

**PAKISTAN LIFE SAVERS
PROGRAMME (PLSP)**

PLSP TRAINER MANUAL FOR LIFE SAVERS



**PAKISTAN
LIFE SAVERS
PROGRAMME**



Join hands, save lives

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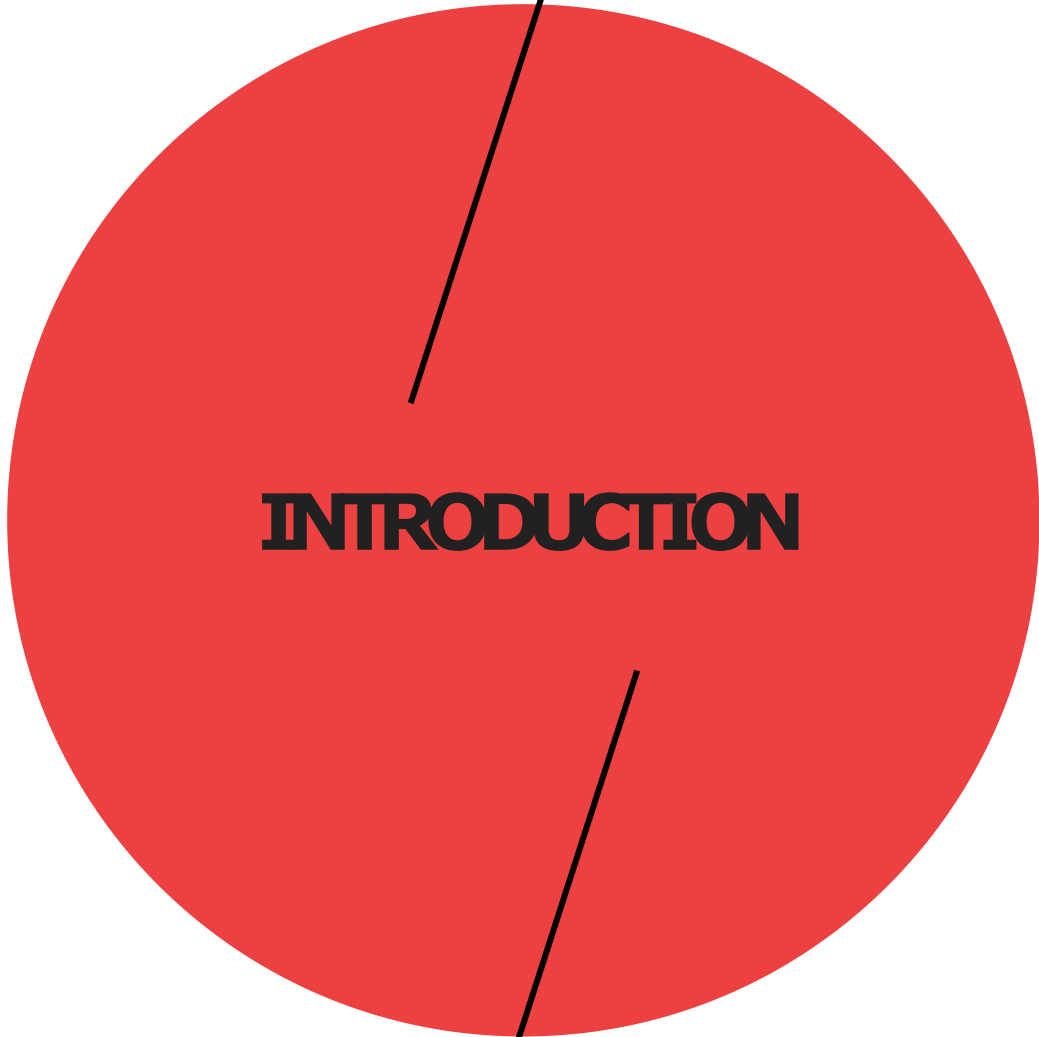
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01



INTRODUCTION

01

• **Need Assessment**

Deaths from Sudden Cardiac Arrest (SCA) and severe bleeding after injury continue to be a significant global public health issue. In case of cardiac arrest, every minute that goes without Cardiopulmonary resuscitation (CPR) decreases the chances of the victim's survival by 10%. Individuals suffering from severe bleeding can lose their lives if steps are not taken to stop the bleeding. Therefore, decreasing the response time for medical emergencies is crucial for patient survival and optimum outcomes.

Family, friends, or bystanders can intervene during the first few minutes of cardiac arrest and injury and save countless lives. Luckily, the two skills required to save a life—CPR and bleeding control—are easy to master for non-healthcare professionals and simple to teach.

To address this massive public health problem, many national and international organizations have joined hands and taken up an initiative in the form of the Pakistan Life Savers Programme (PLSP). PLSP is a national movement aimed at training the citizens in these life-saving skills and consequently increasing the bystander response and overall survival rate.

• **Vision**

To develop a nation of empowered citizens and youth with the skills to save lives.

• **Mission Statement**

PLSP is a youth skill-building and empowerment programme that aims to train 10 million people in hands-only CPR and bleeding control. PLSP will also:

- Deliver evidence-based programmes in life-saving skills.
- Develop a network of Life Savers, with a focus on the government's largest workforce of teachers, and the large youth population of Pakistan.
- Establish a consortium of local and international partners to create a global impact.
- Be a model for interdisciplinary approaches to development challenges.

• **Goals**

The main goal of PLSP is to create a national movement by mobilizing the citizens of Pakistan and enabling them to become trained bystander PLSP Life Savers. PLSP also aims to improve the survival rate for out-of-hospital cardiac arrests and traumatic bleeding by ensuring early life-saving interventions. It will also:

- Contribute towards a decrease in the number of preventable deaths.
- Serve as a model for health skills development in the realm of trauma and emergency for the developing world.
- Contribute towards the generation of new knowledge in the area of cardiac arrest and life-threatening bleeding.
- Result in the engagement of youth and school programmes in learning hands-only CPR and bleeding control skills.

02



**OVERVIEW OF THE
SCIENCE**

02

- **Overview of CPR**

Cardiac arrest is most commonly caused by an abnormal heart rhythm called “ventricular fibrillation (VF).” During ventricular fibrillation (VF), although there is some cardiac activity present, this certainly is not enough to maintain adequate perfusion to the vital organs of the body like the brain and heart.

Hence, VF can result in death quickly if effective chest compressions or Cardiopulmonary resuscitation (CPR) is not performed immediately in patients suffering from cardiac arrest.

CPR, if performed at the earliest minutes of cardiac arrest, enhances the chances of survival. Adenosine triphosphate (ATP), an energy-carrying compound, powers the energy-requiring processes of the body and is utilized by the heart for contraction. The ATP levels inside the heart muscle decrease with time in an untreated VF without CPR.

During prolonged unsupported VF, the ATP levels deplete to such an extent that the heart loses its mechanical or contractile activity, and the chances of survival decrease significantly.

The two main components of hands-only CPR include compressions and decompressions. Each component is equally significant and is described below:

- **Compressions:** Compressions correlate to the systole phase of the cardiac cycle. During systole, the heart contracts, blood is ejected from the heart, and all the vital organs are perfused except the heart. When the chest is pressed during CPR, it increases the chest pressure and leads to the ejection of blood from the heart. Consequently, chest compressions performed as per guidelines would create adequate pressure to increase the output of the heart and perfusion of organs.
- **Decompressions:** This is similar to the diastole or relaxation phase of the cardiac cycle. During decompression, the chest recoils, and there is a decrease in chest pressure. This creates a vacuum, and blood returns to the heart and refills it. Remember that the perfusion of the heart occurs during diastole through the coronary vessels. Hence, an effective recoil would ensure both effective refilling and perfusion of the heart.

- **Overview of CPR**

High-quality hands-only CPR increases the chances of survival of patients with cardiac arrest. To ensure this, several metrics need to be considered while performing chest compressions. These metrics include the following:

- Compression rate
- Compression depth
- Chest recoil
- Intervals between compressions.

During this course, your trainers will help you practice and master these skills to perform effective CPR if required in a real-life situation.

References:

1. The Resuscitation Academy
2. AHA Guidelines 2020, an EMS overview

• **Overview of Bleeding Control**

Uncontrolled bleeding is globally known as the leading preventable cause of death among trauma victims. About 40% of trauma fatalities happen because of severe blood loss, out of which around 33 to 56% occur before reaching the hospital.

It is necessary to minimize or stop blood loss before help arrives, as the outcome of hospital-based management depends on the amount of blood a victim has lost before reaching the hospital.

Blood is a fluid present inside the body whose primary function is to transport oxygen and nutrients to the organs and remove waste products. Severe blood loss makes it difficult for the heart to pump sufficient blood to the body. As a result, perfusion to the vital organs of the body like the brain and heart diminishes, resulting in long-term disability or death.

Direct pressure and wound packing are used as the first line of defense in case of life-threatening bleeding. The underlying principle of bleeding control is that pressure application over a wound results in narrowing or constriction of the blood vessels supplying the injured area. This slows down the flow of blood through these vessels and promotes clotting. The pressure should ideally be applied for at least 10 minutes to control the bleed effectively.

During this course, your trainers will help you practice and master these skills to control bleeding if required in a real-life situation effectively.

References:

1. Kauvar DS, Lefering R, Wade CE. Impact of hemorrhage on trauma outcome: an overview of epidemiology, clinical presentations, and therapeutic considerations. *Journal of Trauma and Acute Care Surgery*. 2006 Jun 1;60(6): S3-11.

2. Stop the bleed. American College of Surgeons
<https://www.stopthebleed.org/>

03



03

- **Trainer Essentials Overview**

Welcome to the Pakistan Life Savers Programme (PLSP) Trainer Course. This course is designed to prepare Trainers to teach Pakistan Life Savers Course.

It educates participants on how to use the training material and conduct hands-on sessions to further teach hands-only CPR and bleeding control skills.

- **Educational Design**

The PLSP Trainer Course is taught in a classroom-based format. To become a PLSP Trainer, participants must be present for the entire duration of the course and need to participate in the hands-on session as well.

After completing the Trainer course in person, the Trainer must hold two sessions under the supervision of Master Trainers. They will then be certified as PLSP Trainers to hold the sessions independently.

- **Steps to Enroll for PLSP Trainer Course**

There are 2 steps to become a PLSP Trainer. For successful completion, trainer candidates must:

- Successfully complete the Pakistan Life Savers Course and the PLSP Trainer Course.
- Hold two training sessions for Pakistan Life Savers under the supervision of Master Trainers within 06 months of taking the course.

• Role of a PLSP Trainer

As a PLSP Trainer, your role is critical for training the Pakistan Life Savers and, subsequently, achieving successful training outcomes. Please use this manual to prepare your classroom. During the course, the Trainer should:

- Encourage discussions to improve confidence and motivation towards training.
- Listen to students' responses and provide feedback to ensure that they've understood the learning concepts.
- Observe students' actions during the hands-on session and coach them as and when needed.
- Give constructive feedback.

• Using this Manual

When

Before the Course

During the Course

How to use?

- Review the training manual to understand:
 1. Objectives for each session
 2. Your role for each session
 3. Resources that you need for each lesson
 - Make notes of things you want to remember or add and consider preparing a list of questions and answers to use during a debrief of the lessons.
-
- Follow each Lesson Plan as you conduct the course.
 - Make sure you have all the resources, equipment, and supplies ready for each lesson.
 - Help the trainer candidates achieve the objectives identified for each lesson.

• Trainer to Participants Ratio

Given the current social distancing needs and to optimize the teaching practice during hands-on sessions, it is ideal that 1 Trainer conducts Pakistan Life Savers Course with up to 8 to 10 participants .

One manikin would be needed to train 4 to 6 participants. The total number of participants would therefore depend on the number of available Trainers.

Number of Participants:

- 4 to 6 participants per PLSP Trainer for hands-on training and 8 to 10 per Trainer if COVID restrictions are relaxed
- 40 to 50 participants per session

• Course Equipment and Materials

Once the course has been scheduled, contact your Institution's PLSP designated team to provide you with resources for this course.

The equipment required for each class held is listed in the table below. All equipment used must be in proper working order and in good condition.

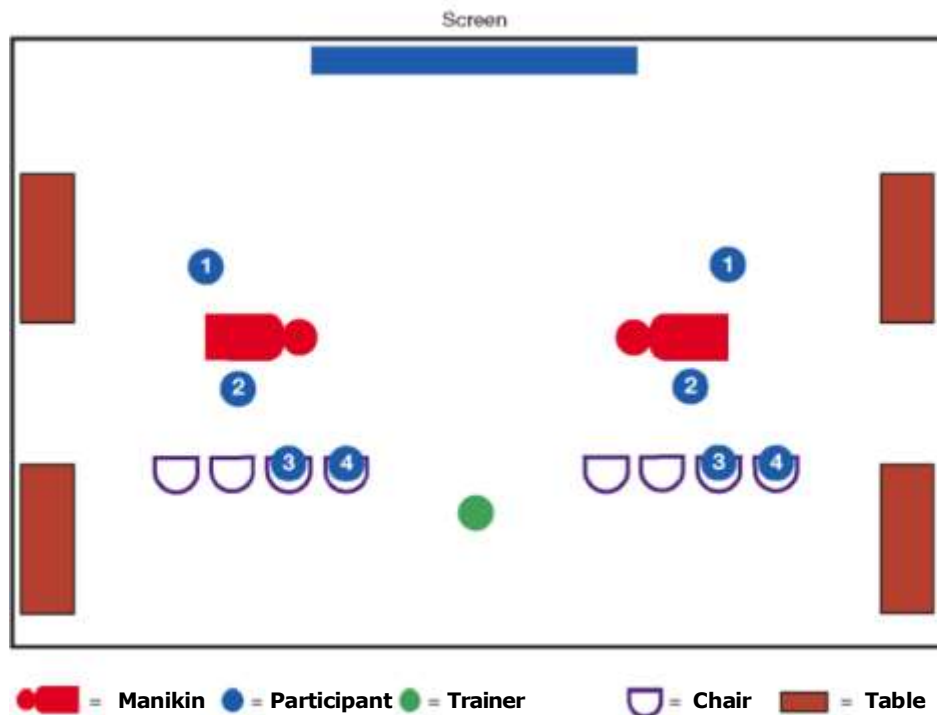
Materials Needed	Quantity
PLSP Trainer Manual for Life Savers	One per Trainer
Laptop with PLSP Training videos saved or USB containing the same. If not available, hard copy or Powerpoint presentations of the video can be used.	One per Trainer
CPR Manikin Manikin Cleaningsupplies Bleeding limb moulage	One per 4 to 6 participants

• Room Requirements

When selecting a location for the PLSP Trainer Course, make sure the room has:

- Adequate space to allow for social distancing such as a classroom, assembly hall, garden, playground, auditorium, seminar room, etc
- Multimedia (Projector, Screen, and Laptop)
- A blackboard/whiteboard, in case electricity supply is interrupted or not available
- Ideally a firm surface with carpeting/mats or tables

Please refer to the diagram below:



*Reference: American Heart Association (AHA): Use this as a reference and modify according to your classroom setting and space.

• Ordering Materials

- A training space (e.g. classroom)
 - CPR manikin or alternative
 - 'Stop the Bleed' manikin or alternative
 - Alcohol wipes (during COVID19)
 - Disposable gloves (during COVID19)
 - Masks (during COVID19)
 - Stationery
 - Photocopies of attendance sheet, skill evaluation checklist, classroom evaluation checklist, and trainer evaluation checklist.
-

• Who Can Take the Course?

Eligibility Criteria:

- **Pakistani Life Saver** should be registered as a student.
- **PLSP Trainer** should be registered as a teacher.
- **PLSP Master Trainer** should be registered as an employee of a PLSP Partner Institute.

Duration of the Course:

2 - 2.5 hours

04



04

● Course Objectives

As a Pakistan Life Saver, the trainee will be able to:

- Ensure their own safety while responding to an emergency situation, along with the safety of the victim - **Scene Safety.**
- Determine a victim's response and level of consciousness - **Check for Response.**
- Effectively communicate with ambulance services and other responders on sight with focus and clarity –**Call for Help.**
- Perform high-performance chest compressions in case of cardiac arrest - **CPR.**
- Stop a victim from potentially bleeding to death in case of severe bleeding – **Stop the Bleeding.**
- Practice preventive measures to stay safe from COVID19 –**COVID Safety.**

• Glossary

- **Annexure:** A supplement or appendix to a written document.
- **Bleeding Control:** Actions that control bleeding from a patient who has suffered a traumatic injury or has a medical condition that has caused bleeding.
- **Chest Compression:** The application of pressure to the chest to prevent it from expanding.
- **Chest Compression Rate:** The actual rate used during each continuous period of chest compressions within a 1-minute interval.
- **Chest Compression Depth:** The total depth attained by applying chest compressions on a victim of cardiac arrest.
- **COVID19:** Coronavirus disease (COVID19) is an infectious disease caused by the SARS-CoV-2 virus.
- **Hands-only CPR:** An emergency life-saving procedure performed when the heart stops beating.
- **Didactic Session:** A teaching method that follows a consistent scientific approach or educational style to present information to students.
- **Trainer activity:** An abstract term for any planned undertaking that improves the trainee's qualifications, knowledge or expertise.
- **Master Trainer:** An employee of PLSP Partner Institutes who will train PLSP Trainers.
- **Metronome:** A device that produces an audible click or other sound at a regular interval that can be set by the user.
- **Manikin:** A model of the human body used for teaching purposes in CPR and bleeding control.
- **Pakistan Life Saver:** A student trained to perform CPR and bleeding control under PLSP.

• Glossary

- **Pakistan Life Savers Course:** A course conducted by PLSP to train the target audience (such as school-going students) in lifesaving skills (bleeding control and chest compression).
- **PLSP Trainer Course:** A course conducted by PLSP Master Trainer to train PLSP trainer.
- **PLSP Trainer Manual:** A booklet comprising all the essential lesson details and protocols used by PLSP Trainers to conduct sessions.
- **PLSP Training video:** Videos shown during training sessions of a trainer.
- **Sudden Cardiac Arrest (SCA):** A condition which results in the cessation of all activities in the heart.
- **Skills Checklist:** An assessment checklist used in examining skills taught during the Pakistan Life Savers Course.
- **Training Site:** Venue where PLSP trainings are conducted.
- **Trainers:** PLSP instructors who train Pakistan Life Savers
- **Teach Back Method:** A teaching method in which the students are asked to recall what their trainer taught them.
- **USB Flash Card:** A USB device given at the end of a PLSP session with all the content that was taught during the class.
- **Wound Packing:** A method to control bleeding from a deep wound by stuffing it with a clean cloth or gauze piece before applying pressure for 10 minutes.

• Programme Agenda

1. Classroom session <ul style="list-style-type: none">• Attendance• Introduction to the team and PLSP• Didactic session (PLSP Training video with debriefing)	Duration: 45 minutes
2. Hands-on Practice Session	Duration: 45 minutes
3. Skill Assessment	Duration: 30 minutes

05

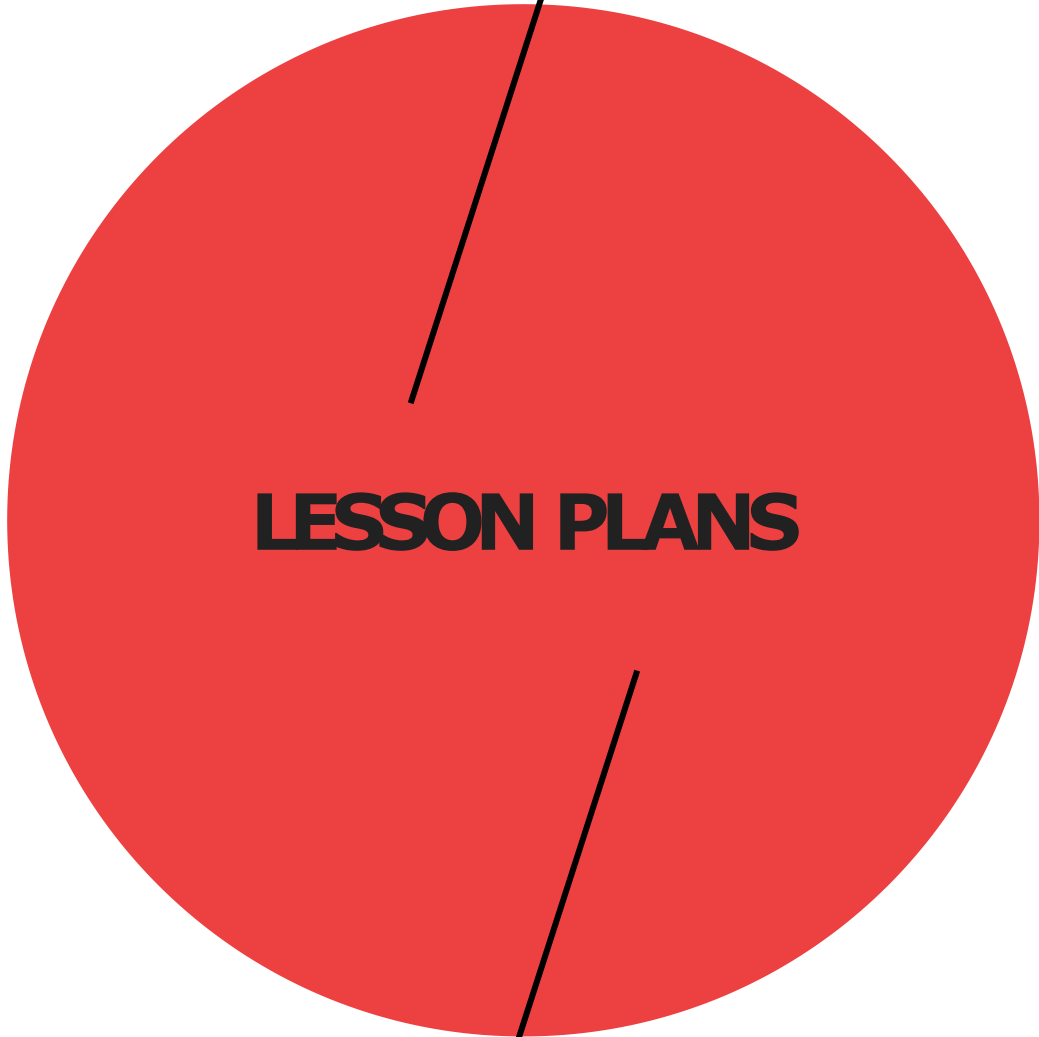


PRE-COURSE

05

Trainer Tips	<ul style="list-style-type: none"> To prepare for your role as a PLSP Trainer, you need to thoroughly review the PLSP Training materials, the PLSP Training video, and this manual.
30 to 60 Days Before the Course	<ul style="list-style-type: none"> Schedule a room that meets the room requirements for the course, including the social distancing needs. Reserve all needed equipment to teach the course. Schedule additional Trainers, if needed, depending on the size of the class.
At least 3 Weeks Before the Course	<ul style="list-style-type: none"> Review the PLSP course materials, including: <ol style="list-style-type: none"> 1. Pakistan Life Savers Course video 2. PLSP Trainer Manual
1 week Before the Course	<ul style="list-style-type: none"> Confirm room reservations and all required equipment needed are available for the course.
Day Before the Course	<ul style="list-style-type: none"> Set up the room and make sure that all technology and equipment are working correctly. This can also be done before class begins the day of the course if the room is not accessible the day before. Coordinate the roles and responsibilities with additional Trainers, if needed, to fulfill the course agenda and to ensure efficiency and timing of the course. Ensure that all course paperwork is in order. Verify that Trainer candidates have successfully passed the Pakistan Life Savers Course.
Day of the Course	<ul style="list-style-type: none"> Arrive at the course location one hour before the session to complete the following: <ol style="list-style-type: none"> 1. Have the video ready to play before Trainer candidates arrive and make sure it is working properly with sound. 2. Submit all relevant documents to the PLSP secretariat.

06



LESSON PLANS

06

• Introduction

Time: 5 minutes

Overview:

Participants should be briefed regarding the expected outcomes and objectives of the course.

Objectives:

To discuss the learning outcomes and expectations from the course.

Presentation Materials: PLSP introductory slide

Practice: No practice for this segment

• **Trainer Activity**

Do's

- Greet the participants and introduce yourself through the following statement: I am (Name) from (Institute Name). I am a Trainer from the Pakistan Life Savers Programme (PLSP).
- Introduce PLSP –Play the slides on the Vision and Mission of PLSP.
- Use the prompts given in the 'notes' section of the slides.
- Brief participants regarding the course structure –Use the Agenda slide in the background.
- Explain how the course is divided into didactic and hands-on components.
- Mention that the didactic component is video- or poster-based, with a debriefing in between.
- Mention that each participant will be given a chance to practice individually during the hands-on session.
- Use a respectful tone throughout, particularly when mentioning any deaths.
- Use animation for the text on the slide as this helps build anticipation.

Don'ts

- Encourage uniform communications, do not delineate from the slides.
- Distress or trigger of previous past individual experience, do not overdramatize the message.

• **Module 1: Safety and Communication**

Time: 10 minutes

Overview:

This module serves to emphasize the importance of provider safety in the face of a medical emergency and highlights the need for clear and concise communication with ambulance services.

Objectives:

At the end of this session, participants will be able to:

- Understand the importance of assessing scenario safety and take measures for their own safety.
- Recall important contact numbers pertaining to ambulance services.
- Get an overview of the information required by ambulance services.

Presentation Materials: PLSP Training video from 00:00 –08:12 minutes

Practice: No practice for this segment

• **Trainer Activity**

Do's

- Play video from 00:00 –08:12 minutes.
- Pause video during safety photos as prompted at 06:15 minutes.
- Pause for the debriefing after 8:12 minutes.
- Ask participants to take out their phones and save ambulance numbers to facilitate maximum recalling ability.

Don'ts

- Take questions –rather ask participants if they can recall ambulance numbers and what information needs to be given.
- Take questions when playing the safety photos –rather, ask why the scene may or may not be safe.

• Module 2: Cardiac Arrest

Time: 17 minutes

Overview:

The purpose of this module is to enable the participants to recognize the signs of a cardiac arrest and understand the steps of hands-only CPR.

Objectives:

At the end of this segment, participants should be able to:

- Recognize the signs of cardiac arrest.
- Approach the patient and check for a response.
- Recall steps in **Call for help**.
- Be familiar with the method of performing chest compressions.
- Understand the importance of proper body position during chest compression.
- Understand the appropriate rate and depth of chest compressions.

Presentation Materials: PLSP Training video from 08:15 –15:04 minutes

Practice: No practice for this segment

• Trainer Activity

Do's

- Play video from 08:15 –15:04 minutes.
- Pause for a debriefing at 15:04 minutes.
- Demonstrate all the steps yourself on a manikin.
- Emphasize the importance of proper body position while performing chest compressions.
- The Trainer should incorporate metronome while performing compressions (metronome should be set at 110 beats per minute).

Don'ts

- Pause in between 08:15 -15:04 minutes.
- Take any questions –rather, ask participants to recall steps involved in responding to cardiac arrest and steps of hands-only CPR.

• **Module 3: Bleeding Control**

Time: 16 minutes

Overview:

The purpose of this module is to enable the participants to stop severe bleeding.

Objectives:

At the end of this module, participants should possess the right amount of knowledge regarding the following bleeding control techniques:

- Applying pressure
- Wound packing

Presentation Materials: PLSP Training video from 15:09-21:03 minutes

Practice: No practice for this segment

• **Trainer Activity**

Do's

- Play video from 15:09 –21:03 minutes.
- Pause for a debriefing at 21:03 minutes.
- Demonstrate all the steps yourself on a manikin.
- Emphasize on the importance of applying pressure for at-least 10 minutes.

Don'ts

- Pause in between 15:09 -21:03 minutes.
- Take any questions –rather, ask participants to recall steps involved in bleeding control.

• **Module 4: COVID-19**

Time: 03 minutes

Overview:

The purpose of this module is to make participants understand and recognize the symptoms of COVID19 and understand the preventive measures that could help them stay safe from infection.

Objectives:

At the end of this segment, participants should have the necessary knowledge regarding:

- The symptoms of COVID19
- The steps to prevent transmission of infection

Presentation Materials: PLSP Training video from 21:08-23:55 minutes

Practice: No practice for this segment

• **Trainer Activity**

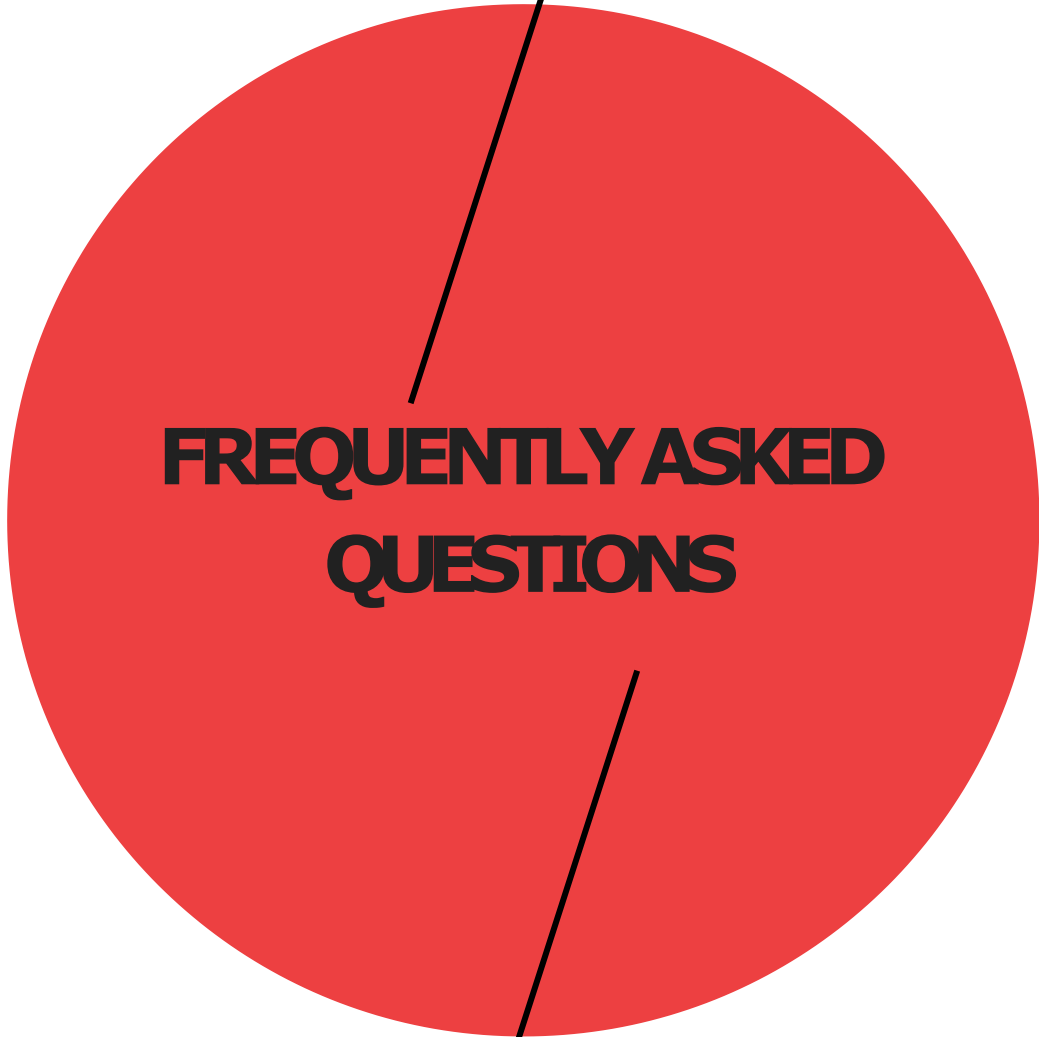
Do's

- Play video from 21:08 –23:55 minutes.
- Pause for a debriefing at 23:55 minutes.

Don'ts

- Pause in between 21:08-23:55 minutes.
- Take any questions –rather, ask participants to recall steps involved in symptoms and prevention of COVID-19 transmission of infection.

07



07

This section is meant to cover the queries that the participants may have for the Trainer. Please note that this is not an exhaustive list and we encourage you to reach out to the Trainers in case you are asked a question that you are unsure about.

- **General Questions**

- 1. Why do ambulance services ask so many questions, especially during a crisis like a cardiac arrest or life-threatening bleeding?**

It's an ambulance services' job to ensure that they have the proper equipment and workforce needed to respond optimally when they arrive. For example, if a child has collapsed instead of an adult, you need to relay this information to them because any adult size equipment may not work in this case. They can also enable you to help the victim in the best possible way.

- 2. Should I take consent before doing hands-only CPR or bleeding control?**

For CPR, consent can be taken from a family member if present (this can be helpful in case there is an advance directive by the patient). If no one is accompanying the patient, you should start CPR, provided the scene is safe.

For bleeding control, if a patient is responsive or accompanied by a family member, consent must be taken to expose the bleeding site and apply maneuvers to stop the bleed. If a patient is unresponsive and is unaccompanied by a family member, you should proceed with bleeding control maneuvers to save a life.

- **Module 01: Safety & Assessment**

- 1. What help can I still give a victim if the situation is not safe?**

After ensuring your own safety and moving to a secure location, call the ambulance as soon as possible. Provide all the necessary details of the victim (i.e., age, address, and problem). The ambulance services will reach the site and guide you to call other services as needed (i.e., the police).

• **Module 02: Cardiac Arrest & Hands-Only CPR**

1. What if I am unable to ascertain if a victim is breathing or not?

The primary focus is to check if a victim is breathing normally. Suppose a victim is unconscious and breathing abnormally, like snoring or gasping (breathing very slowly, barely enough to see a visible chest rise). In that case, you have to assume they are in cardiac arrest and start CPR. If you are unsure about the victim's breathing, start CPR on an unconscious victim. The benefits of initiation of CPR in cardiac arrest outweigh the relatively low risk of injury for patients not in cardiac arrest.

2. How long should I continue hands-only CPR?

You should continue CPR till:

- The victim shows signs of life (becomes conscious and/or starts breathing normally)
- Ambulance services arrive
- A second trained responder arrives or you get tired (switch roles)
- A shock has been delivered by the defibrillator (interruption between the shock and chest compressions should be less than 05 seconds)
- The scene becomes unsafe

3. Can I harm a patient by performing hands-only CPR? (e.g. break ribs during CPR)

Overall the benefits of CPR in cardiac arrest outweigh the relatively low risk of injury. The risk of causing an injury by doing CPR is extremely low.

4. What if I am unable to revive someone with CPR?

Not all victims who receive CPR will survive. While CPR is the only hope for someone experiencing sudden cardiac arrest, it is not a guarantee of life. Be easy on yourself. Your attempt to help someone is what matters.

5. When should I not perform CPR?

CPR must be performed in every patient of cardiac arrest. The decision of stopping CPR should only be made by a medical expert.

6. What should I do if I am the only rescuer present near the victim of a cardiac arrest?

There could be two scenarios if you are alone with an unconscious patient:

- Witnessed cardiac arrest
- Unwitnessed cardiac arrest

Both scenes are dealt with differently.

- **Witnessed Cardiac Arrest:** If you are alone and witnessed the patient collapse in front of you, immediately call emergency services (ambulance services), put your phone on speaker, and start CPR. After 2 minutes of hands-only CPR leave the patient, run and ask for help. Then return quickly and resume CPR till medical help arrives.
- **Unwitnessed Cardiac Arrest:** If you are alone and you enter a scene where somebody is already collapsed, or the collapse was unwitnessed, immediately call an emergency service (ambulance service) and start CPR simultaneously while your phone is on speaker mode. If you don't have a phone, you may perform hands-only CPR for 2 minutes. Then run and ask for help, return to the patient and resume chest compressions till medical help arrives.

7. Which hand should I use (dominant hand or non-dominant) while performing CPR?

You may use the heel of your dominant hand to perform chest compressions. The dominant hand is the hand you use more frequently to perform most activities like writing, cutting, catching, and throwing a ball or carrying weight. Your dominant hand can be either left or right. However, literature shows that it does not appear to matter whether the dominant or non-dominant hand is in contact with the sternum.

8. What should I do if a patient of cardiac arrest is bleeding at the same time?

This is a difficult situation. However, always remember that CPR must be initiated as soon as possible in any patient with cardiac arrest even when they are bleeding profusely. If there are multiple rescuers present at the site, one rescuer should try to stop the bleed while the other continues to perform CPR.

9. Can I still perform CPR while the victim is not on a firm surface? (e.g. if the victim is lying on a bed)

CPR should generally be performed where the victim is found as long as high-quality chest compressions can be delivered. However, performing CPR on a firm surface is preferred, keeping the victim in a supine position.

10. Why do we turn the patients in a lateral position (recovery position) when they are unresponsive but breathing normally?

If a victim is unconscious but breathing normally, it is preferable to turn the victim in a lateral/side-ways position. This allows for the victim's airway to remain open, allowing them to breathe normally. If there is any vomit, fluid, or mucus, the position will enable it to be easily drained out. There is no preference for the side (right or left) in a non-pregnant victim; however, a left-lateral position is advised for pregnant women.

11. Can I perform CPR on a pregnant patient?

Yes, CPR must be performed on patients who are in cardiac arrest, even if they are pregnant.

12. Can I perform CPR in patients with burns or chest injuries?

Yes, CPR must be performed in patients with assumed cardiac arrest, even if they have chest injuries or burns. Ensure the safety & feasibility of CPR before you commence chest compressions.

13. Should I continue CPR during transportation of a patient from the site of a cardiac arrest to the ambulance?

Ideally, CPR must not stop during transportation. If the rescuers cannot perform CPR, they should make sure to resume it with minimum interruptions.

The primary considerations when determining if a victim needs to be moved before starting resuscitation are the feasibility and safety of providing high-quality CPR in the location and position in which the victim is found. The effectiveness of CPR appears to be maximized with the victim in a supine position and the rescuer kneeling beside the victim's chest. It is thought that the optimal chest compressions are best delivered with the victim on a firm surface.

• Module 03: Bleeding Control

1. Can we use natural remedies to stop the bleed?

Natural remedies, like the use of tea bags after a dental procedure to control gingival bleeding, have long been famous. However, these are not effective for the control of severe, life-threatening external bleeding. Studies show that manual compression achieved haemostasis in a shorter average time than pressure dressings/bandages/devices. Hence, any natural remedy, such as applying ice, witch hazel, etc., cannot control massive bleeding at the site of trauma.

2. Should I move the limb or apply ice at the site of injury in a bleeding patient?

Specialized maneuvers like stabilization of the injured limb should only be applied by trained rescuers or medical persons. If you are not a trained rescuer or medical person, you should only apply pressure at the bleeding site to control the hemorrhage.

3. Can the bleeding control techniques be used in case of facial or abdominal bleeding?

The scope and the skills taught in this course are limited to severe bleeding from limbs only. For bleeding from any other part of the body, including the face, chest, and abdomen, please seek expert medical help as soon as possible.

• Module 1A: Scenario Based Learning with Demonstration on Hands-only CPR

Time: 45 minutes

Overview:

The purpose of this module is to enable participants to practice hands-only CPR using scenarios prepared by the Trainer.

Objectives:

At the end of this segment, participants should be able to perform effective chest compressions.

Practice: Hands-only CPR on manikins

• **Trainer Activity**

Do's

- Divide participants into groups of 3-6 participants per one Trainer.
- Introduce yourself again and ask participants to introduce themselves.
- Present the following scenario: You are walking on a footpath along the main Shah-re-Faisal. It is the middle of monsoon season, and you can see puddles of rainwater throughout the road. Suddenly an elderly man standing near a mango stall collapses. How do you respond? **(Refer to Page Number 40 for more scenarios).**
- Utilize the 'teach back' method –ask participants to recall and verbalize the steps taken to respond to cardiac arrest.
- Ask participants to demonstrate all steps after the 'teach back' segment individually.
- Download the free metronome app on your cell phone.
- Encourage the use of metronome during chest compressions.
- Make participants count aloud as '1-1000, 2-1000, 3-1000, 4-1000.'
- Give feedback to the participants only after they have finished their practice.
- Give positive feedback once a student has finished practicing –something to the effect of 'Congratulations! You just saved a life!'
- Encourage the participants to practice for 2 minutes.

• **Module 1B: Scenario Based Learning with Demonstration of Bleeding Control**

Overview:

The purpose of this module is to enable the participants to practice bleeding control using scenarios prepared by the Trainers.

Objectives:

Participants should practice and demonstrate the following skills:

- Identifying life threatening bleeding
- Applying pressure
- Wound packing

Practice: Bleeding control on manikin

• **Trainer Activity**

Do's

- Divide participants into groups with 4 to 6 participants per 1 Trainer and 1 manikin
- Introduce yourself again and ask participants to introduce themselves.
- Present the following scenario: You are in the kitchen, baking a pie. Your nine-year-old nephew is helping cutting up the crust. You are trying to work out the oven setting when you hear him crying. You turn and see that he accidentally plunged a sharp knife into his arm, which is now bleeding. How can you respond? **(Refer to Page Number 40 for more scenarios).**
- Utilize the 'teach back' method –ask participants to recall and verbalize the steps taken to respond to severe bleeding.
- Ask participants to demonstrate all steps after the 'teach back' segment individually.
- Give positive feedback once a student has finished practicing –something to the effect of 'Congratulations! You just saved a life!'

• Skill-based Evaluation

Time: 30 minutes

Overview:

The purpose of this module is to test the skill-based learning outcomes of participants.

Objectives:

Participants should be tested in the following skills through scenario-based demonstrations:

- Check for scene safety
- Check for response
- Call for help
- Perform effective chest compressions
- Apply pressure in case of severe bleeding
- Do wound packing if bleeding persists

• Trainer Activity

Do's

- Conduct the assessment individually.
- A manikin should be provided to the participants.
- Use the Assessment Checklist for evaluation.
- Assess the participant's skills following the checklist.
- First, give a cardiac arrest scenario and evaluate accordingly.
- Then give a life-threatening bleeding scenario and evaluate accordingly.
- Cardiac Arrest scenario: "You are at the National Stadium Karachi during a cricket match. As the crowd stands to cheer, you notice an elderly man having trouble getting up. Moreover, his hand clutches his chest with a pained expression on his face. As you look on, he collapses. How will you respond?"
- Bleeding scenario: "You are at home working while your 6-year-old nephew is jumping on the couch behind you. There is a glass-top table in front of the couch. Suddenly there is a crash, and you turn to see the child on the floor with glass shards around him. He is crying and bleeding from his hand. How will you respond? (**Refer to Page Number 40 for more scenarios**).

- **You may end the session once:**

- **All participants have gone through the skill assessments.**

Participants who have failed to demonstrate satisfactory skills during the assessment should be required to stay back for a debriefing. In the debriefing, they should be instructed to retake the Pakistan Life Savers course on the next available date. The Trainer should use an uplifting and positive tone and try not to discourage them. They should remind them that the ultimate goal is to become a Life Saver.

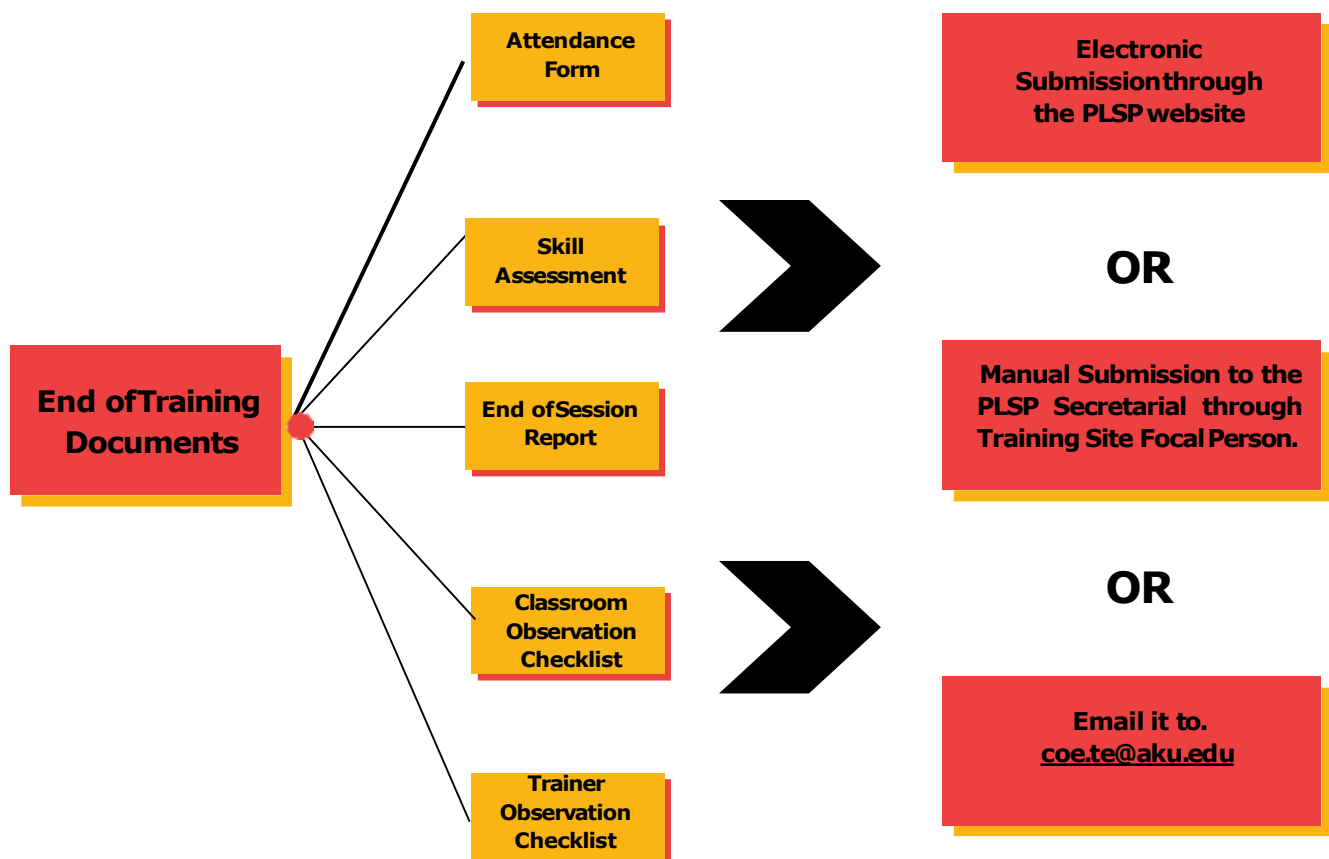
• Post-Training Submission Process

At the end of the session, the Trainer will submit the following documents with complete information to the PLSP Secretariat. The Trainer can submit these documents electronically through the PLSP website if the internet facilities are available. Alternatively, they can submit these documents to the Focal Person/Coordinator of the training site, who will then be responsible for submitting the documents to the PLSP Secretariat.

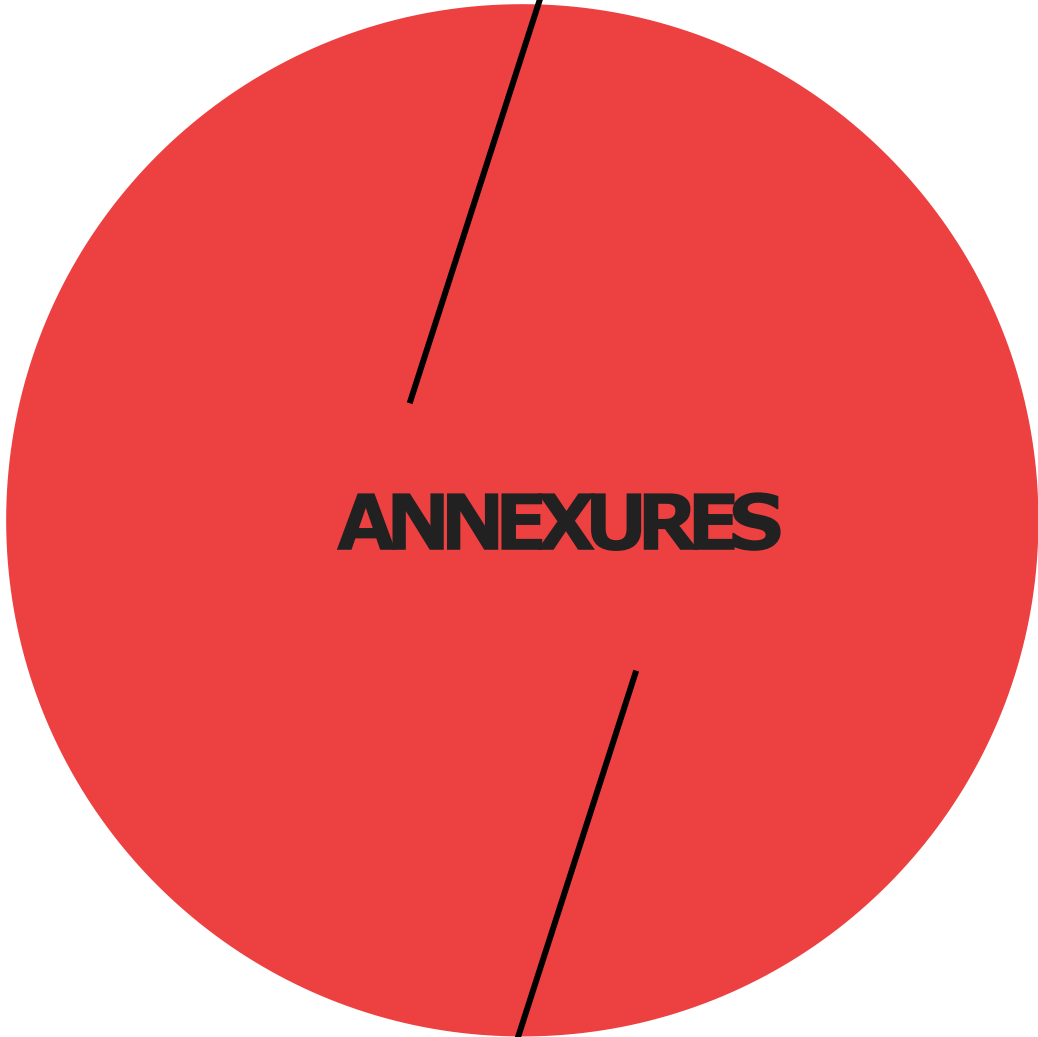
List of documents to be submitted by the Trainer at the end of the session:

- Attendance Form
- Skill Assessments with scores
- End of Session Report
- Classroom Observation Checklist
- Trainer Observation Checklist (only for evaluation of Trainers/Master Trainers)

• Flow Diagram of the Post-Training Submission Process



08



ANNEXURES

08

- Slide 1

Pakistan Life Savers Programme (PLSP)




The Vision

To Develop A Nation Of Empowered Citizens And Youth With
The Skills To Save Lives.




- Slide 2

Pakistan Life Savers Programme (PLSP)



The Mission
Train 10 million citizens as “Life Savers of Pakistan” in the skill of quality CPR and bleeding control

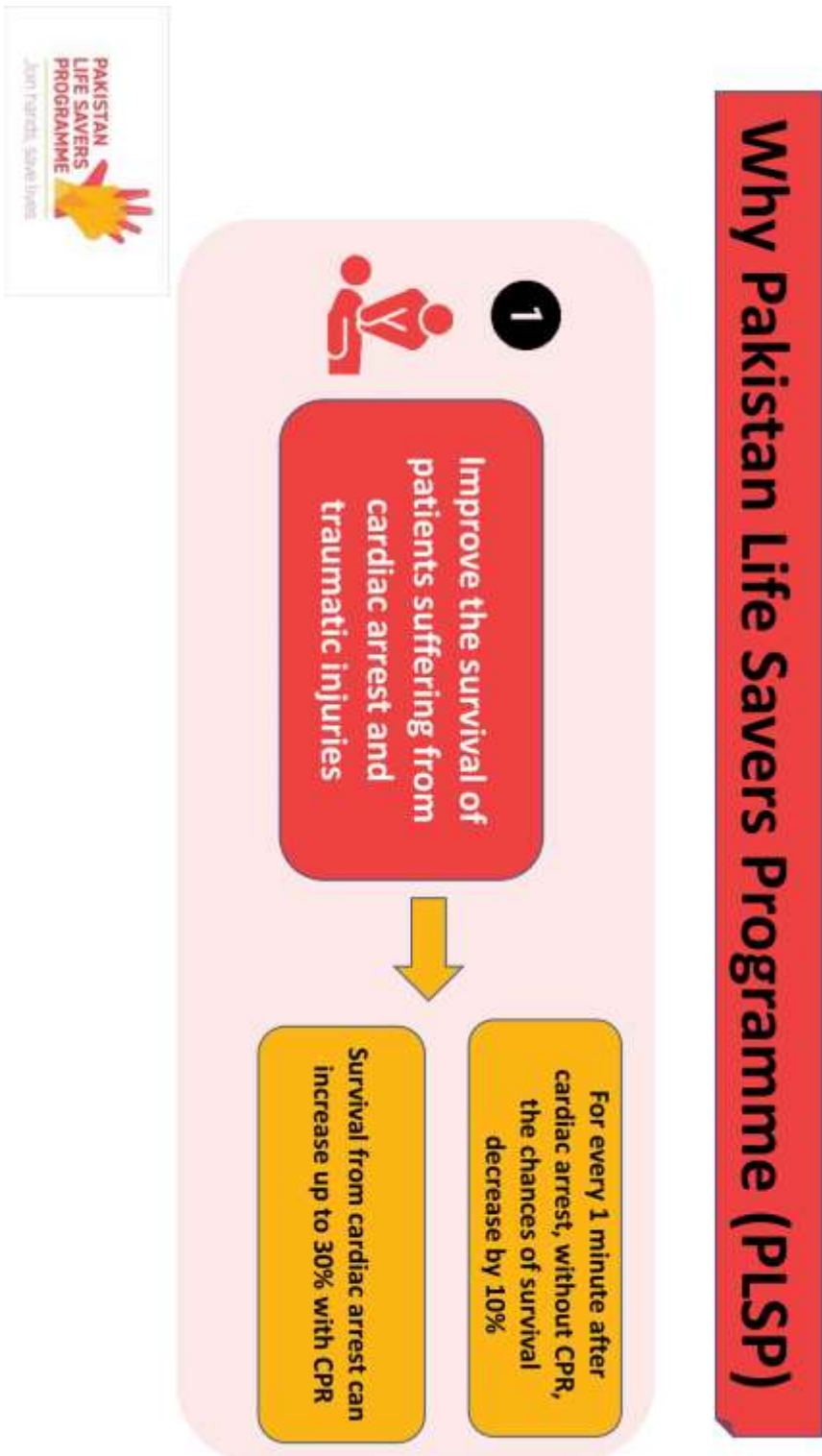


- **Slide3**

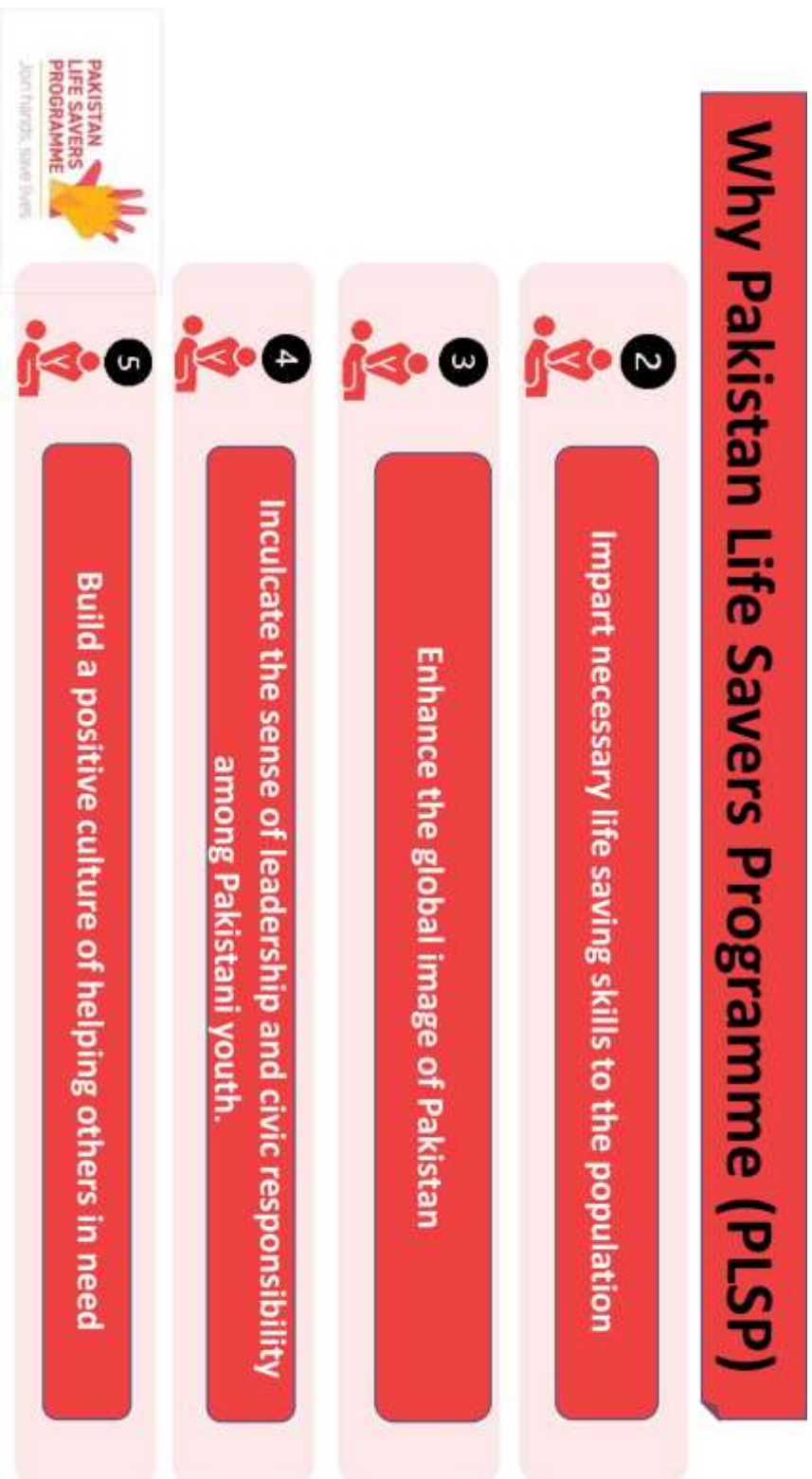


Why Pakistan Life Savers Programme (PLSP)

- **Slide4**



- Slide 5





Pakistan Life Savers Programme Skills Assessment

Date: _____

Name: _____		School/Training Site: _____	
Email: _____		Contact no: _____	
Critical Performance Criteria – CPR (Each participant should be assessed for atleast 02 minutes)			
<p>Level of Competency 1: No command over skills - requires close supervision</p> <p>Level of competency 2: May require moderate supervision</p> <p>Level of competency 3: Requires little or no supervision.</p>			
During this phase, evaluate the rescuer's ability to ensure safety, call for help and check the patient's response and breathing		Level	Comments
1	Assess: A. Ensure that the scene is safe B. Ensure patient and provider safety		
2	A. Check for Response – Tap and Shout: "Are you ok?"		
3	A. If no response, then call for help (call an ambulance service) B. Check for breathing (Look, Listen and feel) – Not more than 10 seconds		
During this phase, evaluate the rescuer's ability to perform High-Quality CPR			
1	Correct hands position - one hand on top of the other, with interlocked fingers - heels on the lower half of the sternum/breastbone, with straight elbows and shoulders directly over the hands		
2	Adequate rate: 100-120 compressions/minute		
3	Adequate depth: Atleast 2 inches or 5 cm		
4	Allows complete chest recoil		
5	Re-assess every 02 minutes for signs of life (response and breathing) Change roles and resume CPR if no signs of life (patient is conscious or/and breathing normally: Interruptions between compressions should be minimum and not more than 10 seconds)		
During this phase, evaluate the rescuer's understanding of when to stop CPR			
1	Sees an obvious sign of life (patient is conscious or/and breathing normally)		
2	Trained rescuer takes over		
3	Ambulance personnel takes over		
4	Too exhausted to continue		
5	The scene becomes unsafe		
Critical Performance Criteria – Stop the Bleed (Each participant should be assessed for atleast 02 minutes)			
During this phase, evaluate the rescuer's ability to identify and stop life-threatening bleeding		Level	Comments
1	Correct identification of the site of bleeding		
2	Correct application of direct pressure		
3	Demonstrate wound packing		
Name _____		Trainer Signature _____	



Pakistan Life Savers Programme Skills Assessment

Date: _____

Additional comments:	

CPR (Scenarios)

Scenario 1

You went for shopping and saw a crowd encircling a 50 years old lady. The lady seems to be unconscious. As a PLSP Life Saver, how will you proceed?

Scenario 2

You saw a gardener of your school is watering the plants. Suddenly, he grabs his chest and falls on the ground. When you reach to him, he is not responding to your voice. What will you do next as a PLSP Life Saver?

Scenario 3

In the monsoon heavy rains, kids were jumping around in the puddles on the street close to the electric pole. Suddenly, following a loud thunder, lightning struck on the nearby power lines. One wire fell into the puddle. A young girl playing in the puddle became unconscious. How will you proceed?

Scenario 4

You are out to buy some stationary when the person next to you suddenly falls on the floor. He became unresponsive. You immediately jump to help. What would you do next as a PLSP Life Saver?

Stop the Bleed (Scenarios)

Scenario 1

During the school break time Ahsan and Hammad plan to do a race in the school ground. During the race Ahsan dropped down and cried for help. Hammad returned to him and he saw massive bleed on his right foot as some sharp stone has cut it. The wound is three inches long and two inches in depth. As PLSP Life Saver you approach both of these boys. How would you control the bleed?

Scenario 2:

On a rainy day, you are waiting for a bus on a bus stop. Suddenly a motorcyclist slipped with his bike in front of you. His right leg got hurt and oozing of blood is witnessed on his lower leg. You approached him as PLSP Life Saver, how would you control the bleeding and manage the wound?

Scenario 3

You are working in an open field. You saw your cousin is cutting grass for the cattle and his hand is hurt by a sharp knife. He is now bleeding profusely. He is frightened and in severe pain. How would you approach the wound as PLSP Life Saver?

Scenario 4

An 18 year old boy is riding a bike. Suddenly another bike came from the wrong side of the road and hit him on his right leg. He was bleeding and lying in the middle of the road. As a PLSP Life Saver how will you proceed?

Scenario 5

You and your friends are enjoying at BBQ party. Suddenly, your friend who is helping out with BBQ skewers screams out loud and is holding out his bleeding hand. Chaos erupts but you jump to rescue. As a PLSP Life Saver what would you do next?

Annexure 3A (Classroom Observation Checklist)



Pakistan Life Savers Programme Classroom Observation Checklist

Date: _____

Name of the School/Training Site: _____

Time: _____

S. NO.		
1	Classroom	
i	Capacity	<input type="checkbox"/> 10 participants <input type="checkbox"/> 20 participants <input type="checkbox"/> 30 participants <input type="checkbox"/> 40 participants <input type="checkbox"/> 50 participants <input type="checkbox"/> > 50 participants
ii	Number of participants	<input type="checkbox"/> Up to 10 participants <input type="checkbox"/> 10 - 20 participants <input type="checkbox"/> 20 - 30 participants <input type="checkbox"/> 30 - 40 participants <input type="checkbox"/> 40 - 50 participants <input type="checkbox"/> > 50 participants
2	Equipment	
i	Multimedia	<input type="checkbox"/> Yes <input type="checkbox"/> No
ii	PLSP Provider Training Video	<input type="checkbox"/> Yes <input type="checkbox"/> No
iii	Blackboard/Whiteboard	<input type="checkbox"/> Yes <input type="checkbox"/> No
iv	Posters	<input type="checkbox"/> Yes <input type="checkbox"/> No
v	CPR Manikins	<input type="checkbox"/> 01 <input type="checkbox"/> 02 <input type="checkbox"/> 03 <input type="checkbox"/> 04 <input type="checkbox"/> 05 <input type="checkbox"/> > 05
vi	Bleeding Control Manikins	<input type="checkbox"/> 01 <input type="checkbox"/> 02 <input type="checkbox"/> 03 <input type="checkbox"/> 04 <input type="checkbox"/> 05 <input type="checkbox"/> > 05
vii	Attendance Sheet	<input type="checkbox"/> Yes <input type="checkbox"/> No
ix	Skills Assessment Checklist	<input type="checkbox"/> Yes <input type="checkbox"/> No
3	Group Mechanics	
i	Number of Master Trainers/Trainers	<input type="checkbox"/> 01 <input type="checkbox"/> 02 <input type="checkbox"/> 03 <input type="checkbox"/> 04 <input type="checkbox"/> 05 <input type="checkbox"/> > 05
ii	Small Group Distribution (Number of participants/manikin)	<input type="checkbox"/> <05/manikin <input type="checkbox"/> 06-08/manikin <input type="checkbox"/> 08-10/manikin <input type="checkbox"/> >10/manikin

Name of the Evaluator: _____

Signature: _____

Date: _____

CETE-PLSP-F-03

Issue no. 01
Issue date: 01-Jan-2021

Annexure 3B

(Trainer Evaluation Checklist)



Pakistan Life Savers Programme Trainer Evaluation Checklist

Date: _____

Name: _____ School/Training Site: _____

Email: _____ Contact No: _____

	E- Excellent	G- Good	S- Satisfactory	U- Unsatisfactory	
Activity	Rating				Comments
1. Pre-Course Preparation					
The Master Trainer/Trainer arrived before the start of the session to check the equipment/manikins					
The Master Trainer/Trainer used the observation checklist to make sure that all the required equipment is available					
The Master Trainer/Trainer was professionally dressed for the session					
The Master Trainer/Trainer was fully prepared for the session (have read the lesson plan before the session)					
2. Teaching Skills					
The Master Trainer/Trainer followed the sequence of the PLSP video during the lecture/didactic session					
The Master Trainer/Trainer debriefed and demonstrated the "Communication & Safety" skill effectively					
The Master Trainer/Trainer debriefed and demonstrated the "CPR" skill effectively?					
The Master Trainer/Trainer debriefed and demonstrated the "Bleeding Control" skill effectively					
The Master Trainer/Trainer engaged with the participants effectively during the Q & A session					
The Master Trainer/Trainer allowed the participants to effectively learn the CPR & Bleeding Control skills by giving them sufficient time to practice					
3. Communication Skills					
The Master Trainer/Trainer greeted the participants and introduced herself/himself					
The Master Trainer/Trainer was compassionate and supportive throughout the session					
The Master Trainer/Trainer answered all the questions during the didactic and practice sessions					
4. Evaluation Skills					
The Master Trainer/Trainer efficiently completed the skills assessment checklist?					
The Master Trainer/Trainer gave adequate time to the participants to evaluate their CPR & Bleeding Control skills					
The Master Trainer/Trainer effectively submitted the end of session report and assessment forms to the secretariat					

Final Evaluation	Pass <input type="checkbox"/>	Fail <input type="checkbox"/>	Need Remediation <input type="checkbox"/>
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Name of the Evaluator: _____ Signature: _____

Date: _____ Institute: _____

CETE- PLSP-F-01

Issue no. 01
Issue date: 01-Jan-2021

Annexure 3C

(Post-Training Session Report)



Pakistan Life Savers Programme Post Training Session Report

Date: _____

A. Pluses:

What went well?

1. _____
2. _____
3. _____

B. Opportunities

The session could have been better if:

1. _____
2. _____
3. _____

C. Concerns:

These are the concerns that I think should be addressed immediately to improve the sessions:

1. _____
2. _____
3. _____

D. Recommendation:

The concerns stated above can be addressed by:

1. _____
2. _____
3. _____

Trainer Name & Signature: _____

Training Site/School Name: _____

Date: _____

Time: _____

Annexure 4 (Attendance Form)



Pakistan Life Savers Programme

[illegible]



AMERICAN COLLEGE OF SURGEONS
Inspiring Quality: Highest Standards, Better Outcomes



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THE AGA KHAN UNIVERSITY



Mukhtar A. Sheikh Hospital
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**INCASE OF ANY QUERTIES, PLEASE
WRITE TO US AT COE.TE@AKU.EDU
OR VISIT WWW.PLSP.ORG.PK**