



International  
**COCOA**  
Initiative



TRAINING MANUAL

# Training for spraying service providers on protecting children from pesticides

September 2025

# Table of contents

|                                                              |           |
|--------------------------------------------------------------|-----------|
| <b>About the training</b>                                    | <b>4</b>  |
| Objectives                                                   | 4         |
| Target group                                                 | 4         |
| Structure and methodology                                    | 4         |
| <b>About the manual</b>                                      | <b>6</b>  |
| Who can use this manual?                                     | 6         |
| Materials needed to conduct the training in the community    | 5         |
| <b>SESSION 1 Basic knowledge on pesticides</b>               | <b>7</b>  |
| The session at a glance                                      | 7         |
| 1.1 Common pesticide products used in cocoa                  | 7         |
| 1.2 Common uses of pesticides                                | 8         |
| 1.3 Levels of toxicity                                       | 9         |
| 1.4 Labels and warnings on pesticide packages                | 10        |
| <b>SESSION 2 Health hazards related to pesticides</b>        | <b>11</b> |
| The session at a glance                                      | 11        |
| 2.1 Refresher: How can pesticides enter the human body       | 11        |
| 2.2 Pesticide residue                                        | 12        |
| 2.3 The vulnerability of children and pregnant women         | 13        |
| <b>SESSION 3 Responsible pesticide use</b>                   | <b>17</b> |
| The session at a glance                                      | 17        |
| 3.1 Before spraying                                          | 18        |
| 3.2 Safe spraying                                            | 25        |
| 3.3 After spraying                                           | 27        |
| <b>SESSION 4 Setting priority objectives for improvement</b> | <b>31</b> |
| The session at a glance                                      | 31        |
| <b>SESSION 5 First aid</b>                                   | <b>33</b> |
| The session at a glance                                      | 33        |
| Case study                                                   | 33        |
| First aid                                                    | 34        |

|                                                                                 |           |
|---------------------------------------------------------------------------------|-----------|
| <b>SESSION 6 Follow-up: Have participants improved their practices?</b>         | <b>36</b> |
| The session at a glance                                                         | 36        |
| <b>Appendix I: National agencies responsible for pesticide product approval</b> | <b>38</b> |
| <b>Appendix II: How to recognise approved pesticide products?</b>               | <b>38</b> |

## About the training

Pesticides are essential tools for farmers to protect their crops from pests that can compromise quality and yield. While pesticide use offers several benefits, it also poses significant environmental and health risks. Children are particularly vulnerable to pesticide exposure due to key differences in physiology and behaviour. When mothers are exposed to pesticides, the toxic substances can harm their unborn babies and be transmitted to their breastfed infants. Children's exposure to even small doses of pesticides can result in serious short-term and long-term health issues, such as damage to physical and cognitive development, and an increased risk of cancer. It is crucial for those who apply pesticides to be well-informed about these risks and to take specific precautions to prevent children's exposure before, during, and after spraying. The present training module has been developed to sensitize spraying service providers to the health risks related to pesticide use and children's vulnerability, and to train them on responsible handling and application of pesticides.

### Objectives

The objectives of this training are to

- Enhance participants' knowledge of the health risks associated with pesticides, especially for children and pregnant or breastfeeding women
- Train participants on measures to protect children, before, during and after spraying, including all steps from purchasing pesticides, preparation of the product, spraying, marking fields after spraying, and disposing of empty containers
- Enable participants to raise awareness amongst farming families about the risks associated with pesticide exposure.

This training module is complementary to basic training on pesticide spraying, which would cover knowledge about common pests, types of pesticide products, correct dosage, spraying periods and spraying techniques.

### Target group

The main target group for this training module are Community Service Groups (CSGs), or local labour gangs, who provide agricultural labour services to cocoa farmers, including spraying services, at affordable prices. Such local labour gangs have been set up in many cocoa-producing communities as part of cocoa sustainability programs or have independently formed within these communities.

While these groups received training on good agricultural practices, their understanding of children's vulnerability to pesticides and knowledge of practices to prevent children's exposure are often limited. The present training module is designed to address these shortcomings and ensure that spraying service providers protect children's health.

The training module can also be integrated into training programmes for professional spraying service providers, such as those hired under government or private company programmes to support farmers, and can easily be adapted to other crops produced on smallholder farms where pesticide use is common. If this training module is integrated into a comprehensive training on pesticide application, the refresher lessons on basic knowledge around pesticide products may be redundant and can be dropped.

### Structure and methodology

The training is divided into 6 training sessions, which can be held sequentially or fit into one training day.

| Session                                         | Estimated duration |
|-------------------------------------------------|--------------------|
| Session 1: Basic knowledge on pesticides        | 2h                 |
| Session 2: Health hazards related to pesticides | 2h                 |
| Session 3: Responsible use of pesticides        | 2h                 |
| Session 4: Setting objectives for improvement   | 45 minutes         |
| Session 5: First aid guidelines                 | 1h                 |
| Session 6: Follow-up                            | 2h                 |

The method of this training builds on key principles of adult learning theory, which aim to create **a learning experience that is engaging, relevant, and effective for adult learners**. In each session, participants engage in a dialogue and explore the topic actively by bringing in their own knowledge and experience. The facilitator should follow these principles throughout the training:

1. **Acknowledge Existing Knowledge:** Begin by asking participants what they already know about the topic. This not only validates their prior knowledge but also sets a positive tone for the session.
2. **Motivate and Encourage:** Recognize and give credit to the participants' existing knowledge. This will boost their motivation to learn more.
3. **Build on Existing Knowledge:** Use the participants' current understanding as a foundation for introducing new concepts. It will be much easier for participants to learn new concepts if they can connect them to what they know already.
4. **Self-Directed Learning:** The facilitator encourages participants to reflect on their current work practices and set their own goals for improvement, based on what they have learned during the training. Hence, the training will lead to changes in practices which are relevant to the local context and feasible to achieve.

At the end of the training, participants should feel proud of the expertise they have gained. The facilitator should transfer the message:

“Applying pesticides requires special expertise. After your active participation in this training, you are better qualified than most local farmers to carry out this task. You should take pride in the knowledge you have acquired.”

## Materials

The following materials are needed to conduct the training in the community:

- [Printed posters](#)
- Flip chart with a blank flip book or blank posters to collect and organise participants' contributions
- Adhesive tape
- Marker pens
- Post-it notes (if participants wish to note their ideas down and put them up on a poster)

Additionally, ICI has developed [two short films](#) on good practices to better protect children from pesticides, which can be screened to complement the training. Please note these are not mandatory or part of the training module.

## About the manual

### Who can use this manual?

This manual is intended to assist field trainers or extension officers in conducting interactive training sessions with Community Service Groups or other spraying service providers. The training module can be integrated into a comprehensive training programme on agricultural practices, or on pesticide application specifically. The person delivering the training should also:

1. Be familiar with participants' profiles, understand the work arrangements under which they provide labour services, and know their current practices
2. Have participated in a Training of Trainers based on the present manual, so they are perfectly familiar with the contents of each session and the methods to convey these contents effectively to training participants.
3. Have acquired basic background knowledge on health risks related to pesticides and children's vulnerability. The required background knowledge is provided in the appendix to this manual. Field officers are encouraged to read additional materials to enhance their understanding of the health risks posed by different types of pesticides

## SESSION 1

# Basic knowledge of pesticides

The training module starts with a short interactive refresher session in which participants are asked to share their knowledge on pesticides used in cocoa production. Participants will feel motivated to engage actively, as their existing knowledge is being recognised. Also, it allows the facilitator to assess the general level of knowledge on pesticides within the group.

### The session at a glance



#### Objectives

- Trainers gather participants' initial understanding of pesticides, different types and characteristics
- By the end of the session, participants:
  - Understand the concept of toxicity and are aware that even invisible residues of pesticides pose risks
  - Understand how pesticides can enter the human body
  - Can read and understand the labelling on pesticide packages



**Duration** – 60 minutes



#### Session overview

| Topic                                     | Materials                                                                                      |
|-------------------------------------------|------------------------------------------------------------------------------------------------|
| Common pesticide products used in cocoa   | Poster 2: Common pesticides used in cocoa<br>Post-it notes or blank flipbook                   |
| Common uses of pesticides                 | Poster 1: Different uses of pesticides                                                         |
| Levels of toxicity                        | Post-it notes or blank flipbook                                                                |
| Labels and warnings on pesticide packages | Poster 4: The different hazard warning pictograms<br><br>Poster 5: Samples of pesticide labels |

### 1.1 Common pesticide products used in cocoa

#### Material needed:



- Printed poster: Common pesticides used in cocoa (Poster 2)
- Post-it notes or blank flipbooks

### Instructions for the facilitator:

1. Ask participants to note the names of the main pesticides used in cocoa production on post-it notes (if participants have limited writing skills, ask them to mention them orally and note them down).
2. Explain that each pesticide falls into one of the 4 categories: rodenticides, insecticides, fungicides and herbicides; and draw a table showing these categories on a poster.
3. Ask participants to stick the post-its into the right categories. Correct if necessary.

## 1.2 Common uses of pesticides

### Material needed:



Printed poster: Different uses of pesticides (Poster 1)

### Instructions for the facilitator:

1. Show Poster 1, which shows the different uses of pesticides, and ask participants to describe each use.
2. Provide more background knowledge for each use. For example:



- "As we can see here, in addition to what you have quoted, pesticides can be used to protect livestock"
- "To combat the mosquitoes responsible for diseases such as malaria and dengue fever..."

See the Key Facts box below for more information on common uses of pesticides.

3. Ask participants to connect the products they know to the different uses, for example:



- Can you give the name of a product you use to kill the rodents that eat crops?
- Who knows the product "**Commando 80 TC**"? "**CPN 2.5 E0**"? "**DRATEX 80% OP**"? "**YASODION**"? (Be sure to include local names to make it easier for participants to understand)

### KEY FACTS

#### Common uses of pesticides

- **Agricultural pest control:** to protect crops from insects, weeds and disease, ensuring food safety and quality. It is used to control external parasites such as ticks, lice and flies on animals. Pesticides are also used to control soil-borne pests and diseases.
- **Public health:** to combat disease-carrying insects such as mosquitoes (e.g. malaria, Zika virus) and ticks (e.g. Lyme disease).
- **Garden and landscape maintenance:** to control pests (e.g. rodents, snakes and birds) in gardens, parks and other green spaces.
- **Forestry:** protecting trees from insects and disease
- **Urban pest control:** to control pests that transmit diseases such as malaria, dengue fever and yellow fever in homes, buildings and public spaces
- **Post-harvest protection:** to protect stored crops against pests and diseases.

### 1.3 Levels of toxicity

#### Material needed:



Blank flipbook or poster

#### Instructions for the facilitator:

1. Introduce the concept of “toxicity”, adapting the content to participants’ profiles and existing knowledge.



Toxicity refers to the harmful or poisonous effects of a substance, such as a chemical, drug, or environmental pollutant, on living organisms, including humans, animals, and plants. Toxic substances can cause damage, injury, long-term health problems, or even death, depending on the level and duration of exposure.

2. Ask participants whether all pesticide products are equally toxic, or whether they can describe differences.
3. On a blank poster, draw a new table with 3 columns, corresponding to 3 levels of toxicity (see the Key Facts box below).
4. Describe the criteria for this classification.
5. Ask participants to take the post-its from the first poster and place them in the right category according to the level of toxicity. Correct if needed. Ask participants what they should look for on the product labelling to find out in case of doubt.
6. Add an important note:



Due to the high level of toxicity of some pesticides, they are banned in different countries across the world. The Pesticide Action Network (PAN) International provides a list of banned pesticides<sup>1</sup>. According to the list, there are 21 banned pesticides in Cote d’Ivoire and 9 banned pesticides in Ghana.

#### KEY FACTS

##### Three categories of hazardous pesticides by their level of toxicity

1. Category I: Highly Toxic - Requires the signal word "Danger" and the skull and crossbones symbol. These pesticides can kill humans if swallowed, inhaled, or absorbed through the skin.
2. Category II: Moderately Toxic - Requires the signal word "Warning." These pesticides can cause moderate health effects on adults or severe health effects on children.
3. Category III: Slightly Toxic - Requires the signal word "Caution." These pesticides can cause slight health effects on adults, but are dangerous for children.

Source: Adapted from US Environmental Protection Agency, [Exposure Assessment Tools by Chemical Classes - Pesticides | US EPA](https://paninternational.org/pan-international-consolidated-list-of-banned-pesticides/)

<sup>1</sup><https://paninternational.org/pan-international-consolidated-list-of-banned-pesticides/>.

**Key messages:**



- Pesticides are toxic and must be handled carefully, using special safety procedures.
- Understanding the type and toxicity level of pesticides is essential. It helps you determine the level of caution and protective measures required when using them.
- Some toxins might not cause immediate symptoms (or only mild) but can still enter the human body and accumulate over time, causing harm and health issues in future.

## 1.4 Labels and warnings on pesticide packages

**Material needed:**



- Printed poster on the different hazard warning pictograms (Poster 4)
- Printed poster on samples of pesticide labels (Poster 5)

Use Posters 4 and 5 to help participants recall the meaning of product labels and hazard pictograms on pesticide packaging. You can also bring samples of empty pesticide packages as real-life examples. If you choose to use actual containers, always explain that **toxic residues remain on these packages**. To reinforce the message, the facilitator must **wear protective equipment (gloves and a face mask)** when handling these packages and ensure that **every participant also wears protective gear when touching the samples**.

**Instructions for the facilitator:**

1. Explain the importance of reading pesticide labels for safe handling and use. Emphasise the potential risks associated with misusing pesticides.
2. Explain that on a pesticide package, you can find different elements. Show a pesticide label and point out the following components:
  - Product name and type
  - Active ingredients
  - Precautionary statements (e.g., "Wear protective clothing")
  - Instructions for use
  - First aid instructions
3. Explain that hazardous substances, like pesticides, are always marked with pictograms/icons which indicate hazard to warn consumers. This is important for people who cannot read, and also for children.
4. Show the printed poster 4 featuring the different hazard warnings (e.g., skull and crossbones, dead fish, etc.). For each pictogram, ask participants whether they know the meaning. If participants don't know, provide clear explanations to fill knowledge gaps.
5. Practice: Provide a sample of printed labels (Poster 5) for farmers to practice reading and interpreting.

## SESSION 2

# Health hazards related to pesticides

### The session at a glance



#### Objectives

By the end of the session, participants:

- Understand the main ways pesticides can enter the human body
- Understand why children and pregnant women are particularly vulnerable to pesticides, even in small amounts, and are aware of both short- and long-term health consequences
- Are aware that pesticide residues remain on equipment, clothing, and containers even when these appear clean or empty



Duration – 2h



#### Session overview

| Topics                                                  | Materials                                                                                                                                          |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Refresher: How can pesticides enter the human body      | Poster 3: How pesticides enter the human body                                                                                                      |
| Pesticide residue                                       | Blank flipbook or poster                                                                                                                           |
| Understanding the risks for children and pregnant women | Poster 6: Long-term health effects of pesticide exposure<br>Poster 7 : Short-term health effects of pesticide exposure<br>Blank flipbook or poster |

### 2.1 Refresher: How can pesticides enter the human body

In this session, participants will learn how pesticides can enter the human body through skin contact and will begin to understand that even small amounts of pesticides can be harmful, especially to children's health.

#### Material needed:



Printed poster: How pesticides enter the human body (Poster 3)

#### Instructions for the facilitator:

1. Ask participants to brainstorm how pesticides can enter the human body
2. Show Poster 3 and ask participants to identify the body parts through which pesticide exposure can occur

3. Encourage participants to describe possible exposure scenarios based on real-life situations they have seen or experience to make sure they have fully understood the mechanism.
  - Inhalation: Breathing in pesticide droplets or vapours
  - Ingestion: Eating or drinking pesticides, for example when confusing pesticides containers with drinking bottles or when reusing empty but contaminated containers
  - Skin contact: Touching or absorbing through the skin
  - Eye contact: Splashing pesticides into the eyes or rubbing eyes with contaminated hands
4. Explain why inhalation is especially risky:
  - As pesticide droplets are often invisible, we may not see them and inhale them without noticing.
  - Unlike skin contact, which sometimes shows visible signs like rashes, inhaled substances enter the bloodstream rapidly and may not cause immediate symptoms.

Ask participants to describe how drift occurs during spraying and why this poses a risk (e.g., wind carrying droplets beyond the intended area).
5. Ask participants to discuss what distance people should keep from a field during spraying, especially for children and pregnant or breastfeeding women. Let them reflect on what conditions influence the recommended distance (such as wind, spraying techniques, etc.).



**Key messages:**

- Exposure may occur “directly”, affecting the person applying pesticides; or “indirectly”, when pesticides diffuse into the environment, affecting people around who may not be aware of the danger.
- Anyone applying pesticides is responsible for ensuring their safety and that of those at risk of indirect exposure.
- Children or pregnant or breastfeeding women should never be present when you are handling or applying pesticides. To avoid exposing them, when spraying crops, they should keep at least 50 meters away.
- The use of personal protective equipment (PPE) is non-negotiable when handling pesticides or when being present when agrochemicals are being handled.

## 2.2 Pesticide residue

In this session, you will lead a simple but powerful demonstration to help participants understand that even empty pesticide containers can still contain harmful residues.

**Material needed:**



Blank flipbook or poster.

**Instructions for the facilitator:**

1. Ask participants to name some spicy cooking ingredients commonly used in their homes (e.g., pepper, ginger, chili).
2. Follow up with a question:



Have you ever felt the spiciness even after washing your hands with soap and water, especially if you later touched your eyes or another sensitive area?

3. Let participants share their experiences, then explain:



Even after washing your hands with soap and water, the residue of the pepper remains on your hands. You can't see it, but it's still there and can cause discomfort. Pesticide residue behaves in the same way: it can remain on objects even after they appear.

4. Ask participants to think about the full spraying process, from preparation to application to clean-up, and list objects that might carry pesticide residue. Write their answers on a blank poster and add any missing items so that the group ends up with a complete list. See the Key Facts box below for the full list of objects on which pesticide residue may be found.

5. Conclude:



We must treat objects containing pesticide residues with special care and avoid children coming in contact with these.

## KEY FACTS

### Objects on which pesticide residue may be found

- Empty containers of pesticides
- Buckets and other equipment used for the preparation of the product
- Clothes worn while preparing the product or spraying
- Protective equipment worn while preparing the product or spraying
- Equipment used for spraying
- Objects or vehicles present on the field while spraying
- Unprotected skin of the person applying or present during application
- Crops on sprayed fields or in the vicinity of sprayed fields

### Key messages:



- Pesticide residue is invisible but can linger on all objects used for pesticide preparation and spraying, and on empty containers.
- We must always keep track of objects on which they may be present.
- Children may not get in touch with any objects contaminated with pesticide residues.
- Equipment and clothes must be washed carefully after spraying and stored away separately.
- Empty pesticide containers should be disposed of properly and must not be reused under any circumstances because of the presence of residue from the pesticide.

## 2.3 Understanding the risks for children and pregnant women

In this session, participants will gain a deeper understanding of the possible health risks associated with children's exposure to pesticides. They will learn about short-term and long-term consequences

and explore why children are particularly vulnerable. As in previous sections, the discussion begins with participants' own experiences and knowledge.

**Material needed:**



Printed poster: Long-term health effects of pesticide exposure (Poster 6)

Printed poster: Short-term health effects of pesticide exposure (Poster 7)

Blank flipbook or poster

**Instructions for the facilitator:**

1. Start with a brainstorming activity to collect what participants already know about health risks and children's vulnerability to pesticides. Ask the question and write their responses on a blank poster or flipchart:



As per what you know, what is the health impact of pesticide exposure to children?

2. Continue the discussion by asking the following questions:



When a woman is expecting a child, how should she be taking care of herself and the child? What should she avoid?

What are the substances which can be transferred from the mother to the child?

3. Fill in knowledge gaps and correct misconceptions. Complete the points mentioned by participants with all key facts summarised in the Key Facts box below. Use relatable language to make participants understand this topic.
4. Use Posters 6 and 7 featuring visual explanations on children's vulnerability to pesticides to support and reinforce your messages.

**KEY FACTS**

**Children's vulnerability to pesticides**

**During pregnancy**

A fetus's life and survival depend on the mother during pregnancy. Maternal exposure to pesticides or other harmful substances at any stage of the pregnancy (especially the first 3 months) can have devastating effects on the fetus's health.

Pesticide exposure can result in **birth defects, developmental delays, cancer risk, growth restrictions and immune system dysfunction.**

Pesticide exposure during pregnancy can change the life of a child even before it is born.

**Infancy and Early Childhood**

Pesticide exposure is like a hidden danger for our children. When we fail to safely secure pesticides within the home environment, we leave our infants exposed to this danger. Even small amounts can affect their growth, brain development, and health. Imagine the chemicals like bad spirits that can follow our children and make them sick, sometimes many years after exposure.

When our children are exposed to pesticides, it's like giving them a heavy burden to carry. It can make them more likely to get sick, struggle in school, and even affect their future.

## Teenagers

Teenagers are equally vulnerable to pesticide exposure due to their rapid growth and development. The harmful effects of pesticide exposure on teenagers are equally severe as those on infants and young children. Teenagers should therefore never be asked to help with pesticide application, and also not with purchasing or preparing of product or cleaning of equipment.

### **Children's bodies are more vulnerable to pesticide exposure as compared to adults due to several reasons:**

- **Higher Absorption Rates:** Toxins enter children's bodies and organs more easily than into adults'. For example, children's skin is thinner and more permeable, and their digestive system absorbs substances more readily. Children also have higher metabolic rates, which means they process substances faster, potentially leading to greater accumulation of toxins
- **Developing Organs:** Children's organs, such as the liver and kidneys, are still developing and are less capable of detoxifying and excreting harmful substances.
- **Body Weight:** The same dose of a toxin represents a larger proportion of a child's body weight compared to an adult, leading to higher *relative* exposure.
- **Behavioural Factors:** Children's age-appropriate behaviours lead to their increased exposure, such as playing on the ground, putting objects in their mouths, exploring their environment and unfamiliar objects for curiosity.

These factors combined make children particularly vulnerable to the harmful effects of toxins.

### **Health consequences in the short-term:**

- Digestive symptoms:
  - Colic
  - Hypersalivation
  - Nausea
  - Vomiting
  - Diarrhea
- Neurological symptoms:
  - Headache
  - Dizziness
  - Ecstasy
  - Shivering of body parts
  - Convulsion
  - Uncontrolled urination
  - Coma
- Skin conditions:
  - Itching
  - Pimples
  - Burns
  - Skin rashes
- Eye conditions:
  - Tearing
  - Tingling
  - Red eyes
  - Blurred vision
- Respiratory conditions:

- Cough
- Nosebleed
- Asthma
- Asphyxia
- Consequences related to maternity:
  - Bleeding
  - Miscarriage
  - Preterm delivery

**Health consequences in the long-term:**

- **Cancer:** Increased risk of different types of cancer, like blood cancer, brain cancer, and breast cancer.
- **Brain and Nerve Problems:** decreased muscle tone, memory loss, Parkinson's disease, Alzheimer's disease
- **Reproductive and Developmental Issues:** Problems with fertility and hormone imbalances, recurrent stillbirths, and mentally or physically disabled children.
- **Breathing Problems:** Long-term breathing issues like asthma, chronic lung disease, and persistent irritant cough.
- **Organ Damage:** Damage to important organs like the liver, lungs, kidneys, and brain.



**Key messages:**

- Protecting children's health starts when they are still in their mother's womb.
- Children lack the experience and understanding to recognize dangers. Their curiosity and desire to explore can lead them into unsafe situations.
- Children's bodies are more vulnerable to pesticides than those of adults.
- Some of the health consequences of children's exposure to pesticides occur immediately; others occur only in the medium or long term.

## SESSION 3

# Responsible pesticide use

### The session at a glance



#### Objectives

By the end of the session, participants:

- Understand key safety measures required at each stage of pesticide handling: before, during, and after spraying.
- Know how to transport and store pesticides safely to avoid unintentional exposure, especially in household environments.
- Recognise the importance of using Personal Protective Equipment (PPE), know how to wear PPE correctly and how to minimize risk while preparing and applying pesticides.
- Understand how to keep others, especially children and pregnant and breastfeeding women, away from treated fields and equipment during and after spraying.
- Know how to correctly dispose of empty pesticide containers.



Duration – 2h



#### Session overview

|                 |                                                    |
|-----------------|----------------------------------------------------|
| Before spraying |                                                    |
|                 | Purchasing pesticides                              |
|                 | Transporting pesticides                            |
|                 | Storing pesticides                                 |
|                 | Reading pesticide labels                           |
|                 | Using protective equipment                         |
|                 | Preventing others from entering sprayed fields     |
| Spraying safely |                                                    |
|                 | Mixing the pesticide product                       |
|                 | Safety measures during spraying                    |
| After spraying  |                                                    |
|                 | Disposing of pesticide packaging appropriately     |
|                 | Cleaning equipment and materials                   |
|                 | Making sure everyone respects the non-entry period |

The facilitator will encourage participants to share their habitual practices, along the full cycle from procurement of pesticides, preparation and spraying, to cleaning and disposal of packages; jointly rethink these practices; and develop suggestions for improvement.

Throughout session 3, the facilitator will take notes to document practices commonly used by participants which deviate from the good practice guidelines for each theme. These notes will then be used to set priority objectives for improvement of practices in session 4.

**Material needed:**



- Printed poster: Responsible use of pesticides (Poster 8 and 9)
- Printed poster on samples of pesticide labels (Poster 5)
- Blank flipbook or poster

### 3.1 Before spraying

#### 3.1.1 Purchasing pesticides

**Instructions to the facilitator:**

1. Open a discussion on how and where pesticides are procured. Ask the following questions:



- When you are hired to spray a farmer's field, who buys the pesticides you use?
- If you buy pesticides on behalf of the farmer, how do you choose the product?

2. If participants purchase pesticide products themselves, briefly recap what they learned about toxicity in session 1.
3. Introduce good practice guidance for choosing the safest pesticide products (see the Good Practices box below). Write them down on a blank poster.
4. If participants use pesticides procured by the farmer they work for, continue the discussion by asking:



- When farmers procure the pesticides, does the farmer hand over to you the original packages with the use instructions?
- Who decides on the dosage?
- Does the farmer send family members to buy the pesticides?

5. Reinforce the following key messages:



- Make sure you know exactly which product you are applying.
- Always ask the farmer to hand over to you the original packages with the use instructions.
- Ask the farmer who has been sent to buy the pesticides. If needed, explain to the farmer and their family that pesticides, even sealed packages, may never be in the hands of children or breastfeeding / pregnant women, because exposure to pesticides is dangerous for children's health and development.

## GOOD PRACTICES

### Choosing the safest pesticide products

- **Only buy approved products.**
  - Check for product registration: Ensure the pesticide is registered with the responsible government agency. Approved products will have a registration number on the label. See Appendix I for links to competent government agencies.
  - Look for Certification Marks: Approved pesticides often carry certification marks or seals indicating they meet safety standards in your country. See Appendix I for examples.
  - If you are unsure, consult the list of recommended and approved pesticides for cocoa farming. Farmers can access this list through local extension officers or official publications. See Appendix II for guidance.
- **Buy pesticides from trusted agrochemical stores.** These stores are more likely to sell only approved and genuine products. In many cases, they can also help you read and understand label instructions.
- **Only buy products which come with clear label instructions.** Never choose products where label instructions are missing or written in a foreign language you cannot understand. Never buy products which have been refilled.
- **Opt for the least-toxic product:** Choose least-toxic pesticides. Pay attention to signal words like "Caution," "Warning," or "Danger," which indicate the level of toxicity. "Caution" indicates the lowest, and "Danger" the highest level of toxicity.

### 3.1.2 Transporting pesticides

#### Instructions to the facilitator:

1. Ask participants about the common practices for the transport of pesticides:



How are the pesticides typically transported from the shop to the field?

2. Share the Good Practices (see box below) related to the transport of pesticides with participants and write them down on a poster for everyone to remember.

## GOOD PRACTICES

### Transporting pesticides

- Transport the products in their original containers, tightly closed, and in good condition
- Fix the containers tightly and safely on the back of your vehicle
- Protect paper and cardboard containers from rain and damp
- Make sure you have on board the vehicle: a first-aid kit, personal protective equipment and the necessary materials to deal with a minor spill (shovel, absorbent material, dustbin) or fire (fire extinguisher).
- Avoid carrying pesticides in the passenger compartment of your vehicle (car or van)
- Never transport pesticides together with food, seeds, animals or drinking water.
- **Children or pregnant/breastfeeding women may never be involved in the transport of pesticides**

### 3.1.3 Storing pesticides



#### Material needed:

Blank flipbook or poster

#### Instructions to the facilitator:

1. Ask participants what rules they know for the storage of pesticides, and how that relates to the common practices:



Do farmers store pesticides between purchase and application? Do they store half-used packages?

If so, where and how are pesticides stored?

2. On a blank poster, draw two columns: one for good practice on the right-hand side (marked with a “positive” icon, e.g., check mark, thumbs up) and one for examples of bad practices on the left-hand side (marked with a negative icon, e.g., a cross, warning sign).
3. As participants share their observations on where and how farmers typically store pesticides, ask them whether this is good or bad practice and to explain why.
4. Give feedback, fill knowledge gaps, correct misperceptions if needed, referring to the box below.
5. Note down each of the storage places mentioned in the corresponding field on the poster, using one colour for good practice and a different colour for bad practice examples.

## GOOD PRACTICES

### Storing pesticides safely

- **Keep Out of Reach:** Always store pesticides out of reach of children. Ideally, keep them in a locked cabinet or a secure storage area. Ensure containers are tightly closed.
- **Avoid Food Areas:** Never store pesticides near food or animal feed to prevent contamination.
- **Avoid Bedrooms:** Never store pesticides in rooms where people sleep, since the toxic fumes rise from pesticides packages. Make sure that the area where they are stored is well-ventilated to avoid the buildup of fumes
- **Original Containers:** Always store pesticides in their original containers with the label intact. This ensures that they will not be confused with other substances, and that the usage instructions and warning signs remain available.
- **Avoid Flood-Prone Areas:** Do not store pesticides in places where flooding is possible or where they might spill or leak into wells, drains, groundwater, or surface water.
- **Minimal Stockpiling:** Buy only the amount of pesticide you will need soon to reduce storage risks.

Example of a storage location image:



### 3.1.4 Reading product labels and use instructions

In this session, you'll guide a practical exercise where participants practice reading and interpreting pesticide labels and use instructions. Using Poster 5, which shows the main components of pesticide labels and instructions, participants will work in pairs to discuss guided questions and identify key safety information. The goal is to refresh their knowledge and ensure they feel confident in understanding labels before preparing or applying pesticides.



#### Material needed:

Printed poster on samples of pesticide labels (Poster 5)

**Instructions to the facilitator:**

1. Start by explaining the importance of reading the pesticide labels and use instructions before preparing pesticides for application.
2. Divide participants into pairs. Ask them to review the different components of pesticide labels and use instructions shown on Poster 5, and discuss the following questions:
  - What is the product name and brand?
  - Where can I see the list of active ingredients? (No need to read out the list, just point where it can be found).
  - Which element shows that this is an approved product? (Registration number, seal from government agency, list of active ingredients, warning signs, etc.) See Poster 5.
  - What is the level of toxicity of this product? How can I tell from the label? (warning words and icons)
  - What are the specific hazards posed by this product? (indicated by precautionary statements and icons)
  - How should this product be used? Explain briefly how to properly mix and apply, according to the use instructions.
  - Storage and Disposal Instructions: Guidelines on how to store the product safely and dispose of it properly.
  - Where can I see the name and address of the manufacturer?
3. Bring everyone back together. Invite a few pairs to share their answers. Use **Poster 5** to clarify any misunderstandings and fill in missing information.
4. If participants struggle with several questions, note these gaps and plan a quick refresher session later.

### 3.1.5 Wearing protective equipment

In this session, you'll emphasize the importance of wearing personal protective equipment (PPE) whenever handling or applying pesticides.

**Instructions to the facilitator:**

1. Present an image of a **properly dressed applicator (image 3, in Poster 8)** and invite participants to name each element of the PPE and specify what the role of each element is.
2. Ask participants to explain which elements of the PPE should be worn at which moments.
3. Fill knowledge gaps if needed, referring to the Good Practices box below.

#### GOOD PRACTICES

##### The importance of wearing PPE

- **Keep Out of Reach:** Always store pesticides out of reach of children. Ideally, keep them in a locked cabinet or a secure storage area. Ensure containers are tightly
- **Mixing and Loading:** When preparing the pesticide solution, gloves, goggles, aprons, and respirators should be worn to protect against splashes and inhalation of the concentrated substance

- **Applying Pesticides:** While spraying or spreading pesticides, gloves, long-sleeved shirts, long pants, boots, and respirators should be worn to prevent skin contact and inhalation of fumes
- **Handling Equipment:** When handling application equipment, gloves, aprons, long-sleeved shirts, long pants are necessary to avoid exposure to residues on the equipment
- **Cleaning Equipment:** After application, gloves, aprons, long-sleeved shirts, long pants and boots should be worn while cleaning and maintaining equipment to protect against residuals.
- **Entering Treated Areas:** Anyone entering treated areas before the restricted entry interval has passed, must wear gloves, protective clothing, and respirators.

#### General good practices

- **Inspect your PPE** before each use, to check for any damage. Replace any worn or damaged equipment.
- **Store your PPE** in a clean, designated area, out of reach of children, and away from other clothes.

### 3.1.6 Preventing people from entering sprayed field

#### Instructions for the facilitator:

1. Ask participants to share their current practices to prevent other community members from getting exposed spray and residues:



How do you make sure that people keep off the field while spraying is taking place?

Whose responsibility is it to make sure no-one approaches the sprayed area during spraying? And after spraying?

Who is typically present on or around the field to assist?

How much distance should people keep from the field while spraying is taking place?

Encourage participants to give honest responses, even though they might be aware that their current practices are not perfectly in line with the guidelines. Using positive language can avoid them feeling judged.

2. Once participants have shared their current practices, ask them to identify the ones they think are the safest and most effective in ensuring community members don't enter sprayed fields.

Refer to the good practice rules for keeping people off the sprayed fields as listed in the box below. If participants' reported practice deviates from these guidelines, point out to them that their practices could be improved, but don't make them feel guilty.

3. Ask follow-up questions on practices which are not in line with the good practice guidelines, for example:



Why do you not mark the fields before spraying? Is it because materials are not available, or the farmer does not consider it necessary, ...?

When would be the best moment to inform nearby farmers or residents? If they are not around, how can you pass the message?

What is the most effective way to warn children?

...

4. Ask participants to suggest solutions and give ideas on how to overcome the obstacles.

### GOOD PRACTICES

#### Keeping people off the sprayed areas

1. **The sprayer is responsible:** The person who does the spraying is responsible for ensuring that no community member enters the area where spraying is going on. He can assign someone to help monitoring or marking the field, but it remains under the responsibility of the spraying person to verify that the necessary measures are in place.
2. **No-Entry Zone:** Create a buffer zone around the sprayed area where entry is prohibited. It is generally recommended that people keep at least 30 meters away from the sprayed area to avoid exposure to pesticides, but this distance can vary depending on the type of pesticide used and weather conditions.
3. **Post warning signs:** Clearly mark the no-entry zone with warning signs indicating that pesticides are being applied. For example, this could be red cloth or red bags tied to stakes surrounding the plot or 5-20 meters of the entry and exit.



4. **Set up physical barriers:** Ropes or fences can help keep people away from the sprayed area.
5. **Inform the community:** Notify farmers owning or managing nearby fields, or families living in nearby houses, in advance about the spraying.
6. **Take special caution when schools are nearby:** When the sprayed area is nearby a school, or on the way between the community and the school, inform the school headmaster and teachers about the spraying. Ask them to pass the information on to parents and students, and to monitor children during breaks to make sure they don't approach the sprayed area.
7. **Pay special attention to children:** Request parents to prevent their children from approaching the sprayed field. Remind them that pesticides exposure is particularly harmful for children, including

unborn babies and breastfed infants through their mother's exposure. If possible, **talk directly to the children to warn them.**

8. **Monitor the Area:** Assign an **adult** person to monitor the area and ensure that no-one enters the restricted zone during spraying. The person monitoring must also wear PPE.

## 3.2 Safe spraying

During the following activities on safe spraying, focus on good practices to protect the sprayer and the community from pesticide exposure, rather than focusing on the technical aspects of spraying.

### 3.2.1 Mixing the pesticide product

#### Instructions for facilitator:

1. Ask participants to share their current practices for preparing pesticide products for spraying:

Where do you mix the pesticides?

How do you know

Does anyone assist?

Who brings the water?

Do you wear PPE?

2. Encourage participants to give honest responses, even though they might be aware that their current practices are not perfectly in line with the guidelines.
3. Refer to the box below for good practice concerning the mixing of the pesticide product. If participants' current practices deviate from the good practices, point out to them that they could improve these practices without making them feel guilty.
4. Ask follow-up questions on practices which are not in line with the good practice guidelines, for example:

Why do you find it more convenient to mix at the farmer's home?

Why do you need assistance from other persons?

Why does the farmer ask her children to help?

5. Ask other participants to suggest solutions and give ideas on how the obstacles could be overcome towards following the good practice.

#### GOOD PRACTICES

##### Preparing the pesticide mix

1. **Read the Label:** Always read the pesticide use instructions to get the dosage right. Use proper measuring tools and avoid using more than the recommended amount.

2. **Mix at the farm:** Take the product in its original package and equipment to the farm and mix on site, to prevent exposure of community members, and to prevent contamination of areas where children play.
3. **Protect vulnerable persons:** Make sure that children, and pregnant or breast-feeding women, are not present when you mix the product. Children may also not be asked to fetch water needed for the mixing.
4. **Wear Protective Gear:** Use appropriate personal protective equipment (PPE), including gloves, long sleeves, long pants, eye protection and respirator.
5. **Check Equipment:** Check whether your sprayer is in good working condition. Check hoses, nozzles, and pumps for leaks or malfunctions.

### 3.2.2 Safety measures during spraying

#### Instructions for facilitator:

1. Ask participants how they protect their own health and the health of others during spraying:



What measures do you take to reduce harm from pesticide exposure during spraying?

What measures do you take to prevent others from harm from exposure to pesticides during spraying?

Who is typically present on or around the field while you spray?

2. Encourage participants to give honest responses, even though they might be aware that their current practices are not perfectly in line with the guidelines.
3. Refer to the good practice guidelines for safety measures during the spraying presented in the box below. If participants' reported practice deviates from these guidelines, point out to them that their practices could be improved, but don't make them feel guilty.
4. Ask follow-up questions on practices which are not in line with the good practice guidelines, for example:



We all know that we should wear PPE throughout the spraying process. Are there any reasons why sometimes this is difficult or inconvenient?

If people are around during the spraying, is their presence really needed? Do they wear PPE?

5. Ask other participants to suggest solutions and give ideas on how obstacles could be overcome towards following good practice.

#### GOOD PRACTICES

##### Ensuring individual and others' safety during spraying

1. **Only skilled individuals may spray:** Spraying must be carried out exclusively by adults who have been trained to carry out this dangerous task safely.

2. **Wear complete and intact PPE:** The person spraying must be protected by PPE. This is a measure to reduce the exposure but be aware that it cannot protect you 100%. Any person present on the farm at the time of spraying must also wear PPE.
3. **Stop spraying** immediately when you see an unauthorized person entering or approaching the field.
4. **Weather conditions:** Never spray on windy or rainy days to prevent drift and runoff.
5. **Never spray within the village:** Use machetes and dabas to clean up the village and surrounding area from herbs. Never use pesticides in areas where people live and children play.

### 3.3 After spraying

#### 3.3.1 Disposing of pesticide packaging appropriately

##### Instructions for facilitator:

1. Ask participants how they deal with empty pesticides containers:

What happens to the empty pesticide containers after spraying?

Whose responsibility is it to dispose of them?

2. Encourage participants to give honest responses, even though they might be aware that their current practices are not perfectly in line with the guidelines.
3. Remind participants of what they learned about “residues” in the previous session. Explain that residues remain in empty pesticides packages and can never be removed completely.
4. Ask participants what disposal channels exist in their community. This may vary from one locality to another.
5. Refer to the good practice guidelines in the box below and recommend good practices based on the local context. Remind participants that everyone should follow these guidelines.
6. Ask participants whether there are any possible obstacles which could prevent them from following this best practice.
7. Ask other participants to suggest solutions and give ideas on how to overcome these obstacles.

##### GOOD PRACTICES

##### Disposal of empty pesticide containers

1. **Take responsibility:** The person who has applied the pesticides is also responsible for the disposal of the empty containers. You may not leave this in the hands of the farmer who may not be sufficiently aware of the risks related to pesticides residues.
2. **Empty pesticides containers are contaminated. The pesticides residues in these containers cannot be removed.**
3. **Pesticides containers are toxic waste.** They must be disposed of separately.

4. **Never reuse empty pesticides containers.** Under no circumstances may empty pesticides containers be reused for any purpose. Any food, water etc. filled in empty pesticides containers can seriously harm people or even kill them.
5. **Return to qualified collection point:** Ideally, empty packaging should be returned to the point of sale, special collection containers for toxic waste; or the cooperative.
6. If there is no place to return empty pesticides containers in the local community, consider the following **second-best options**:
  - Punch at the bottom to prevent any re-use and bury on the field
  - Burn on the field

### 3.3.2 Cleaning equipment and materials



#### Material needed:

Blank flipbook or poster.

#### Instructions for the facilitator:

1. Ask participants to list the different elements which need cleaning after the spraying has been completed.
2. Write them down on a poster. The list should comprise:
  - Ones skin
  - All PPE worn by any person present during the spraying: protective clothes, gloves, boots, respirator, eye protection.
  - Buckets and other materials used for mixing the product.
  - Spraying machine
3. Ask participants to think about the way these elements travel from the field to where they can be cleaned:



Is there a risk that the pesticides residues on these objects or on your skin contaminate anyone?

Is there a risk that the residues contaminate any other objects?

Moderate a discussion to define how any contamination can be avoided:

Do you have water available on or near the farm to wash yourself after spraying?

How do you get from the sprayed farm to the nearest water point where equipment can be washed?

How do you transport your equipment to this place?

Is the water source you use for cleaning equipment also used by other community members for other purposes? Is there a risk that cleaning of equipment contaminates the water source? If so, what alternatives are available for cleaning your equipment?

4. Refer to the good practice guidelines in the box below. If participants' reported practice deviates from these guidelines, explain how these practices could be improved, without making them feel guilty.
5. Jointly define solutions and best practice, given the common circumstances and availability of water for washing equipment in the local area as described by the participants.

#### GOOD PRACTICES

##### Cleaning up after spraying

1. **Wash your skin immediately after spraying:** First thing after you have completed the spraying, take off all PPE and protective clothes and wash yourself with fresh water provided for this purpose on the farm.
2. **Wash your equipment on the farm if possible. Otherwise, wrap your protective equipment in a bag and take it immediately to where you can wash it.** You should wash the equipment yourself because you know best about the risk posed by the residues. Equipment and PPE must be washed immediately after each spraying. You should never take it home with you because it will expose your family to the toxic substance.
3. **Wash your equipment in a bucket, dilute the contaminated water and spill it in an area where it cannot cause harm to people or local wildlife.** One option is to apply the diluted water evenly on the sprayed field.
4. If there is **leftover mix, dilute it with ten times the amount of clean water** and apply it evenly on the treated field to minimize environmental and health impacts.
5. **Never spill the contaminated water back into a water body.** Rinse the bucket several times after the washing is completed, and do not use the same bucket for drinking water.
6. **Never ask children or pregnant or breastfeeding women to wash contaminated equipment.**
7. **Always keep the PPE and spraying equipment in a separate place, out of reach of children.** Even after washing, residues can remain. You should never mix the protective clothing with other clothes.

### 3.3.3 Making sure everyone respects the non-entry period

#### Instructions for the facilitator:

1. Before introducing the last topic of this session, ask participants whether they can think of a last aspect sprayers should take into consideration before the job is completed.
2. If someone mentions "informing the farmer about the no-entry period", applaud them and confirm that this is an important responsibility.
3. Clarify that
  - The no-entry period varies according to the type of pesticide used, the dose applied, and the weather conditions. The minimum restricted entry period is shown on the product label or use instructions.

- This period must be clearly communicated to the farmer. If possible, the sprayer should also go to meet the farmer's family to inform them.
4. Engage participants in a discussion to share their experience on how to make sure that everyone in the farming family is well informed and respects the no-entry period.

## SESSION 4

# Setting priority objectives for improvement

### The session at a glance



#### Objectives

By the end of the session, participants:

- Reflect on their current spraying practices and identify areas where improvements are needed to better protect themselves, their community, and especially children from pesticide exposure.
- Jointly define five priority objectives for improving their work practices, focusing on measures that are both effective and realistic to adopt.
- Commit collectively as a group to adopting and applying the agreed objectives when providing spraying services.



**Duration** – 45 mins

In this session, you will guide participants in collectively identifying and agreeing upon five key improvements in their work practices for better protecting the community, especially children, against exposure to pesticides.

To ensure it's a constructive exercise, at first, let participants suggest priorities, to then check whether these indeed reflect good practice and are relevant to improving the group's current practices. Use your notes taken during discussions during session 3 to guide this exercise. If the suggested priorities are not in line with good practices or will not help improve current practices mentioned during session 3, you can suggest adjustments, as long as the group is convinced and agrees.

All participants shall commit to adopting these improvements when providing spraying services. It is important that the group decides collectively.

#### Notes to the facilitator:

When setting rules for participants to adopt changes, it is crucial to follow the suggested participatory approach, based on the following insights from research on behaviour change (\*):

- Having fewer rules is more effective than having many, as it makes them easier to remember and follow.
- When we set the rules ourselves, we are more likely to feel ownership and commitment to the change.
- Making a group commitment to these rules strengthens adherence and provides mutual support among members of the group.

#### Material needed:



- Blank flipbook or poster.

#### Instructions for the facilitator:

1. Explain to participants that what they have learned is a lot, but to translate this knowledge into practice, it will be helpful to start with some priority objectives. Explain the objectives of this session: collectively identifying 5 priority objectives they can easily adopt in their work practices.

2. Explain the 3 behaviour change insights above (\*).
3. Ask participants to reflect and suggest 5 areas where their practices should be improved, which are
  - A priority because they address important risks of children's exposure to pesticides
  - Realistic and can be easily adopted
4. Allow the group to discuss without introducing your own ideas. Provide feedback on the proposed objectives. If a proposed objective does not reflect any of the areas where improvement is indeed needed (based on the discussions in session 3), politely explain and request an alternative suggestion from the group.
5. For each of the suggested objectives, let the group vote whether they want to adopt it. Note the final list down on a blank flipbook or poster – see box below.
6. Limit the priority objectives to 5. If participants insist they want to have more, tell them they should start with the 5 most important ones, and then more can be added at a later stage.
7. Inform participants about the follow-up session to be held on a subsequent date to recap the knowledge acquired and exchange experience on the adoption of the priority objectives. Announce the date, time and place of the follow-up session, and inform participants that only after having attended the follow-up session, they will obtain a training certificate.

#### How to document the five priority objectives

After the group has identified and agreed upon the five priority areas of improvement of their work practices, you should write them on a poster using a table as shown below. In the first column, you should write down a keyword for each objective. In the second column, describe in easy words the corresponding **concrete action** to be taken by the spraying service provider (see example).

| 5 rules to better protect children before, during and after spraying                  | Explanation                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. (e.g., "prevent community members from entering fields during and after spraying") | (e.g., "Always post warning signs around the field before spraying (red cloth or red bags tied to stakes) and advise the farmer to not remove these before the end of the no-entry period.") |
| 2.                                                                                    |                                                                                                                                                                                              |
| 3.                                                                                    |                                                                                                                                                                                              |
| 4.                                                                                    |                                                                                                                                                                                              |
| 5.                                                                                    |                                                                                                                                                                                              |

## SESSION 5

### First aid

#### The session at a glance



##### Objectives

By the end of the session, participants:

- Are able to recognize the signs and symptoms of pesticide poisoning and understand why quick action is critical to preventing severe health consequences.
- Know the immediate steps to take when they or someone else may have been exposed to pesticides, including assessing the situation and protecting themselves before helping others.



Duration – 60 minutes



##### Session overview

---

Case study

---

First aid

---

#### Material needed:



A blanket for practising the recovery position

Printed posters: Long-term and short-term health effects of pesticide exposure (Posters 6 and 7)

#### Case study

Start by sharing the case study below and asking participants about their practices.



*Mr Tia, aged 32, arrived in the country a fortnight ago. He is delighted with his new job and wants to make sure that his employer appreciates the quality of his services. He finished weeding the cocoa field ahead of time. It is agreed that he will be picked up and brought back to the village in 1 hour.*

*To do the right thing, Tia decides to go to a nearby sprayed field and start weeding. Shortly after starting his work, he felt unwell: he began vomiting and experiencing severe abdominal cramps.*

Questions for discussion:

What could cause vomiting?

You discover Tia writhing in pain. What do you do?

## First aid

Following the case study, give an overview of the following first aid guidelines:

- **Check the person's condition:**
  - If the person is conscious, ask questions. For example: What happened? Where is the pain now? What pesticide did you use? [...]
  - If the person is unconscious or not breathing, quickly put them in the recovery position contact the nearest health center.
- **Seek medical help and bring information:**
  - Take the container or label of the pesticide involved in the accident to the health center.
- **Monitor and comfort the victim:**
  - Stay with the victim to monitor their condition. Keep them at rest, warm and as comfortable as possible.
- **Protect yourself and others:**
  - Protect yourself by wearing personal protective equipment and clothing when administering first aid, if necessary. For example, wear chemical-resistant gloves when giving first aid to a victim of a pesticide that can be absorbed through the skin.
  - Pay attention to the health effects on yourself and your colleagues - if you suspect poisoning, seek first aid and medical assistance as soon as possible.
  - Keep others away from the exposure source.
- **Prevent further exposure:**
  - Mark the field where the person was poisoned
  - Warn other workers and people to avoid contamination
  - Ensure decontamination of premises, equipment and clothing

Explain that there are specific first aid instructions for different exposure routes:

- **Inhalation or ingestion:**
  - Rinsing and cleaning the mouth
  - Do not induce vomiting unless specifically instructed to do so by medical staff
  - If the worker is gagging or vomiting, place them in the lateral safety position (this position reduces the risk of vomit entering the lungs and worsening the victim's condition).
  - Do not allow the victim to lie on their back
  - Contact the medical services
  - Do not attempt to neutralise the product with milk or oil
- **Skin contact:**
  - The rescuer must ensure that they do not intoxicate themselves
  - Remove the person from the contaminated area
  - Remove pesticide-soiled clothing
  - Rinse skin with water for 15 to 20 minutes or wash skin and hair with a non-abrasive soap and water for 15 to 20 minutes. Also clean under finger or toenails.
  - Do not apply any medicines or creams to the skin to counter the effects of the pesticide
  - Put on clean clothes before transporting the person to a health centre
  - If the pesticide is a corrosive liquid, a longer rinse may be necessary (30 minutes or more).
- **Eye contact:**
  - Rinse with water continuously for at least 15 minutes, keeping the eyelids open.
  - Refer to medical services for an examination



**Key messages:**

- Taking immediate care of a person poisoned by a pesticide can make all the difference to their recovery.
- Knowing the signs and symptoms of pesticide exposure is essential. Workers must learn to recognise these symptoms - so they can spot potential overexposure, whether to themselves or a colleague.

## SESSION 6

# Follow-up: Have participants improved their practices?

### The session at a glance



#### Objectives

By the end of this session, participants:

- Recall and consolidate the key knowledge and practices learned during the training to strengthen long-term retention.
- Reflect on their progress by sharing how they have applied the recommended practices and what changes they have made since the training.
- Recognize and celebrate achievements, taking pride in the improvements adopted to enhance safety for themselves, their communities, and especially children.
- Identify remaining challenges and openly discuss barriers that make it difficult to fully adopt safer practices.
- Collaborate to find solutions and commit to further improvements, fostering a sense of collective responsibility and mutual support within the group.



**Duration** – 90 minutes



#### Material needed:

- Posters used during previous sessions
- Poster showing the 5 rules to better protect children which have been jointly agreed during session 4

#### Note to facilitator:

The follow-up session plays a key role in ensuring the long-term impact of the training. Revisiting knowledge after some time helps participants reinforce what they have learned and consolidate it into long-term memory. Sharing personal experiences about adopting new practices also strengthens participants' commitment and encourages peer learning.

To ensure full participation, plan this session well in advance and communicate the details clearly to all participants. Attendance is essential: participants will only receive their training certificate once they have completed the full programme, including this follow-up session.

#### Instructions to the facilitator:

1. **Recall key learnings:** Start by asking participants to recall some of the points they remember from the training.
2. **Review key learnings:** Once everyone has shared at least one point, help them recap the key learnings. You can now show a poster prepared in advance of this session which summarizes the

most important learnings based on knowledge gaps identified during sessions 1-3. Keep the content lean and focus on key points.

3. **Recap key objectives for improvement of work practices:** Use the poster prepared during session 4 to recall the objectives set by participants. Let participants read them out.
4. **Experience sharing:** Invite participants to share their experiences on how they have adopted new work practices based on these priority objectives. Also encourage participants to mention improved work practices which go beyond these 5 priorities. Encourage each participant to share their experiences.
5. **Challenges and possible solutions:**  
Ask each participant to share any challenges they have encountered in putting the recommendations in practice.  
Ask the group to discuss and suggest solutions.
6. **Awarding certificates:** Conclude the session by congratulating participants for the new knowledge acquired, for their increased level of expertise in safer use of pesticides, and for their important contribution to better protecting the health of communities, and children in particular, from harm through pesticides exposure.  
Hand out to each participant individually their training certificate, inviting the group to applaud.

## Appendix I: National government agencies responsible for pesticide product approval

**Côte d'Ivoire:** Comité Pesticides (Pesticides committee), under the authority of the Direction de la Protection des Végétaux. [Service Public de Côte d'Ivoire :: servicepublic.couv.ci](http://servicepublic.couv.ci)

**Cameroon:** there are two entities for the approval

- Inter-State Committee for Pesticides in Central Africa (CPAC) [HOMOLOGATION | CPAC](#) . CPAC is the regional body responsible for pesticide registration within the CEMAC zone (Economic and Monetary Community of Central Africa). It plays a key role in harmonizing pesticide registration procedures across Central African countries.
- Ministry of Agriculture and Rural Development (MINADER)  
Specifically, the Directorate of Regulation and Quality Control (DRCQ) [MINADER - Direction de la Réglementation et du contrôle de Qualité \(DRCQ\)](#)

**Ghana:** Environmental Protection Agency (EPA) [Environmental Protection Authority, Ghana](#)

**Nigeria:** NAFDAC (National Agency for Food and Drug Administration and Control) <https://nafdac.gov.ng/>

## Appendix II: How to recognise approved pesticide products?

To ensure the product is approved by the country check the following elements on the label:

**Ghana:**

- Product name (e.g., 'AgroShield 500EC'),
- EPA Ghana registration number (e.g., EPA Reg. No. GH-2023-0456),
- Active ingredient and concentration (e.g., Cypermethrin 50g/L),
- Usage instructions in English,
- Safety precautions with hazard symbols,
- Manufacturer name and contact, and barcode.
- The label should be colorful but professional, with a layout suitable for a 1-liter bottle; including the EPA Ghana logo in the corner.

**Cote d'Ivoire:**

- Product name (e.g., 'AgroProtect 500 EC'),
- Active ingredient name and concentration: (e.g., 'Cyperméthrine 50g/L')
- Usage instructions in French: 'Insecticide pour cultures maraîchères',
- Safety precautions: 'Porter des gants et un masque. Ne pas appliquer près des sources d'eau.',
- Homologation number: 'CI-2025-0456',
- Manufacturer: 'AgroSolutions Afrique',
- A small Ivorian flag icon and a QR code linking to the Ministry of Agriculture's pesticide registry.
- The design is clean, professional, and follows typical agricultural product packaging aesthetics.



[www.cocoainitiative.org](http://www.cocoainitiative.org) | [info@cocoainitiative.org](mailto:info@cocoainitiative.org)

**ICI Secretariat in Switzerland**  
Chemin de Balexert 9,  
1219 Châtelaine | Switzerland  
+41 22 341 47 25

**ICI National Office in Côte d'Ivoire**  
II Plateaux, 7ème Tranche, Lot 3244, Ilot 264,  
Abidjan-Cocody | Côte d'Ivoire  
+225 27 22 52 70 97

**ICI National Office in Ghana**  
No. 16, Djanie Ashie Street,  
East-Legon | Accra | Ghana  
+233 302 998 870