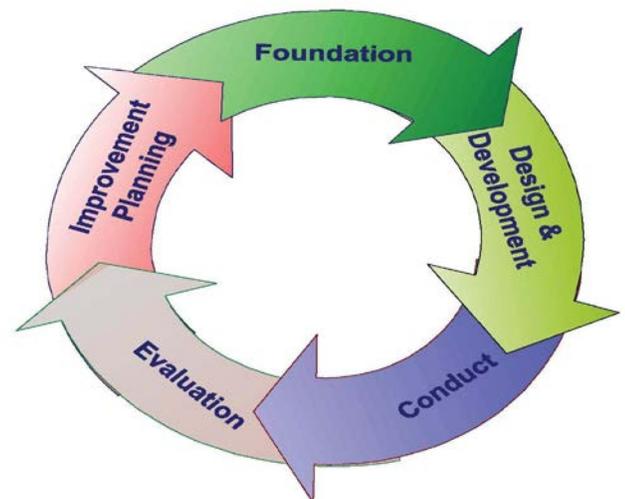
What is Foundation?

This is the first stage in the exercise stage, focusing on developing a project management timeline, establishing milestones, identifying an *exercise planning team*, and scheduling planning conferences.

Phase 1   Foundation

A good exercise program starts with a foundation. From the foundation the building blocks are added, renewed, and revised on a recurring basis. Preparing the foundation for a successful exercise requires project management skills and includes the following steps:

- Assess capability to conduct an exercise.
- Define the exercise scope.
- Develop an exercise planning timeline with milestones.
- Select participants for a planning team.
- Schedule planning conferences.
- Develop an exercise work plan.

The individuals who prepare the foundation are part of an Exercise Planning Team.

What is an Exercise Planning Team?

This is a group of individuals with the overall responsibility for all phases of an exercise.

An exercise planning team is needed for each exercise. It's important that each participating agency nominate members onto this group. All agencies with a role to play in the exercise should be invited to take part.

The exercise planning team is responsible for designing, developing, conducting, and evaluating all aspects of an exercise. The planning team determines exercise design objectives, tailors the scenario to local needs, and develops the documentation used in exercise evaluation, control, and simulation. Planning team members may also assist with developing and distributing pre-exercise materials, conducting exercise briefings and training sessions.

The exercise planning team should be chaired, where possible, by an Exercise Coordinator who is nominated from the pre-determined lead organization for the exercise. The Exercise Coordinator works with the assistance of the planning team, and has overall charge of planning,

exercising and debriefing. The Exercise Coordinator controls the exercise tempo, and ensures continuity from one phase to the next, including early termination for safety or other reason.

Exercise Planning Timelines

The exercise planning team sets a timeline for the planning process. This timeline identifies key planning meetings, critical responsibilities and activities. Be aware that timelines vary, depending on the exercise scope and complexity.

Planning Conferences

During the process of developing your exercise, you'll find that the planning conferences/meetings that your team will schedule and attend fall into 4 categories:

- **Concept and Objectives Meeting**
- **Initial Planning Conference**
- **Mid Term Planning Conference**
- **Final Planning Conference**

What is a Concept and Objectives Meeting (C&O Meeting)?

It's the formal beginning of the exercise planning process, held to agree upon already-identified type, *scope, capabilities, objectives,* and *purpose* of the exercise.

The **goal of this meeting** is to identify:
- The type of exercise needed
- Scope of the exercise
- Objectives of the exercise
- Purpose of the exercise

This meeting is attended by representatives of the sponsoring organization, the Lead Exercise Planner, and selected senior officials.

Decisions made in this meeting need to be written down in a briefing or concept paper. This paper is then used as a point of reference for future planning meetings and the exercise itself.

If your proposed exercise is not complex, and/or you have limited resources, this meeting may be conducted at the same time as the Initial Planning Conference.

What is an Initial Planning Conference (IPC)?

It brings together the stakeholders and plan the upcoming year(s) of exercises. The IPC is typically the first step in the planning process and lays the *foundation* for the exercise (unless a *C&O Meeting* is held).

The **goal of the Initial Planning Conference** is to:

- Gain agreement and support from the exercise planning team on scope, design requirements, and conditions.
- Determine objectives, levels of participation, and scenario variables from each participating organization.

Before holding this meeting, some groundwork, such as a concept paper, would have been established, based on the Concept and Objectives meeting. Additional preparation work prior to the Initial Planning Conference includes a briefing for the exercise planning team that gives an overview of the exercise and briefly explains: the purpose, goals, objective, and a narrative of the scenario contemplated.

If the initial work in the Concept and Objectives Meeting and the preparations for the Initial Planning Conference are done well, then you can expect the following to be accomplished:

- Clearly defined, obtainable, and measurable objectives
- Exercise narrative
- Identification of major events
- Identification of scenario variables (such as the threat scenario, any victims, venue)
- Participation by appropriate organizations
- Identification and recruitment of subject matter experts (SMEs) and facilitators
- Assignment of responsibility for exercise document development and presentations/briefings
- Where to get all source documents (including policies, plans, and procedures) needed to draft exercise documents and presentations
- Identification and assignment of logistic responsibilities (such as invitations, badges, registration)
- Determining dates of completion for action items and tasks
- A planning schedule
- Identification of critical tasks for the next planning conference

- Decision on the date, time, location of the next planning conference and the actual exercise

There is some follow up work involved after the Initial Planning Conference. It is suggested that meeting minutes are prepared and sent out within a week of the meeting.

What is a Master Scenario Events List Conference (MSEL Conference)?

This conference may be held in preparation for more complex exercises, specifically to review the *scenario* timeline and focus on *MSEL* development.

What is a Mid-Term Planning Conference (MPC)?

This is an exercise planning conference, used to discuss exercise organization and staffing concepts; *scenario* and timeline development; and scheduling, logistics, and administrative requirements. It is also a session to review draft documentation.

Depending on the level of complexity of your exercises, all mid-term planning may be accomplished in one Mid-Term Planning Conference. However, for a more complex exercise, a Master Scenario Events List Conference may be needed to focus on the scenario and all of the events that will drive that scenario. A Mid-Term Planning Conference and/or a Master Scenario Events List Conference applies to both discussion-based and operations-based exercises and gives planners a chance to develop a chronological listing of events and injects that will drive the exercise play.

What is a Final Planning Conference?

It is the final forum for reviewing exercise processes and procedures before the exercise begins.

Prior to this conference, all members of the planning team should receive:

- An agenda
- Minutes of the Initial Planning Conference
- Final drafts of all exercise materials. At the Final Planning Conference, no major changes should be made to the design or scope of the exercise, nor of the supporting documentation

As a general guideline, you may find that the Final Planning Conference is half day for a discussion-based exercise, and a full day for an operations based exercise. Given the purpose of the conference, it's a

good idea to have the meeting close enough to the exercise site so that your team members can have a final site walk through.

The **purpose of the Final Planning Conference** is to:

- Work out any remaining issues related to exercise planning
- Identify last minute concerns that may arise
- Review all exercise logistical tasks (such as schedule, registration, attire, special needs, refreshments, room configuration and set up, audio visual equipment).
- Conduct a comprehensive final review of and approve all exercise documents and presentation materials.

Follow up work after the Final Planning Conference is recommend, you'll have to:

- Prepare and send out minutes to the exercise planning team members within a week of the conference conclusion
- Discuss any outstanding issues with the exercise planning team members, especially issues related to the logistics for conducting the exercise
- Check that the planning team finalizes all publications, prepares all supporting materials, rehearses presentations and briefings, and prepares to conduct the exercise
- Prior to the exercise, give information and documentation to personnel such as presenters, facilitators, controllers, evaluators, simulators

What is Design and Development?

Building on the exercise *foundation*, the design and development process consists of identifying *capabilities*, *tasks*, and *objectives*, designing the *scenario*, creating documentation, coordinating logistics, planning exercise conduct, and selecting an evaluation and improvement methodology.

Phase 2 Exercise Design and Development

Once a foundation is established, you can begin to design and develop your exercise. Planning a successful exercise requires coordination skills to help you work with participating agencies and officials. This phase includes the following steps:

- Managing the project
- Convening a planning team
- Conducting effective planning conferences
- Identifying exercise design objectives
- Developing the scenario and documentation, including major and minor events
- Assigning logistical tasks
- Coordinating the involvement of participating organizations and officials
- Identifying the evaluation methodology

The extent of work and time required for this phase depends on the complexity of the exercise planned.

What are Exercise Objectives?

These are established for every exercise. Well-defined objectives provide a framework for scenario development, guide individual organizations' objective development, and inform exercise evaluation criteria.

The first step of an exercise is to decide upon the goals. This helps to set clear objectives and expected actions to meet those goals. Having everyone agree on the goals, objectives, and expected actions will help to make sure that the appropriate type of exercise is selected. This in turn helps to decide how the exercise will be evaluated. For the first few exercises you run, keep the objectives simple, clear and limited in scope.

Exercises can occur within individual organizations or on an inter-organizational basis. When joint exercises are planned, the senior management of all participating organizations need to agree on the overall goal of the exercise. Specific objectives for each organization can be set individually but need to be consolidated so that that they don't conflict with those of another participating organization. Broad participation from all stakeholders is important for training and exercises if a wide range of preparedness needs will be met.

What is an Exercise Scenario?

It provides the backdrop and storyline that drive an exercise. For *discussion-based* exercises, a scenario provides the backdrop that drives *participant* discussion. For *operations-based* exercises, the scenario provides background information on the incident catalyst of the exercise.

A scenario is developed using the agreed goals, objectives and outcomes as guidelines. Scenarios enliven and focus an exercise. However, a scenario should not take over the exercise as it is just a means to an end. Any scenario selected should complement the main goal of the exercise. Avoid unlikely or unusual hypothetical incidents. Scenarios which fit with local geography, and which could reasonably happen, add realism which, in turn, will add to the interest in, and credibility of, the exercise.

The first step in designing the scenario is to determine which hazard to use. Each type of hazard presents its own strengths and weaknesses to be used for evaluating different aspects of prevention, response, and recovery.

The next step is to determine the facility or site that the scenario will affect during the exercise. A balance needs to be struck between exercising in the area that the scenario problem is likely to affect, and letting the day-to-day activities carry on as normal. Exercises held outside of normal working hours have a number of advantages.

Exercise Timing

One key decision you'll have to make early on in your planning is whether the exercise is to run in real time, or whether the scenario will unfold in a series of events within a timeline. You'll also have to decide whether you'll call a stop at any point during the exercise to allow for review, or to consider alternative actions that might be taken due to variables such as weather, time of day or year.

Exercise Location

Whatever type of exercise is chosen, it's important to note that the planning team should visit the location – at a similar time and day as the exercise – to ensure that it is appropriate.

Phase 3 Exercise Conduct

Conducting a successful exercise requires facilitation and project management skills to ensure the exercise takes place and includes the following steps:

- Setup
- Briefings
- Facilitation/control/evaluation

■ Wrap up activities

Exercise Control Centre

The need for an Exercise Control Centre should be considered by the exercise planning team. Many times a control centre is needed only for live exercises. An exercise control centre should be in a suitable building close to the exercise site. It can be used as an assembly point, for briefings, and where victims, if used, can be prepared.

Health & Safety

The safety of personnel during an exercise is important. All participants – including controllers, evaluators, players, actors, and observers- need to be made aware of any hazards within the area and reminded of safety issues. You'll need to remember that exercise participants may not be familiar with the location, and control may be needed to make sure that they stay within the exercise area.

It is important to appoint a **Safety Officer** and carry out a risk assessment for every live exercise to test that structures are safe and no unseen dangers are present on the site. All participants need to be reminded to comply with safety requirements and not place themselves, or others, in danger. At complex exercises, or where conditions are particularly hazardous, each participating agency may need its own safety officer. The Safety Officer must be easily identifiable and have the authority to intervene, as necessary, to ensure the health and safety of personnel.

First aid / Ambulance coverage is provided to deal with any health problems or injuries sustained during an exercise. For safety reasons, have an agreed procedure for interrupting the exercise, including stopping the exercise if necessary. The exercise planning team needs a codeword for this purpose and a way of relaying it to all participants.

Victims

The use of victims adds realism to exercises but their needs also have to be considered. For example, exercise victims should not be placed in or near unsuitable conditions, e.g. cold, wet or hard surfaces, without appropriate care. Often the length of time planned for an activity turns out to be much longer. It's therefore important to have an area which is warm and dry.

Identification

Exercise participants need identification that is similar to what would be used in a real emergency. To avoid confusion, all those who are not actively participating in the exercise scenario e.g. the lead exercise planner, exercise staff, evaluators, observers, should be easily distinguishable. It is important in all types of exercise to be able to identify which organization each person represents.

Public Information

The exercise planning team needs to decide whether there should be any prior publicity. It may be a good idea to give prior public information to members of the public in the surrounding area of the exercise to prevent any undue alarm, particularly for exercises at hazardous sites. All reasonable steps need to be taken to make sure that the public does not think that any live exercise is a real event.

What is a Briefing?

It's a meeting held, before the exercise begins, to inform participants on the ground rules of conduct and their roles and responsibilities.

A full briefing needs to be given to all exercise participants. Each organization should take responsibility for the briefing of their staff. The extent of the briefing varies with the type of exercise.

Exercises are given a code word (also sometimes called a code name). Instructions should be provided to indicate that the code word be mandatory as a prefix to all messages – verbal or written – during the exercise. The use of code words helps make sure that everyone involved is aware that they are part of the exercise and not a real incident. Control rooms and operation centres of all participating organizations need to know about the codeword - before the exercise. A code word, which can be used to identify that a real incident has occurred and is not part of the exercise, should also be decided, and given to all participants prior to the exercise.

Media

Dealing with the media is a significant part of any major incident, which means that you should take every opportunity to practice your media plan during an exercise. Exercise press conferences can test media skills and information management.

What is a Hot-Wash?

It's an immediate debriefing session between players and members of the exercise planning team to discuss their preliminary observations. A hot-wash is done while events are fresh in everyone's minds. What went right; as well as what went wrong, is identified. Ideas about how to improve in the future are freely shared. The Exercise Controller must carefully avoid two dangers here: first, self-congratulatory accounts that mask important deficiencies and, second, the creation of an impression that someone or something is to blame. This information will inform the After Action Report.

What is a Cold-Wash?

It's a post-exercise meeting that is held after a period of time, not immediately after the exercise. Preliminary observations and evaluations are discussed and participants have an opportunity to provide feedback that might have been missed in the hot-wash.

Debriefing is a crucial stage of any exercise. It is an opportunity to evaluate efficiency, learn from the experience gained and determine how well the emergency management process went.

Debriefings need to occur both at an individual service level and at the inter-organizational level. The exercise coordinator and exercise team need to make sure that the necessary debriefing sessions take place. All participant organizations, including the voluntary sector and any private sector involvement, should be represented at an inter-organizational debriefing.

What is Exercise Evaluation?

It's the act of observing and recording exercise activity or conduct, by comparing the behaviour or actions against the exercise objectives, while noting strengths and weaknesses.

Phase 4 Exercise Evaluation and Reporting

Evaluation is the cornerstone of exercises. The quality of evaluation and identification of learning points is crucial.

As an exercise is underway it's a great idea to put in place a process to observe the exercise and follow this up with a constructive critique of the events as they occurred. Your players need a chance to comment on the

exercise from their point of view. The results should be collated in a final report and communicated to all concerned.

A good evaluation of an exercise can identify:

- Whether an exercise has achieved its objectives
- Needed improvements in standard emergency procedures or guidelines
- Needed improvements in the emergency management system
- Training and staffing deficiencies
- Needed operations equipment
- Need for continued exercising of the plan and the emergency management functions

Evaluations need to record strengths, as well as opportunities for improvement, in an emergency management program. This phase includes the following steps:

---

7 Steps in the Evaluation Process

Step 1: Plan and organize the evaluation
Step 2: Observe the exercise and collect data
Step 3: Analyze data
Step 4: Develop the draft AAR
Step 5: Conduct an exercise debrief (cold-wash)
Step 6: Identify improvements and corrective actions that need to be implemented
Step 7: Finalize and issue the AAR

Phase 5 Corrective Action Plan/Improvement Plan

Successful follow-up to an exercise requires analytical and practical skills in order to turn the lessons learned from an exercise into concrete, measurable steps that result in improved capabilities. Successful follow-up activities include the following steps:

- Corrective Action Plan (CAP)
- Improvement Plan (IP)

Evaluation and improvement planning are linked together. Improvement planning is a process where actions that address the issues observed during an exercise are developed, assigned, implemented and tracked.

It's important for the Exercise Planning Team to make sure that all learning points and action items are agreed to by each of the participating organizations. The action items identified are documented in the final report, and a time frame agreed for implementation of the action items. This process is monitored by each of the organizations and the results validated during subsequent exercises.

> **Any exercise program functions in a cyclical way, in that it starts with:**
> ⇒ **a foundation and a plan**
>   ⇒ **moves into the design and development stage**
>   ⇒ **moves on to exercise execution and then**
>   ⇒ **completes a full cycle with an evaluation**
>   ⇒ **then goes into the corrective action and improvement planning stages.**

Recap

In the next Lesson, let's take a look at the key roles played by the exercise participants and how they would fit into the phases.

Lesson 2 Test

Basics of an exercise program

1. Number the five major phases of an exercise in their proper sequence.

    A. ___ Exercise Conduct

    B. ___ Exercise Evaluation and Reporting

    C. ___ Prepare the Foundation

    D. ___ Improvement Planning

    E. ___ Exercise Design and Development

2. A hot-wash occurs immediately following an exercise. Which of the following statements would apply to a hot-wash? Choose all that apply.

    A. ____ Deficiencies will be publicised in order to motivate personnel.

    B. ____ Any issues or concerns that occurred during the exercise, and proposed improvement items that can be identified.

    C. ____ The players' level of satisfaction with the exercise can be determined.

    D. ____ Events can be captured while they remain fresh in the minds of the players.

3. True or false? Regional exercise scenarios should be developed to include players from multiple agencies and jurisdictions as this would likely reflect actual response to a disaster.

    A. ____True

    B. ____False

4. True or false? The Safety Officer's primary responsibility is to analyze the entire exercise from a safety perspective in order to identify all possible safety hazards and resolve each one.

    A. ____True

    B. ____False

5. True or false? The Safety Officer does not have the authority to terminate an activity, or even the entire exercise, if a safety problem arises.

    A. ____True

    B. ____False

6. Which are the four types of planning conferences? Choose all that apply.

    A. ____Evaluation conference

    B. ____Final planning conference

    C. ____Concept and objectives

    D. ____Mid term planning conference

    E. ____Initial planning conference

    F. ____Time line conference

7. True or false? The purpose of the final planning conference is to gain agreement and support from the exercise planning team on scope, design requirements, and conditions.

    A. ____True

    B. ____False

Lesson 3 Key roles and responsibilities

At the end of this lesson, the participant will be able to:

Define an exercise planning team

Identify the importance of Public/Private Sector cooperation

Organizations have a direct responsibility for the training and exercising of their emergency management professionals. Your organization's Exercise Division coordinates programs that support training and exercise activities for the organization, and any government, private sector, and international partners. As you'll see in this Lesson, responsibilities for these tasks are complementary. Collaboration by all parties is needed for a successfully managed exercise.

The key roles played by exercise participants are:

- Exercise Coordinator
- Exercise Planning Team
- Player
- Controller
- Evaluator
- Simulator
- Facilitator
- Observer

What is an Exercise Coordinator?

This person has the responsibility for and authority to properly plan and deliver an exercise.

The Exercise Coordinator is the person in overall charge of planning, exercising, debriefing and producing the final report. It falls to the Exercise Coordinator to control the exercise tempo and make sure there is continuity from one phase to the next, including early termination for safety or other reasons, such as a major incident requiring real action by participants.

Key tasks of an Exercise Coordinator include:

- ☑ Review risk, vulnerability, and needs assessments.
- ☑ Prepare the exercise needs portion of the strategy.

- ☑ Prepare a schedule of major exercise activities and regular updates on changes to the plan and schedule.
- ☑ Coordinate the development and implementation of a multi-year exercise program for the approval of the emergency management committee.
- ☑ Support the planning, conduct, and evaluation of exercises in accordance with the principles and guidance defined in legislation, such as the Emergency Management Act, and regulations.
- ☑ Ensure that the After Action Report (AAR) and Corrective Action Plan (CAP)/Improvement Plan (IP) are prepared.
- ☑ Establish a procedure for tracking the implementation of the Corrective Action Plan (CAP)/Improvement Plan (IP)
- ☑ Incorporate lessons learned, and prevention and response needs identified through exercises, into strategy planning and evaluation.

Exercise Planning Team

The exercise planning team is responsible for the successful handling of all aspects of an exercise, including exercise planning, conduct, and evaluation. There are many tasks, ranging from designing the exercise to arranging detailed administrative matters. The complex tasks involved in developing exercise content and procedures require the efforts of a dedicated team.

Select team members from varied backgrounds as this helps with coordination. It also stimulates creativity. While each exercise has its own planning team, the team members may carry over from one exercise to the next, and your organization may find it advantageous to include team members with previous exercise planning experience. The membership of an exercise planning team can be adjusted to fit the type or scope of an exercise.

Key tasks of an exercise planning team include:

- ☑ Determine exercise objectives
- ☑ Tailor the scenario to any jurisdictional needs
- ☑ Develop the documents used in exercise simulation, control, and evaluation

Because planning team members have advanced scenario and events knowledge about an exercise, they are ineligible to participate in the exercise as players.

Planning team members help develop and distribute pre-exercise materials. They also conduct exercise briefings and training sessions. This makes them ideal selections for controller and evaluator positions during the exercise.

The exercise planning team can most effectively be structured using the principles of the Incident Management System (IMS). The team's project management principles should reflect IMS with clearly defined roles and responsibilities. For instance the jurisdiction and responsibilities of key roles and sections, such as Exercise Director/Lead Exercise Planner, Safety Officer, Operations, Planning, Logistics, Finance and Administration should be incorporated.

Here's an example of how an exercise planning team can be structured:

```
                    Exercise Director/
                    Lead Exercise Planner
                              |
                          Safety Officer
                              |
  ┌──────────────┬───────────────┬───────────────┬──────────────────┐
 Operations    Planning        Logistics      Administration/
                                                   Finance
    |             |                |                  |
 Site Liaison  Exercise          Props            Reporting
              Documentation        |
    |             |             Actors
 Police       Evaluation
    |
  Fire
    |
  EMS
```
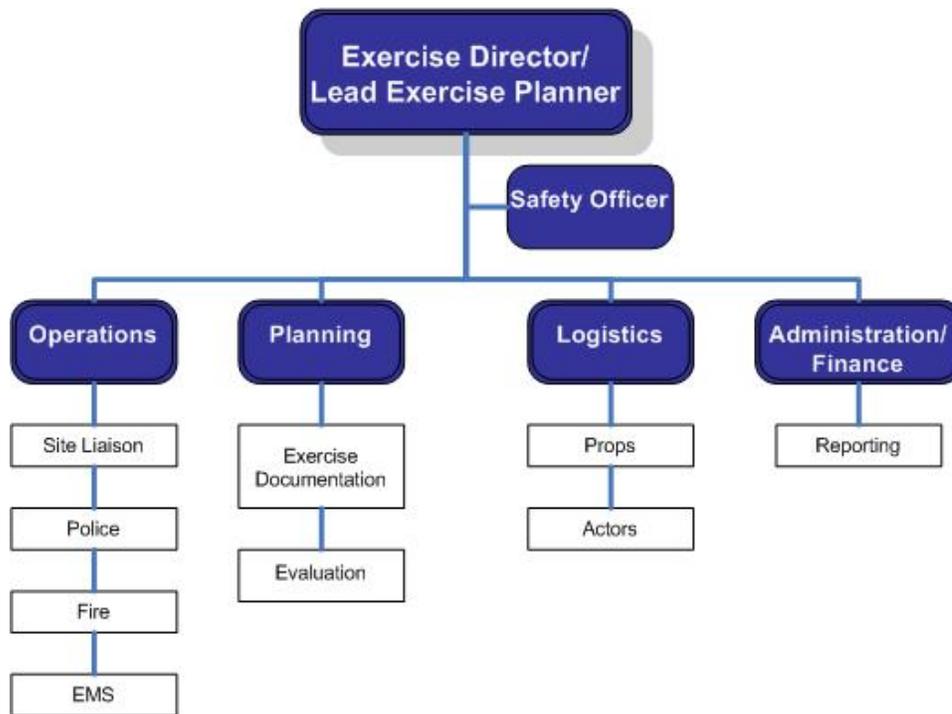
What is a Player?

This exercise participant is responsible for taking whatever actions are necessary to respond to a simulated emergency.

Players, also called Exercise Participants, respond to events according to the Exercise scenario. Players have an active role in responding to an incident by either discussing (in a discussion-based exercise) or

performing (in an operations-based exercise) their regular roles and responsibilities.

What is a Controller?

This is a person whose role is to ensure the objectives are sufficiently exercised, the level of activity keeps players occupied and challenged, and the pace (flow) of the exercise proceeds according to the scenario.

The key responsibility of the controller is to make sure that the exercise is conducted in accordance with the objectives, the scenario, and the problems identified in the scenario. It is the controller who leads the players through the exercise and is responsible for the development of a Control/Simulation Plan.

A Control/Simulation plan includes, but is not limited to, the following:

- Exercise control and simulation activity management
- Provisions for controller/simulator training and briefing
- Procedures for monitoring and reporting of exercise activities to include the flow and pace of the exercise
- Procedures to track the accomplishment of exercise objectives
- Procedures to record the responses of players
- Procedures to include the development of ad hoc messages to support exercise objectives in the message injects
- A list of required exercise forms, as well as instructions for their use and preparation
- Preparation for the critique

What is an Evaluator?

This is an individual assigned to one or more exercise functions or locations to document and evaluate individual, team, and organizational performance based on the exercise objectives and performance criteria.

What are the duties of an Evaluator?

An evaluation team is made up of one or many more evaluators, depending on the type and size of the exercise. Each evaluator is responsible to the Lead Evaluator at his/her assigned location to assist in monitoring and facilitating exercise play.

Specifically, individual evaluator responsibilities include:

- ☑ Review evaluation plan and control plan materials and attend evaluator training
- ☑ Observe assigned objectives. Monitor player actions and assist the Lead Evaluator and other exercise control team members in tracking exercise events
- ☑ Report to the Lead Evaluator any problems or issues that may arise. Examples of these include: who's in control, deviations from the scenario, or exercise artificialities that may interfere with exercise realism or exercise progress. Any problems or issues need to be recorded in an evaluator log
- ☑ Provide observations using the key player observation and comment form for input to the exercise evaluation
- ☑ Attend the end-of-exercise player debriefings/critiques, and any evaluator debriefings as instructed by Lead Evaluator
- ☑ Review simulator materials and attend training
- ☑ Answer (if allowed) inquiries from players and individuals for general information or information concerning Master Scenario Events List (MSEL) events already injected into play and record each of these inquiries on a log
- ☑ Record actions and/or decisions on tactical maps, situation status boards, resource status boards, and logs
- ☑ Assist controllers in monitoring the flow of the exercise and completion of Master Scenario Events List (MSEL) events
- ☑ Inform Lead Evaluator of possible deviations from the Master Scenario Events List (MSEL) and expected actions
- ☑ Record observations using the evaluator checklists and points or review
- ☑ Complete summary forms for input to the exercise evaluation report

Depending on the size and scope of the exercise, there may be one or several evaluators.

What is an Evaluation Team?

The team consists of evaluators trained to observe and record *participant* actions. These individuals should be familiar with the exercising jurisdiction's plans, policies, procedures, and agreements.

Duties of an Evaluation Team

To get you started in thinking about being an evaluator, here are some of the responsibilities of the evaluation team:

- ☑ Participate in the exercise design team (this is done by the lead evaluator)
- ☑ Analyze and assess the exercise plan to determine an appropriate evaluation strategy (locations of evaluators, number of evaluators required, roles and responsibilities, etc.)
- ☑ Develop and send out the Exercise Evaluation Plan
- ☑ Establish a communications system for the evaluators and information support mechanisms
- ☑ Design and develop the evaluation organization and chain of command
- ☑ Define the roles and responsibilities of the exercise evaluation team, including evaluation team chiefs and evaluators
- ☑ Develop policies, guidelines, and procedures for implementing the Exercise Evaluation Plan
- ☑ Develop the administrative and logistic systems needed for reporting observations, problem resolution, and safety and site preparation for participating organizations and evaluation organizations

What is a Lead Evaluator?

This is the person with overall responsibility for directing the documentation and evaluation of drills and exercises.

The Lead Evaluator has additional responsibilities, as follows:

- ☑ Determine the qualifications and experience level of evaluators needed and identify ways to find these evaluators
- ☑ Design and develop training for the exercise evaluators
- ☑ Develop procedures for debriefing of players and exercise evaluation team
- ☑ During the exercise, manage and coordinate activities of the exercise evaluator team so that everyone can make sure that exercise play achieves the exercise objectives
- ☑ Monitor exercise progress and make decisions regarding any deviations or significant changes to the scenario caused by unexpected developments in the course of play
- ☑ Coordinate any required modifications to the Master Scenario Events List (MSEL)

☑ Conduct debriefing of exercise evaluation team
☑ Provide observations for input to the exercise evaluation using the key player observation and comment form
☑ Complete routine reports to log exercise events and any special reports, as necessary
☑ Conduct control and simulation debriefings for subordinate controllers/simulators
☑ Chair the post-exercice critique session
☑ Attend evaluation team debriefings

What Does An Evaluator Need To Know?

Evaluators may need additional training, such as Emergency Operations Centre (EOC) operations, the Incident Management System being used, and all exercise control plan elements. It's best for training to emphasize the roles and responsibilities of both the control and evaluation teams, as well as how the two teams work together.

Training and prior work experience will give evaluators the tools they need to quickly understand the following:

- Purpose and objectives of the exercise they will be evaluating
- Master Scenario Events List (MSEL) and scenario timeline
- Message forms and flow of information
- Content of exercise messages
- Requirements for coordination with controllers and other personnel
- Procedures for monitoring and tracking player actions
- Procedures for recording observation of player actions
- Procedures for reacting to player inquiries
- Procedures for notifying the Lead Evaluator or lead controller of problems and exercise deviations

What is a Simulator?

This is an individual assigned the responsibility to artificially duplicate (role play) the response activities of personnel and groups not participating in the exercise.

The key responsibility of the simulator is to create an artificial reality by using visual aids and pre-scripted messages. The simulator wants each player to react in a similar manner to the way in which the player would react in a real emergency.

One type of simulator is an actor.

What is an Actor?

Actors are volunteer victims who simulate specific roles, including injuries from a disaster, to add realism to an exercise. Simulators act on behalf of an agency or organization that is not participating in the exercise.

What is a Facilitator?

This is a specially trained individual assigned responsibility for guiding participant discussions during table-top exercises to ensure key issues are addressed.

The Exercise Facilitator is responsible for making sure that progress is being made during the exercise. The facilitator works with the Exercise Planning Team and players to solve problems that may hamper progress, particularly those problems caused by the artificial nature of the exercise.

The exercise Controller may assign the Facilitator to a specific exercise response area, function or team. In some cases, the Controller may also perform the role of the Facilitator.

The key tasks of the Facilitator are to:

- ☑ Provide briefings and debriefings for all exercise players
- ☑ Provide exercise inputs in line with the Master Scenario Events List (MSEL)
- ☑ Monitor progress of the exercise
- ☑ Ensure that expected actions from exercise inputs are completed
- ☑ Ensure effective exercise responses by coaching players as required
- ☑ Report to the Exercise Planning Team
- ☑ Resolve problems and/or issues if the exercise goes off track, seeking advice from Exercise Planning Team as required

What is an Observer?

This is someone who has no role to play in the exercise but is witnessing events either to assess the preparations of the organization or individuals within it, or to learn lessons.

A few tips for you to consider in managing observers:

- Establish a viewing area. This will also help to ensure their safety
- Give a quality briefing to your observers before and during the exercise
- Have staff available to explain events and procedures as the exercise unfolds
- Seek the views of your observers, perhaps through the use of exercise evaluation forms or requesting written comments

Public/Private Sector Cooperation

We encourage public and private sector cooperation to increase local response to an emergency. If possible these organizations should be invited to participate in exercises.

Lesson 3 Test

Key roles and responsibilities

1. True or false? A Controller's primary responsibility is to lead the players through the exercise and to develop the Control/Simulation Plan.

    A. ____True

    B. ____False

2. True or false? The Simulator is the person responsible for guiding discussion by players during an exercise, and making sure that key issues are addressed.

    A. ____True

    B. ____False

3. Match the exercise positions with their descriptions.

A. _____ Player	1. Manage exercise play, set up and operate the exercise incident site, and possibly take the roles of responders (individuals and agencies) not actually participating in the exercise.
B._____ Controller	2. Keep player discussions on track with the exercise objectives, and make sure all issues and objectives are explored as thoroughly as possible despite operating under time constraints.
C. _____ Evaluator	3. Act on behalf of an agency or organization that is not participating in the exercise.
D._____ Simulator	4. Respond to an incident by either discussing (in a discussion-based exercise) or performing (in an operations-based exercise) their regular roles and responsibilities.
E. _____ Facilitator	5. Note the actions and/or decisions of players.

4. What is a benefit of public-private sector cooperation in exercises? Choose all that apply.

    A. ____Response to an actual event requires government agencies to be aware of, and possibly support private sector plans

    B. ____Private sector emergency management activities often mirror those of the surrounding communities

    C. ____To enhance local response to emergency

    D. ____In a real incident, these resources and activities are available for mutual aid

    E. ____All of the above

5. Which of the following is a key responsibility of an evaluator? Choose all that apply.

    A. ____Observe the exercise

    B. ____Review risk, vulnerability, and needs assessments.

    C. ____Report on what went well and what went poorly after the exercise is over.

    D. ____Monitor decisions made in the exercise and then report on them.

    E. ____Provide briefings and debriefings for all exercise participants.

6. Whose responsibility is it to control the exercise tempo and to make sure there is consistency from one phase to the next?

    A. ____ Facilitator

    B. ____ Exercise Coordinator

    C. ____ Evaluator

Recap:

In Part 1 you were introduced to:

- The core elements, key principles, terms, concepts, and phases of an exercise program
- The key roles and responsibilities of exercise participants

And the following terms:

- Discussion-based exercise
- Operations-based exercise
- After Action Report (AAR)
- Corrective Action Plan (CAP)
- Foundation
- Exercise Planning Team
- Design and Development
- Exercise Objectives
- Exercise Scenario
- Briefing
- Hot-Wash
- Cold-Wash
- Exercise Evaluation
- Improvement Plan
- Exercise Coordinator
- Player
- Controller
- Evaluator
- Evaluation Team
- Lead Evaluator
- Simulator
- Actor
- Facilitator
- Observer

Part 2   Why a Building Block Approach?

The context and importance of an exercise program within an emergency management program, the 5 phases of an exercise, and the key roles and responsibilities of exercise participants were reviewed in the previous lessons.

Part 2 will explore how an exercise program formed using a building block approach, and then go on to discuss the two types of exercises: discussion-based and operations-based. We will review what kind of exercises go in each of these types, and give you a few examples of how they would be conducted. Finally we'll talk about some of the elements of an exercise that are common to both discussion-based and operations-based exercise, elements such as communications, media participation, briefings, debriefings, and code words.

In Part 2, you'll be introduced to:

- Lesson 4 - The Building Block Approach to an exercise program
- Lesson 5 – Discussion-based exercises and how to conduct them
- Lesson 6- Operations-based exercises and how to conduct them
- Lesson 7- Common exercise elements such as media participation, communications, briefings, and debriefings

Lesson 4 Building Block Approach

At the end of this lesson the participant will be able to:

Define the Building Block Approach to Exercise Design

Identify selection of an exercise type for a specific organizational need

What is a Building Block Approach?

There is a focus on exposing participants to a cycle of training and exercises that escalates in complexity, with each exercise designed to build upon the last, in terms of scale and subject matter. For example, a building-block series of exercises may include a *seminar*, which leads to a *table-top exercise (TTX)*, which leads to a *full scale exercise (FSE)*.

The building block approach to exercising includes:

1. **Discussion-based exercises:**

    Seminars

    Workshops

    Table Top Exercises

    Games

2. **Operations-based exercises:**

    Drills

    Functional Exercise

    Full Scale Exercise

Below is an illustration of the building block approach.

Building Block Approach

Full Scale

Functional

Drills

Games

Table Top

Workshop

Seminar

CAPABILITY

Discussion-Based Exercises   Operations-Based Exercises

PLANNING/TRAINING ➡➡➡➡➡➡➡➡➡➡➡➡➡➡➡

The chart below provides examples of the reasons to conduct exercises.

Reasons To Conduct Exercises			
Seminars and Workshops	*Drills*	*Table-top Exercises and Games*	*Functional & Full Scale Exercises*
No previous exercises	Assess equipment capabilities	Practice group problem solving	Assess and improve information analysis
No recent major Emergencies	Test response time	Promote familiarity with your Emergency Plan	Assess & improve interagency coordination and cooperation
New Plan	Personnel training	Assess plan coverage for a specific risk	Support policy formulation
New Procedures	Assess interagency cooperation	Assess interagency & interdepartmental coordination	Test resource and personnel allocation
New Staff, Leadership	Verify staff and resource capabilities	Observe information sharing	Assess personnel and equipment
New Facility, Risk or Threat		Test group message interpretation	Assess Media Management
New mutual aid agreement		Test familiarity with roles in plan	
Specific case study		Improve agency contacts	
Executive familiarity			
Note: Any category to the right includes all components of those to the left.			

Lesson 4 Test

Building Block Approach

1. A cycle of training and exercise that escalates in complexity, with each exercise designed to build upon the last in terms of scale and subject matter. What do we call this approach?

        A. _____ Building Block Approach

        B. _____ All Hazards Approach

        C. _____ Discussion-based

        D. _____ Operations-based

Lesson 5 *Discussion Based Exercises*

At the end of this lesson participants will be able to:

Define discussion-based exercise

Identify examples of discussion-based exercise

Discussion-Based Exercises

Discussion-based exercises include seminars, workshops, table-top exercises (TTX), and games. In the building block approach to an exercise program, they are the starting point.

Discussion-based exercises focus on strategic, policy-oriented issues. For example, you could use such an exercise to highlight existing plans, policies, mutual aid and assistance agreements, and procedures. For these uses, discussion-based exercises are exceptional tools for familiarizing organizations and personnel with current or expected capabilities. Facilitators and/or presenters lead the discussion, keeping participants focused on meeting the objectives of the exercise.

What is a Seminar?

This is an informal discussion exercise, designed to orient the participants to new or updated plans, policies, or procedures, authorities, strategies, protocols, response resources, concepts and idea.

Seminars provide a good starting point for organizations that are developing or making major changes to their plans and procedures.

Some characteristics of seminars are:

- They are less expensive to run than other types of exercises
- They are a low-stress environment using a number of instruction techniques such as lectures, multimedia presentations, panel discussions, case study discussions, expert testimony, and decision support tools

- They are informal discussions led by a seminar leader
- There are fewer time constraints than in a real-time portrayal of events
- They can be effective with both small and large groups

What is a Workshop?

It's an exercise that resembles a seminar, but is used to build specific products, such as a draft plan or policy. To be effective, workshops must be highly focused on a specific issue and the desired outcome or goal clearly defined.

Workshops differ from seminars in two important aspects:

1. Participant interaction is increased
2. The focus is on achieving or building a product (such as a plan or a policy).

Workshops are an ideal way to:

- Collect or share information
- Get new or different perspectives
- Evaluate new ideas, processes, or procedures
- Train groups in coordinated activities
- Problem solving of complex issues
- Obtain consensus
- Team building
- Produce new emergency procedures
- Produce mutual aid and assistance agreements
- Develop multi-year exercise programs
- Develop a Corrective Action Plan (CAP)/Improvement Plan (IP)

Some characteristics of workshops are:

- It's a low-stress environment
- It's a no-fault forum
- Information is provided by using various instructional techniques
- A workshop is facilitated, with breakout sessions
- Full group discussions are led by a workshop leader
- Goals are oriented toward an identifiable product
- It's effective with both small and large groups

What is a Table-top Exercise?

It's an activity in which key staff or other emergency management personnel are gathered together informally and without time constraints,

usually in a conference room setting, to discuss various simulated emergency situations. The focus is on examination and discussion of problems with resolution.

Table-top Exercises (TTX)

Table-top exercises are used for validation, especially in testing for weaknesses in procedures. Table-top exercises (TTX) use simulations. A table-top exercise uses a realistic scenario and a time line, which may be real time or may use a timeline that is fast forwarded. Usually, table-tops are run in a single room, or in a series of rooms to simulate the divisions between those responders who need to communicate and those who need to be coordinated. For example, if you are a player testing an emergency plan, you would be expected to know the emergency plan before the table-top begins, so that you can test how the plan works as the scenario you are given unfolds.

Table-top exercises can involve senior staff, elected or appointed officials, or other key personnel in an informal setting, discussing simulated situations. This type of exercise is intended to stimulate discussion of various issues regarding a hypothetical situation.

A table-top exercise may last from 2 – 4 hours or longer, depending on the issues to be discussed.

Some characteristics of Table-top exercises are:

- They are relatively cheap to run, if you don't count staff time
- They demand careful preparation
- They allow you to practice group problem solving
- They familiarize senior officials with a situation
- They can be used to conduct a specific case study
- They can be used to examine personnel contingencies (for example, think of a pandemic planning scenario: how many people can keep your organization going and for how long?)
- They can be used to test group message interpretation
- They help you and your group to participate in information sharing
- They help in assessing inter-organizational coordination
- They can be used to achieve limited or specific objectives
- They can be used to assess plans, policies, and procedures, or to assess the type of systems needed to guide the prevention of, mitigation of, response to, and recovery from a defined event
- They help to understand concepts, identify strengths and shortfalls, and sometimes are used to help change attitudes
- They help you and your group to discuss issues in depth

What is a Game?

It's an exercise that explores the way decisions are made, and the consequences of those decisions in a simulated situation. In a game, the same situation can be examined from various angles by changing the variables that guide participants' actions. It often involves two or more teams, usually in a competitive environment, using rules, data, and procedures designed to depict an actual or assumed real-life situation.

Games are excellent for:

- Gaining policy or process consensus
- Conducting "what-if" analyses of existing plans
- Developing new plans

In the next lesson we'll take a look at Operations-Based exercises, and following that, we'll briefly discuss some of the other aspects of an exercise that are common to both Discussion-Based and Operations-Based exercises.

Lesson 5 Test

Conducting discussion-based exercises

1. True or false? A seminar is an excellent way to orient first time exercise players to the emergency plan and their specific roles and responsibilities under the plan. This session may help make them feel at ease and reduce their stress level prior to the exercise.

    A. ____True

    B. ____False

2. Which exercise is NOT a discussion-based exercise?

    A. ____Game

    B. ____Workshop

    C. ____Table-top

    D. ____Drill

    E. ____Seminar

3. True or false? Discussion-based exercises focus on strategic, policy-oriented issues.

    A. ____True

    B. ____False

4. How do workshops differ from seminars? Choose all that apply.

    A. ____There are more players in a workshop.

    B. ____The focus is on achieving or building a product in a workshop.

    C. ____Workshops concentrate on "what-if" analyses of existing plans.

    D. ____Player interaction is increased in a workshop.

    E. ____There is no difference. Both workshops and seminars are the same.

5. What document must be available as reference for any emergency management exercise? Choose the best answer.

    A. ____ Emergency plan of the organization

    B. ____ Agenda for the day

    C. ____ List of players

    D. ____ sustaining action guidelines

    E. ____ Guidelines on how to write memos and briefing notes for emergency situations

6. Which exercise explores the way that decisions are made, the consequences of those decisions, and lets you examine the same situation from various angles by changing some of the variables that would guide a player's actions?

    A. ____Discussion-based

    B. ____Workshop

    C. ____Table-top

    D. ____Game

    E. ____Seminar

7. Which exercise is used for validation, especially in testing for weaknesses in procedures?

    A. ____Discussion-based

    B. ____Workshop

    C. ____Table-top

    D. ____Game

    E. ____Seminar

Lesson 6 *Operations-Based Exercises*

At the end of this lesson participants will be able to:

Define an operations-based exercise

Identify examples of operations-based exercise

Operations-Based Exercises

Operations-based exercises are more complex. The players must resolve the scenario by actually acting out their responses, as opposed to talking about how they would respond. For example, simulated wounds are treated, personal protective equipment is donned, medical casualties are placed on stretchers, ambulances arrive at participating hospitals, and security teams apprehend and detain perpetrators – just like would happen in a real life emergency.

Examples of operations-based exercises are:

- Drills
- Functional exercises (FE)
- Full scale exercises (FSE)

Operations-based exercises will:

- Clarify roles and responsibilities
- Identify gaps in resources needed to implement plans and procedures
- Improve individual and team performance

Some characteristics of Operations-based exercises are:

- Actual response
- Use of equipment and resources
- Commitment of personnel, usually over an extended period of time

What is a Drill?

It's a coordinated, supervised activity and is usually used to test a single, specific operation or function within a single agency or organization.

Drills are used to provide training on new equipment, to develop or test new policies or procedures, and to practice and maintain current skills.

Characteristics of drills include:

- They have a narrow focus, measured against established standards
- Instant feedback is provided
- Testing is done in a realistic environment
- Can be performed separately from other tasks

Conducting Drills

Drills are repetitive actions designed to train participants to act or respond in a certain way. Beginning a drill will depend on the type of drill being conducted. For example, a command post drill would require the personnel of the emergency service that are participants in the drill to report to the designated drill site. There, a "visual narrative" is displayed before them in the form of a mock emergency to which they would respond. Command post equipment such as vans, command boards, and other needed supplies should be available.

Methods vary widely from the practice of simple operational procedures to more elaborate communication and command post drills. The drill designer would:

- Give a general briefing
- Set the scene
- Review the purpose and objectives of the drill
- Review operational procedures if they are to be tested
- Consider safety precautions and review with the participants

What is a Functional Exercise?

It's an exercise designed to test or evaluate the capability of individual or multiple emergency functions, with time constraints, and normally in the emergency operations centre.

A Functional exercise is designed to test and evaluate, in a simulated real time environment:

- Capabilities
- Multiple functions or activities within a function
- Interdependent groups of functions

This exercise involves:

- Emergency Operations Centre (EOC) personnel who carry out actions and provide coordination as though the incident were real
- A team of controllers and simulators who track exercise events and assessments by evaluators and simulate the responders who are not actually participating in the exercise
- A team of evaluators who assess operational capabilities based on the criteria identified for successful performance, of the emergency management plan

Functional Exercises tend to be focused on exercising plans, policies, and procedures. They help players to simulate a response to a scenario, including decision-making skills, and usually in a time-sensitive environment.

How a functional exercise works

During an exercise scenario, events drive activity to the management level. Movement of personnel and equipment is simulated. The scenario gives complex and realistic problems that require rapid and effective responses by trained personnel in a highly stressful environment. The more realistic the scenario, the more realistic the response tends to be.

Here are some examples of what a functional exercise can be used for:

- To evaluate functions
- To evaluate Emergency Operations Centres (EOC), headquarters, and staff working in both areas
- To reinforce established policies and procedures
- To measure adequacy of resources available
- To examine inter-jurisdictional relationships

A functional exercise can last 2 – 8 hours, or longer, depending on the objectives and functions to be tested.

What is a Full Scale Exercise?

It's an exercise that evaluates the capability of emergency management systems over a period of time, by testing the major portions of an emergency operations plan and the organization itself, while under the stress of an emergency.

The Full scale Exercise (FSE) is the most complex and expensive step in the exercise cycle. Full scale exercises are multi-organizational, multi-jurisdictional exercises that test and evaluate many parts of emergency response and recovery in an interactive manner.

The focus of a full scale exercise is on implementing and analyzing the plans, policies, and procedures developed in discussion-based exercises and tested in previous, smaller, operations-based exercises. Events unfold in a scripted exercise scenario that has enough built-in flexibility to let updates drive activity. The exercise occurs in a real-time, stressful environment that closely mirrors a real event. First responders and resources are mobilized and deployed to the scene where they conduct their actions as if a real incident had occurred (with minor exceptions).

A full scale exercise allows you to:

- Assess organizational and individual performance
- Demonstrate inter-organizational cooperation
- Allocate resources and personnel
- Assess equipment capabilities
- Activate personnel and equipment
- Assess inter-jurisdictional cooperation
- Exercise emergency information systems
- Test communications, telecommunications systems and evaluate procedures
- Analyze memorandums of understanding, plans, policies, and procedures

The level of support you'll need to conduct a full scale exercise is greater than needed during other types of exercises. The exercise site is usually extensive with complex site logistics. Food and water are needed for players and volunteers. Safety issues, including those concerning the use of props and special effects, are monitored. A full scale exercise will last from 2 – 8 hours, or longer.

Controllers in a full scale exercise are responsible for ensuring that the way players behave stays within predefined limits. Simulation Cell (SIMCELL) controllers continuously inject scenario inputs to simulate real events. Meanwhile, evaluators observe behaviour and compare them against established plans, policies, procedures, and standard practices (if applicable). Safety officers make sure that all activity occurs in a safe environment. Although the exercise on site may be completed, other elements of the exercise may need to continue for some time, e.g. control rooms, reception centres, emergency rooms, media etc.

A summary of the key tasks for running a full scale exercise includes:

- Brief participants prior to the exercise
- Set the scene with victims, if applicable

- Brief your observers, have them in position, and readily identifiable
- Brief your exercise controllers and facilitators, have them in position, and readily identifiable
- Have the first aid support (if necessary) in place and clearly identifiable
- Brief your outside organizations and have them in place
- Have arrangements in place for food, refreshments, and temporary toilets
- Make media arrangements
- Complete communication checks
- Have a guarantee that the focus for the exercise is available for participation - e.g. a ship, building, highway - and prepare an alternative scenario, just in case you need one

Emergency Call-Off Procedures

In any exercise, a real emergency might occur. Especially in a full scale exercise, you must always keep in reserve sufficient personnel to handle routine problems—from a fire to ordinary telephone calls to the emergency office. As well, every exercise should have a planned call-off procedure that will result in the prompt return of personnel and equipment to full duty status. This procedure should consist of a codeword (example: **No Duff**) from the exercise controller that the exercise has been terminated and that personnel should report to their regular duty positions. All radio traffic, as well, will return to normal. These procedures should also be tested.

In the next lesson, we'll discuss some of the common elements of both discussion-based and operations-based exercises. These include communications, media participation, briefings, and debriefings. We'll also look at some of the similarities and differences between discussion-based and operations-based exercises.

Lesson 6 Test

Operations-based exercises

1. True or false? In setting up an Operations-based exercise, planners must consider the assembly area, response route, response operations area, parking, registration, observer/media accommodations, and a possible Simulation Cell (SIMCELL) facility.

    A. ____True

    B. ____False

2. True or false? Types of situations such as communication outages, equipment failures, and logistical limitations put stress on everyone and add little value to an exercise.

    A. ____True

    B. ____False

3. Which exercise is NOT an operations-based exercise?

    A. ____Game

    B. ____Full Scale exercise

    C. ____Functional exercise

    D. ____Drill

4. How is an operations-based exercise different from a discussion-based exercise?

    A. ____An operations-based exercise is multi-organizational and multi-jurisdictional.

    B. ____There is no difference in how the exercise works. Only the number of participants increases in an operations-based exercise.

    C. ____In an operations-based exercise, players must resolve a scenario by actually acting out their responses, as opposed to talking about how they would respond.

    D. ____An operations-based exercise is informal, designed to orient players to new or updated plans, policies, or procedures.

    E. ____An operations-based exercise is an activity where key staff members are gathered together to discuss various simulated emergency situations.

At the end of this lesson participants will be able to:

List the common aspects between discussion-based and operations-based exercises

Lessons 5, 6 and 7, introduced you to the Building Block Approach to an Exercise Program, the types of exercises and their key characteristics, and how to conduct these exercises. Some of these elements are more relevant to complex exercises - whether discussion-based or operations-based. Others are common to all, from the simplest to the most complex. We introduce them here so that you can think for yourself how they might apply to an exercise.

Public Information

The exercise planning group will need to decide whether there should be any prior publicity. A suggestion is to issue prior public information to members of the public in the vicinity of the exercise to prevent any undue alarm, particularly for exercises at hazardous sites. The planning team may consider issuing information by letter, to the public on the day of the exercise. However, since this may attract a crowd of uninvited spectators, "Exercise in progress" signs may be strategically positioned. This can detract from the realism but reassures the public or uninvolved organizations. While public information is more likely to be a consideration in Operations-based Exercises, it can also be necessary in high-profile Discussion-based exercises, such as for an advanced table-top exercises.

If public information is issued, the players may also find out about the exercise and this could affect realism. Details for the media could be held until the day of the exercise.

Communications

Communications - both equipment and process - plays a key role in the success of exercises. An agreed channel of communication needs to be set up between controllers, simulators, and evaluators so that they can be kept aware of any developments or changes. As an example, in live exercises, the agreed communications used by controllers, simulators, and evaluators must be separate to those being used by players.

One element of your exercise may be to test inter-organizational communications. Prefix all your messages with an agreed codeword so that everyone involved is aware that they relate to the exercise and not to

a real incident. All control rooms need to be aware in advance of the agreed code words.

Media Participation

Dealing with the media is a major part of responding to any incident and for that reason should be practiced as often as possible. While exercise planners could use student journalists or reporters from local papers to test the different organizations' response to the media, for major exercises, a representative from the national media should be invited to attend. Exercise press conferences and interviews can be used to test the knowledge of the combined response.

Media Coverage

The media might arrive – unplanned - to cover the exercise and arrangements need to be in place for this possibility. Public relations staff should be allocated to keep the media informed during the exercise. Designate a good viewing point and useful locations for photo-opportunities.

Logging and Recording

Logging and recording activities are important parts of conducting an exercise. These can be vital at subsequent public enquiries. In an exercise, those taking part need to understand the importance of keeping an accurate log of actions and decisions. Don't assume that players will bring their organizations' logging practices to the event.

What is a Situation Report (Sit Rep)?

This is a report on the current situation in a simulated emergency during an exercise.

In a real life situation, frequent updates are needed. This gives the coordination team members a chance to pool their information and see if they are making decisions based on current data. One method for giving updates is through a Situation Report, or Sit Rep.

The report should:

- Note the current situation
- Be concise
- Be clear
- Be timely
- Be informal
- State the facts and decisions taken without any embellishments

Briefings

Briefings are common to all types of exercises. A briefing should be held immediately before the start time of the exercise and include:

- A statement and discussion of the general exercise objectives
- The time period in which the exercise is to be conducted
- A description of the environment
- Recording requirements
- An outline of the procedures and ground rules to be used. The outline of procedures should clearly specify the participating organizations, and the internal and external non-participating organizations

The type of briefings you need to use will depend on the exercise's goal. As a general principle each organization's representative on the exercise planning group should take responsibility for briefing his/her staff who are involved in the exercise. Further briefing may be required on arrival at the place the exercise takes place. Particular attention needs to be paid to volunteers.

Further briefings are needed for additional exercise controllers, evaluators, simulators, and observers.

Debriefing

After an exercise, a review of the responses to the exercise by participants and responding organizations is essential. This is an opportunity to evaluate efficiency, to learn from experience gained and offers a source of information to assist in future planning, training and exercising.

Organizations may want to appoint a neutral debrief coordinator. It's important to create a non-threatening atmosphere so that people are not afraid of being honest about their experiences and problems.

Lesson 7 Test

Common Exercise Elements

1. Choose the best situation report input, A or B.

   A. _____Press releases were distributed to the following radio and TV stations:
   - CBC
   - CTV
   - Global
   - Radio Canada
   - CNN

   B. _____Press releases were distributed to radio and television stations and were given airtime during the morning drive period. Community Relations was contacted and is reporting that the majority of citizens contacted heard these releases and obtained the registration number and information through them.

2. Choose the best situation report input, A or B.

   A. _____William Jones from our fine staff held a breakfast meeting at the local Rotary Club meeting to discuss disaster relief efforts. Breakfast consisted of eggs, sausage, toast and beverage.

   B. _____Community Relations attended a local meeting of citizens to discuss disaster recovery efforts. Attendance consisted primarily of local politicians and business leaders and all evaluations of our efforts to date are very favourable.

3. Choose the best situation report input, A or B.

   A. _____A large delivery of water arrived yesterday. This is in addition to a delivery of 50,000 litres of water from the donations center.

   B. _____A delivery of 200,000 litres of water arrived yesterday. This is in addition to a delivery of 50,000 litres of water from the donations center. A three days supply of water is now on hand or enough water for 62,500 people at the current delivery rate.

4. Choose the best situation report input, A or B, which would be given by a Medical Officer of Health.

 A. ____An outbreak of *Malarkey Fever* was reported in the Winnipeg area on 8/17/2007. Infectious disease experts report that the outbreak, which is caused by mosquito bites, has been contained and can be easily treated by common prescription drugs. Aerial spraying has begun to deal with the mosquito problem.

 B. ____An outbreak of *Malarkus Persnicitus Hyperthermia* was reported in Winnipeg and surrounding areas. Epidemiologists report that the calamity, which is caused by the species *Buggusbiteusinthebuttus,* has been contained and can be treated by taking Doxicycline Pentaborate Humongotablis B.I.D. An airborne decimation program using aerosolized chemical vector eradicants based on organic toxicants has been initiated.

5. Which of the following statements best describe an exercise debriefing? Choose all that apply.

 A. ____It allows planners, facilitators, controllers and evaluators to review and provide feedback on the exercise.

 B. ____Is held at regular intervals during the exercise to assess whether objectives are being met.

 C. ____Allows each planner, facilitator, controller and evaluator an opportunity to provide an overview of the functional area they observed and document both strengths and areas for improvement.

Recap ....

In Part 2 you were introduced to:

- The Building Block Approach to an exercise program
- Discussion-based exercises and how they are conducted
- Operations-based exercises and how they are conducted
- Common exercise elements such as communications, media participation, briefings and debriefings

The following terms:

- Building Block Approach
- Prevention
- Mitigation
- Preparedness
- Response
- Recovery
- Seminar
- Workshop
- Table-top Exercise
- Game
- Drill
- Functional Exercise
- Full Scale Exercise
- Situation Report (Sit Reps)

In the next two lessons, we'll introduce you to the 8 steps of exercise design, and talk about the types of documentation to use when participating in an exercise.

Part 3   How Is An Exercise Designed & Developed?

In this section, we'll introduce you to the 8 steps of exercise design, and talk about the types of documentation to use when participating in an exercise.

In Part 3, you'll be introduced to:

- Lesson 8 - The 8 steps in exercise design
- Lesson 9 - Exercise documentation

Lesson 8 *Eight steps to exercise design*

At the end of this lesson the participants will be able to:

Identify the 8 steps of exercise design

It is easy to confuse the 8 steps in designing an exercise with the 5 exercise phases. The 5 phases of an exercise deal with the whole cycle of an exercise. The 8 steps to exercise design focus only on how to design an exercise – it does not deal with running an exercise or evaluating it.

What is a Needs Assessment? It's is a process of defining an organization's inventory of problems or needs.

Step 1 – Assess needs

The first step in designing any exercise is to assess your organization's needs. This gives you valid reasons to do an exercise, helps you define problems you hope to solve, and identifies the functions to be exercised. If your organization has previously done exercises, then an evaluation of any past events or exercises are good primary sources of information.

A needs assessment has 3 basic steps:

1. Define problems
2. Establish the reasons to do an exercise
3. Identify the functions to be exercised

Step 2 Define the Scope

"Defining the scope" means to put realistic limits on the areas addressed in the needs assessment. **Not all hazards can be tested, not all exercise types used, and not all resources will be available**. Your scope needs to be clear and defined. The following five categories make up the scope:

a. **Hazards**—normally, one main hazard is identified in the scenario of the exercise, even though others may develop.
b. **Geographic area**—a defined location of the event is identified, such as an address, or specific site.
c. **Functions**— identify what emergency management functions will be tested, based on need.
d. **Organizations and personnel**—identify what organizations will be involved, and at what staffing levels.
e. **Exercise type**— identify what type of exercise is needed or authorized.

Step 3 Write a Statement of Purpose

A statement of purpose is a general statement about an upcoming exercise activity. Using this statement, your emergency management program can communicate the plan to exercise, the purpose of the exercise, and the exercise scope to all interested parties.

Below is an example of a statement of purpose.

> **Example of a Statement of Purpose**
>
> **The purpose of the proposed emergency management exercise is to improve the following emergency operations:**
> > *a. Flood stage monitoring*
> > *b. Evacuation warning*
> > *c. Relocation of school children and senior citizen home*
> > *d. Reception centre management*
> **by involving the following agencies and personnel:**
> > *a. EMO*
> > *b. Fire Department*
> > *c. Public Works*
> > *d. Health Department*
> > *e. Red Cross and Salvation Army*
> > *f. Area Schools*
> > *g. Senior Citizen Homes in area*
> **in a *functional* exercise simulating a *flood caused by riverbank overflowing* at Queensway Bridge to Hwy 417 on October 20.**

Step 4 Define the Objectives

Objectives can be classified into "general objectives" or "functional or specific" objectives.

General objectives are used to provide a general overall exercise objective of the organization. (*Example: The town of "X" will respond to and recover from a train derailment event.*)

Functional or specific objectives are the focal point of any exercise activity. They add to the purpose statement for the exercise, by describing the expected outcomes (performance) of the emergency management functions being tested.

The objectives for any exercise activity should provide a statement of the following:

> a. Who is to perform the action?
> b. What are they to do?

      c. Under what conditions?
      d. According to what standard?

Objectives need to be clear, concise, specific, and performance based. Don't forget – all objectives need to be attainable. The number of objectives needed for an exercise activity will vary. An orientation exercise activity may only need two or three objectives, while a full scale exercise may have several for each function involved in the exercise.

Good Examples of Objectives

1. At the time the evacuation notice is received, the EOC policy and coordination groups will examine the needs of schools and other special facilities, and organize notification according to standard operating procedures.
2. The EOC will identify and activate an alternate communication system within 30 minutes of the primary communication failure, as described in the emergency management plan.

Bad Examples of Objectives

1. To test the volunteer organizations.
2. To get agencies to improve their disaster operations.

Level of play matrix

Sometimes organizations would like to participate in an exercise, but when they review the scope and objectives they realize that they are unable to commit to full participation. A Level of Play Matrix lets organizations agree early on in the exercise planning process to a specified level of play.

Level Of Play Matrix		
LEVEL OF PLAY	**DESCRIPTION**	**AVAILABILITY**
1	**Full organizational participation**	**24/7**
2	**Full headquarters or EOC participation**	**24/7**
3	**Response cell participation**	**24/7**

4	**Partial response cell participation**	**a) Normal work hours (xx am to xx pm)** **b) Normal work days (Mon-Fri)**
5	**Liaison only participation**	
6	**Observer**	
7	**Simulated**	
8	**Subject matter expert (SME)**	

Step 5 Compose a narrative

An exercise's scenario narrative describes the events leading up to the time the exercise begins. It sets the scene for later events and also captures the attention of the players. A scenario narrative is normally one to five paragraphs long, with short sentences and specific information. It gives answers to questions like these:

- What is the event?
- How fast, strong, deep, or dangerous is the emergency?
- How was the information relayed?
- What response has already been made?
- What damages have been reported?
- What is the sequence of events?
- What time did it happen?
- Was there any advanced warning?
- Where does the event take place?
- What are the weather conditions?
- What other factors would influence emergency procedures?
- What is predicted for the future?

Sample Scenario Narrative: Air Crash

A Boeing 747, en route from Amsterdam to Toronto, is experiencing in-flight engine problems and will have to make an emergency landing. Plans have been made to land at Ottawa Airport.

However, the latest communications with the pilot indicates that the plane has lost engine power and is losing altitude too quickly to reach the airport in Ottawa. Instead, the plane will attempt to land at YOUR airport.

Conditions at your airport are clear, and the surrounding area is dry. Winds are from the north; steady, at 25 km per hour. The main runway lies along a relatively unpopulated suburban area, but it is not designed for a 747. Therefore, there is concern as to how successful the pilot will be in landing the plane. The approach will pass over populated housing developments.

The airport control tower has alerted the airport's Crash/Fire Rescue units and is requesting local emergency services to provide backup assistance in fire, medical, police, search and rescue, and welfare.

It's now 9 a.m. (The exercise begins.)

Step 6 Write major and detailed events

These events take place after, and as a result of, the disaster described in the narrative. Major events are problems that are likely to occur based on past events. Normally, there will be several of these directly related to the narrative. They require certain emergency, management, and/or government related functions to be addressed. Here is an example of major events, which are based on the previous narrative:

- Fuselage breaks apart as it hits buildings on approach
- Debris and fuel ignite several fires to homes
- About 60 survivors are thought to be trapped in the front section of the plane
- Several bystanders on the ground are injured
- A crowd convenes around the crash site
- Family members of victims begin to gather at the crash site, as well as foreign embassy representatives who have been dispatched by their governments to find out information on behalf of family members in their countries
- Estimates of fatalities are 200-300
- News media are providing instant coverage, as well as speculating on causes of the crash

Detailed events are smaller problems of each major event that will still require action to be taken. They are designed to prompt expected actions by the players. Here is an example:

Major Event

- About 60 survivors trapped in the front section of the plane

Detailed Events

- Rescuers find survivors entangled in the wreckage
- Many of the trapped victims are found severely injured
- Passengers and/or onlookers get in the way of rescue efforts
- Government representatives begin their work, sometimes in apparent conflict of rescue operations
- News crews demand instant updates and cause of crash

Step 7 List expected actions

These are the desired actions or decisions the players are expected to make. For each major or detailed event, exercise coordinators and planners anticipate that the players will perform actions that follow the emergency management plan, including Standard Operating Procedures (SOPs) and other applicable procedures.

> **Example: Objective and Expected Actions**
> *Function:* **Coordination and communication among the airport and the jurisdiction's emergency systems.**
> *Objective:* **Upon notification that a crash is imminent, response units will stage within 3 minutes, according to SOPs.**
> *Event:* **Landing of disabled aircraft is imminent.**
> *Expected Actions:*
> **Airport Control Tower:**
> - **Notify police (OPP and RCMP), fire, ambulance, medical personnel to proceed to airport.**
> - **Alert hospitals of potential mass casualty incident.**
> **Dispatch Centre:**
> - **Alert police, fire, and medical supervisors.**
> **Hospital:**
> - **Notify other medical facilities as appropriate.**
> **Crash/Fire Rescue:**
> - **Initiate incident management system.**
> - **Notify dispatch of command post and staging locations.**
> **As an example from the detailed events above:**
> - **Survivors entangled in wreckage—expected action: special extrication equipment brought in.**
> - **Trapped people found severely injured—expected action: paramedics establish emergency medical services branch within the incident management system structure being used.**
> - **Onlookers get in the way—expected action: law enforcement sets up perimeter and security.**

Verify (information gathering)

- Consider (discuss, negotiate, consult)
- Defer (put action on priority list)
- Decision (deploy or deny resources)

Step 8 Prepare Messages

Messages are the means by which the expected actions are brought about. They are communicated to the players by:

- Telephone
- Email
- Radio
- Written note
- Transmitted by fax

There are two kinds of messages: **pre-scripted** (developed prior to the exercise), and **spontaneous** (developed when players react in different ways). Spontaneous messages can also be "free play", entered into the exercise by the controller or simulator to induce, create, or steer players to react.

SAMPLE MESSAGE FORM:		
Emergency Management Exercise _____		
MESSAGE		
TO: **METHOD:**		**FROM:**
Contact Number:	**TIME:**	
CONTENT:		
ACTION TAKEN:		

In our next lesson we'll briefly discuss some of the documentation used in an exercise.

Lesson 8 Test

Eight steps to exercise design

1. Number, **in order**, the 8 steps to designing and developing an exercise.

    A. ___ Compose a narrative

    B. ___ Define objectives

    C. ___ List expected actions

    D. ___ Write a statement of purpose

    E. ___Assess needs

    F. ___Write major and detailed events

    G. ___Prepare messages

    H. ___Define the scope

2. A needs assessment has 3 basic steps. Select the 3 that apply:

    A. _____ Define problems

    B. _____ Identify the functions to be exercised

    C. _____ Get full organizational participation

    D. _____ Find Subject Matter Experts (SME)

    E. _____ Establish the reasons to do an exercise

3. True or false? By using LEVEL OF PLAY MATRIX, organizations can commit early on in the exercise planning process to a specified level of play after they have reviewed the planned exercise scope and objectives.

    A. ___True

    B. ___False

4. 5 categories make up the scope of an exercise? Which one of the answers below is NOT one of the categories?

    A. _____ Hazards

    B. _____ Organizations and personnel

    C. _____ Geographic area

    D. _____ Availability of Subject Matter Experts (SME)

    E. _____ Functions

F. _____ Exercise type

5. What is a statement of purpose?

    A. _____ A detailed explanation of the planned exercise.

    B. _____ A list of resources to be used in an exercise.

    C. _____ A statement of intent to begin an exercise program.

    D. _____ A statement that identifies who will be involved in an exercise.

    E. _____ A general statement about an upcoming exercise activity.

6. Major and detailed events are related in that detailed events are smaller problems of each major event, while major events are the big problems arising from an emergency. In the statements below, one is a major event, while the others are detailed events for the major event. Identify the major event taken from the events in an air crash scenario.

    A. _____ Local hospitals lack specialized facilities and personnel to treat large numbers of severe burn victims.

    B. _____ The Canadian Red Cross has agreed to set up a family information center to link victims and their families.

    C. _____ Estimates of passenger victims rise between 200 and 220 deaths and at least 70 severe burn victims.

    D. _____ The mortuary is unable to accept the large numbers of remains resulting from the crash.

Lesson 9 *Exercise documentation*

At the end of this lesson participants will be able to:

Describe the documentation used when designing and participating in an exercise

Regardless of the kind of exercise you conduct, documents will help guide exercise participants. This lesson will review the specific documents.

What is a Situation Manual (SITMAN)?

It's a handbook provided to all *participants* in *discussion-based* exercises, particularly *TTXs*. The SITMAN provides background information on the exercise *scope*, schedule, and *objectives*. It also presents the *scenario* narrative that will drive participant discussions during the exercise.

The SITMAN does not need to be more than a few pages; it gives background information on the exercise scope, schedule, and objectives. It also presents the scenario narrative that participants will use during the exercise. The SITMAN should mirror any multimedia briefing, supporting the scenario narrative and allowing participants to read along while watching events unfold.

Multimedia Presentation

The multimedia presentation for a discussion-based exercise should summarize and support (both visually and with audio) information contained in the written documentation. Participants should be able to read the written material while watching or listening to the presentation.

This presentation typically contains the following information:

- Introduction
- Background on the hazard or scenario
- Objectives
- Exercise play rules
- Modules that describe the scenario

What is an Exercise Plan (EXPLAN)?

This is a general information document that helps *operations-based* exercises run smoothly. It is published and distributed prior to the start of exercise and provides a synopsis of the exercise.

It provides a summary of the exercise and is distributed before the exercise starts. It discusses the exercise objectives and scope, and

assigns tasks and responsibilities. The EXPLAN doesn't contain detailed scenario information and is generally intended for exercise participants and observers.

What's included in an Exercise Plan?

- Purpose/scope/objectives
- Background
- Duration, date and time of exercise
- Exercise organization (e.g., director, controllers, evaluators, players)
- Roles and responsibilities
- Rules of conduct
- Safety issues and security and access
- Logistics
- Communications
- Schedule of events
- Maps and directions

What is an Exercise Control Plan?

This plan provides exercise controllers and simulators with guidance concerning procedures and responsibilities for exercise control, simulation, and support. It explains the exercise concept as it relates to controllers and simulators, establishes the basis for control and simulation of the exercise, and establishes and defines the communications, logistics, and administration structure needed to support control and simulation during the exercise.

This document contains more detailed information about the exercise scenario and describes the controller staff roles and responsibilities. As the controller staff notes contain information on the scenario and exercise administration, it's best to only distribute the Exercise Control Plan to those individuals specifically designated as controllers and evaluators.

What's In an Exercise Control Plan?

- General objectives
- Concept of play (exercise scope, scenario narrative, location of players)
- Specific functional objectives
- Procedures, responsibilities, assignments and support
- Exercise Planning Group structure
- Exercise timelines (including pre- and post exercise activities)
- Emergency call-off procedures, safety and security

- Artificialities, assumptions and simulations
- Master Scenario Events List (MSEL) for the exercise
- Communications capabilities, structure and procedures
- Checklists or any other job aids needed (including maps, reference etc)

Player Handbook

A Player Handbook contains a list of instructions for players, as well as information about player responsibilities and functions to be performed during the exercise.   It helps the players in understanding the ground rules, the overall objectives and scope of the exercise, limits of play, simulation plans, and the debriefing process.

What is a Master Scenario Events List (MSEL)?

It's a chronological timeline of expected actions and scripted events to be injected into exercise play by *controllers* to generate or prompt *player* activity. It ensures necessary events happen so that all *objectives* are met, and provides guidance for controllers and/or simulators in keeping the exercise on schedule.

The Master Scenario Events List (MSEL) links simulation to action, makes the exercise experience relevant for players, and uses an incident or activity that is intended to prompt **players** to action. Each Master Scenario Events List (MSEL) record contains a designated **scenario** time, an **event** synopsis, the **controller** responsible for delivering a particular inject and any special delivery instructions, the **task** and **objective** to be demonstrated, the expected action, the intended player, and a note-taking section.

It's important that messages are entered in their proper sequence so the exercise will maintain "flow" and controllers can monitor the tracking of the messages.

Here is a sample Master Scenario Events List (MSEL), and see what information can go in it.

Sample Master Scenario Events List		
TIME	**EVENT**	**EXPECTED ACTIONS**
7:35 am	**Plane radios tower: losing engine power and altitude**	**1. Tower notifies dispatch centre.** **2. Dispatcher alerts police, fire, medical services to proceed to airport.**
7:40–7:50 am	**Pilot reports major vibrations / noise. Requests runway designation.**	**1. Tower designates runway; notifies dispatcher of runway and potential for mass casualty incident.** **2. Dispatcher relays runway info to police, fire, medical.** **3. Dispatcher notifies hospitals.** **4. Crash/Fire Rescue initiates IMS; notifies Dispatcher of Crash Position and staging locations.** **5. Dispatcher relays Crash Position and staging locations to police, fire, medical.**
7:55 a.m.	**Hospital calls dispatcher requesting more information**	**1. Dispatcher gets potential number of casualties and relays info to hospital.** **2. Hospital notifies other medical facilities.**
8 a.m.	**Media calls dispatcher requesting information**	**(etc.)**

What is an Exercise Evaluation Plan (EVALPLAN)?

It's typically used for *operations-based* exercises of a large *scope* and scale but can be used for more intricate discussion-based exercises. This document provides specific guidance to exercise *evaluators*. It's designed to help exercise evaluators understand their roles and responsibilities in exercise data collection and evaluation in order to conduct an effective *analysis* of the exercise and produce a comprehensive *After Action Report* (*AAR)/Improvement Plan (IP)*.

What's In an Evaluation Plan?

- Exercise overview
- Evaluation control organization
- Evaluation methodology and observation techniques
- Evaluator roles and responsibilities
- Evaluation communications plan

Lesson 9 Test
Exercise documentation

1. What exercise documentation is recommended for exercises? Choose all that apply.

    A. _____Master Scenario Events List

    B. _____Situation Manual (SITMAN)

    C. _____Player Handbook

    D. _____Exercise Control Plan

    E. _____Exercise Evaluation Plan

    F. _____All of the above

2. Match the documentation with its purpose.

A. ____ Exercise Evaluation Plan (EVALPLAN)	1. Contains a list of instructions for players as well as information about players' responsibilities and functions
B. ____ Exercise Control Plan	2. Handbook provided to all players in a discussion-based exercise, particularly TTXs.
C. ____ Player Handbook	3. Provides specific guidance to exercise evaluators. Designed to help exercise evaluators understand their roles and responsibilities in exercise data collection and evaluation.
D. ____ Situation Manual	4. Given only to directing staff and evaluators, describes their roles and responsibilities

3. Fill in the blank:

A general information document that provides a synopsis of operations based exercises and helps them to run smoothly is a _____.

4. A Situation Manual gives background information on the exercise scope, schedule, and objectives. Would it also include the scenario narrative that players would use during an exercise?

    A._____Yes

    B._____No

5. Who is the Exercise Plan (EXPLAN) intended for?

        A. ____Controllers

        B. ____Actors

        C. ____Exercise participants and observers

        D. ____Observers

        E. ____Evaluators

Recap ....

In Part 3 you were introduced to:

- The 8 steps in exercise design
- Exercise documentation

And introduced to these terms:

- Needs Assessment
- Situation Manual (SITMAN)
- Multimedia Presentation
- Exercise Plan (EXPLAN)
- Master Scenario Events List (MSEL)
- Exercise Evaluation Plan (EVALPLA

Part 4   Why an Exercise Program?

In order to prepare for any emergency, you need an exercise program that's made up of a series of exercises, some more complex than others, with each one building upon the previous exercise.

The purpose of any exercise program is to build capabilities to deal with different hazards identified by your organizations needs assessment.

In Part 4 of the course, you'll be introduced to:

- Lesson 10 - Why it's essential to annually update your multi-year exercise program

Lesson 10 Multi-year exercise program

At the end of this lesson participants will be able to:

State the importance of a multi year exercise program

Your multi-year exercise program is based on the need to prepare for emergencies or a disaster, and is part of your building block approach. The program is "function" driven, both in terms of emergency management functions and specific emergency response duties. For example, if mitigation practices have been identified as weak, what can you do? It's not enough to simply identify the problem.

To help develop a multi-year exercise program, the first step is to collect information that identifies specific potential or real problems. As we saw in previous lessons, this information comes from many sources, including:

- Past exercises
- Past events
- Skills that need practice
- Functions that seem weak
- Functions that are not exercised
- New facilities, personnel, or equipment
- Emergency Operations Plan (EOP) weaknesses or changes
- Need for role clarification
- Hazard analysis
- Recurring problems
- Threat & risk assessments

The next step is to prioritize the needs, with the most critical being first.

Once you've prioritized your needs, you can plan how you will address each need by using exercise activities in a multi-year exercise program.

Sample Matrix – Exercises to meet needs					
Workshop = W Drill = D Table-top = TTX Functional = FE Full scale = FSE					
NEED	1st Year	2nd Year	3rd Year	4th Year	5th Year
New Hazard	W	TTX	D	FE	FSE
New EOC	W				
Breakdown of Alert/Notification	W	W	W	FE	FSE
Breakdown of Alert/Notification	D	D	D		
Change in EOP	W	W	W	FE	FSE
Lack of training for damage assessment	W	W	W	FE	FSE
Lack of training for damage assessment	D	D	D		

Different exercises can be planned for one, several, or all the identified needs, depending on the urgency of the needs, and the time that you and your organization can commit to training. What is important is to plan your exercise program so that it meets the needs identified in the order in which they have prioritized.

What is meant by "functions" in the area of emergency response duties? Anyone responding to an emergency has a specific duty that helps in the overall response. In planning exercises, the focus is on functions rather than on types of emergencies. This is because preparedness in those functions is common to all emergencies. Your multi-year exercise plan will need to cover all functions that respond in a disaster or emergency.

An *example* of a multi-year municipal exercise plan might be:

- **Year 1** – Discussion-based exercises(s) (e.g. table-top, seminar, workshop)
- **Year 2** – Discussion-based exercises(s) (e.g. table-top, seminar, workshop)
- **Year 3** – Operations-based exercises- (e.g. drill, functional, small full scale)
- **Year 4** – Operations-based full scale exercise (where the municipal EOC (Emergency Operations Centre) is set up, the control group meets to make decisions, and there is a basic connection with the site)
- **Year 5** – Operations-based full scale exercise with multi-jurisdictional, cross border, multi-organizational participation, as appropriate.

Example: Multi-Year Exercise Program Strategic Plan

Organization: _____

Purpose: **This matrix can be used as a tool to develop and implement a progressive exercise program.**
Procedure: **Conduct an assessment of current functional readiness and determine which exercise activities would be most beneficial for each function based on current capabilities.**
Summarize your assessment on the matrix below in the column for the current fiscal year.
Projecting activities for each function progressively allows exercising with the intent to reach full capability testing, at the highest level, within a multi-year time frame.
Each activity could be designated on the matrix in the following manner:

Workshop = W Drill = D Table-top = TTX Functional = FE Full scale = FSE

Functions	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Alert, notification, warning					
Coordination					
Communications					
Damage assessment					
Individual/family assessment					
Resource management					
Financial management					
Emergency transportation					
Info & planning					
HazMat					
Logistics					
Evacuation					
Mass care					
Emergency social services					
Emergency public information					
Health & medical					
Fire fighting					
Search & rescue					

While the example shows a progression of different types of exercises from a less complex exercise to those that are more complex, be aware that at any point in the multi-year cycle, you may have a need for seminars and workshops, and other less complex exercises.

Updating Your Multi-year Plan

Your multi-year exercise cycle may run on a 5 year basis, you must continually update the schedule to take into account the lessons learned from previous exercises, to address changes in personnel, and to reflect changes in your organization's needs assessments. Every year, your Year 2 becomes your Year 1, and you add a new Year 5.

NEED	1ST YEAR	2ND YEAR	3RD YEAR	4TH YEAR	5th YEAR

Lesson 10 Test

Multi-year exercise program

1. True or false? A multi-year exercise program is a cycle of exercise activity of varying degrees of complexity, using a combination of exercise types to meet exercise specific objectives and program goals.

    A. ____True

    B. ____False

2. True or false? The multi-year exercise program should be based on the needs of the organization preparing for emergencies. The program would clearly identify the specific issues that need to be addressed in order of priority, with the most critical being first.

    A. ____True

    B. ____False

3. While a multi year exercise cycle may run on a 5 year basis, you must continually update the schedule to take the following into account. Choose all that apply.

    A. ____Lessons learned from previous exercises

    B. ____Changes in personnel

    C. ____Changes in an organization's risk assessments

    D. ____All of the above

Recap ....

In Part 4 we introduced you to:

- Why it's essential to annually update your multi-year exercise program

This concludes our course. As you prepare to take your final exam please visit our website for additional resources which include Vocabulary, Acronyms a Glossary and Templates at:

www.ontario.ca/emo.

Answer Key

Lesson 1   **Exercises and emergency management**
1. **A**, **B**, **C**
2. **D**
3. **Exercise**

Lesson 2   **Basics of an exercise program**
1. A. **3**   B. **4**   C. **1**   D. **5**   E. **2**
2. **B**, **C**, **D**
3. **A**
4. **A**
5. **B**
6. **B**, **C**, **D**, **E**
7. **B**

Lesson 3   **Key roles and responsibilities**
1. **A**
2. **B**
3. A. **4**   B. **1**   C. **5**   D. **3**   E. **2**
4. **C**
5. **A**, **C**, **D**
6. **B**

Lesson 4   **Building block approach**
1. **A**

Lesson 5   **Discussion-based exercises**
1. **A**
2. **D**
3. **A**
4. **B**, **D**
5. **A**
6. **D**
7. **C**

Lesson 6   **Operations-based exercises**
1. **A**
2. **B**
3. **A**
4. **C**

Lesson 7 Common exercise elements

1. **B**
2. **B**
3. **B**
4. **B While A is a more informal answer, B is more comprehensive and gives the information needed by a wide range of people.**
5. **A**, **C**

Lesson 8 8 steps to exercise design

1. A. **5**   B. **4**   C. **7**   D. **3**   E. **1**   F. **6**   G. **8**   H. **2**
2. **A**, **B**, **E**
3. **A**
4. **D**
5. **E**
6. **C**

Lesson 9 Exercise documentation

1. **F**
2. A. **3** B. **4** C. **1** D. **2**
3. Exercise Plan
4. **A**
5. **C**

Lesson 10 Multi-year exercise program

1. **A**
2. **A**
3. **D**