SAFE USE OF PLANT PROTECTION PRODUCTS

By

PAMELA N KABOD
UGANDA CHRISTIAN UNIVERSITY
What is safe use /PPP?

Safe use is use without causing harm to man and his environment (plants, water, animals, soils).
Why safe use?

Plant Protection products are hazardous; Careless handling / use may lead to

• Pain and suffering
• Loss of income
• Poor quality of life
• Family stress
• Premature death
Plant Protection Products

Pesticides may be

- Mineral products
- Biological products
- Plant derived
- Synthesized products
Importance of Pesticides

- Protect crops in the field and in post harvest

- Use of PPP leads to better crop growth thus higher yields and earnings

- However, inappropriate and excessive use has negative side effects in regard to human health and environment

- PPP are biologically active can cause damage to organisms they were not intended to control (So Who & what is at risk?)
NAMING

- Trade name
- Active ingredient
WHO Toxicity Categories

HAZARD CLASSIFICATION

GROUP Ia

GROUP Ib

GROUP II

GROUP III

GROUP IV
Dangers with PPP

All PPP are hazardous

- Toxic
- Corrosive
- Flammable
TYPES OF POISONING

- **Acute** – Symptoms of poisoning are observed after a single exposure

- **Chronic** – Symptoms occur after repeated exposure to small doses of pesticides
Initial Symptoms of Acute Poisoning

- Dizziness, Discomfort, Headache
- Weakness or fatigue
- Nausea
- Vomiting
- Excessive sweating
- Shaking
- Tightness of the chest
Tools for Safe Use Implementation

- Right attitude – Safety must be consciously managed not assumed
- Discipline
- Knowledge of product and all pertaining to it
- Knowledge about routes of exposure
- Right skill of application
- Proper use of PPE
- Personal hygiene
- Aim at minimizing usage (IPM)
‘WHAT IS POSSIBLE CAN HAPPEN’
Exploit **ALL** possible prevention measures
What is possible can happen
What is possible can happen

*Be Vigilant at creating awareness*
2. Think of safety in totality

- Yourself & Your family
- The crop & other people on the farm
- Consumers of your produce
- Livestock and poultry around and within the farm
- Water supplies
- Wildlife
- The general environment; biodiversity, soil live etc
**ROUTES OF EXPOSURE**

**Dermal (skin contact)**

Most common are:

- splash into eyes
- exposed skin
ROUTES OF EXPOSURE

Breathing (inhalation)

- Most rapid; pesticide enters lungs

- From lungs directly into bloodstream

- Avoid closed spaces or still air conditions
ROUTES OF EXPOSURE

Swallowing (ingestion)

- Least likely method of poisoning very dangerous
- Usually intentional
- Do not eat, drink or smoke with contaminated hands
To Protect yourself

- Use full PPE when handling Pesticides
- Read the label before use
- Follow instructions in the label
- Work with well maintained machines
- Employ proper application techniques
- Do not eat /smoke/drink while handling pesticides
- Observe Hygiene
- Do not keep food & utensils in treated areas
- Observe re-entry intervals
- Do not re-use pesticide containers
Personal Protective Equipment

- Protective helmet or cloth cap.
- Eye protection (safety spectacles, goggles or face shield)
- Dust or vapour mask
- One piece worksuit with closely fitting trouser bottoms
- Rubber or plastic gloves or gauntlets
- Rubber or plastic apron
- Workboots with protective toecaps
Safety for others & Environment

- Proper storage
- Bar access to area under treatment
- Observe re-entry intervals
- Adhere to recommended dosing rates
- Proper disposal of all chemical waste
- Do not re-use PPP packaging materials
- Proper use of warning signs
- Fence off risky areas
Safe Application Techniques

- Spray in cool of day
- Never leave PPP and equipment unattended
- Never leave pesticide containers open
- Do not spray in strong wind
- Do not eat, drink or smoke
- Do not touch face with contaminated hands
Safety After Spraying

- Fix warning signs - re-entry period
- Prevent re-entry without protective clothing
- Collect all chemical wastes for safe disposal
- Dispose of empty containers in the correct manner
- Wash the sprayer and parts
- Wash hands and face before eating, drinking or smoking
- Complete an application record
FIRST AID

- Stop exposure

- If poisoned through skin, remove contaminated clothes

- Wash with lots of running water

- Take the patient to hospital with the product label

- Do not give anything to eat, drink

- Do not induce vomiting unless stated on the label
Write a Report

- What happened
- How did it happen
- When did it happen
- Why did it happen
- Where did it happen
- What can be done to prevent it from happening again
- Ensure corrective action is taken
THANK YOU FOR LISTENING