

# APPLICATOR SAFETY





# READ THE LABEL!

- ▶ HERBICIDE LABEL IS A LEGAL DOCUMENT
- ▶ LABEL DEFINES LEVEL OF HAZARD ASSOCIATED WITH PRODUCT
- ▶ LABEL DETERMINES PROPER FIRST AID PROCEDURES
- ▶ LABEL DETERMINES MINIMUM PPE NEEDED
- ▶ LABEL PROVIDES SAFE USE RECOMMENDATIONS
- ▶ LABEL DESCRIBES ENVIRONMENTAL HAZARDS
- ▶ DISPOSAL
- ▶ STORAGE



**DANGER**



- ▶ HIGHEST LEVEL OF TOXICITY
- ▶ VERY LOW DOSE CAN KILL—1 DROP TO 1 TSP
- ▶ CAN CAUSE PERMANENT OR SEVERE SKIN, EYE OR RESPIRATORY DAMAGE
- ▶ HAZARD CLASS 1
- ▶ SIGNAL WORD REFLECTS ACUTE TOXICITY



## WARNING



- ▶ MODERATE LEVEL OF TOXICITY
- ▶ SMALL TO MEDIUM DOSE CAN KILL
- ▶ POSSIBLE ILLNESS, SKIN, RESPIRATORY, AND SKIN DAMAGE– 1tsp TO 1oz
- ▶ HAZARD CLASS II

# CAUTION

- ▶ SLIGHT LEVEL OF TOXICITY
- ▶ MEDIUM TO LARGE DOSE CAN KILL
- ▶ POSSIBLE ILLNESS, SKIN, RESPIRATORY, AND SKIN DAMAGE– 1 pint TO 1 lb
- ▶ HAZARD CLASS III & IV

# EXPOSURE $\times$ TOXICITY = HAZARD

- ▶ HAZARD IS THE POSSIBILITY OF INJURY THAT WILL RESULT FROM USE OF A SUBSTANCE IN A GIVEN FORMULATION, QUANTITY, OR MANNER
- ▶ A PRODUCT CAN BE EXTREMELY TOXIC , BUT PRESENT LITTLE HAZARD
- ▶ A PRODUCT CAN BE OF LOW TOXICITY AND BE VERY HAZARDOUS

# ACUTE vs. CHRONIC TOXICITY

- ▶ ACUTE: ACCIDENTAL OR INTENTIONAL SINGLE OR REPEATED SHORT TERM EXPOSURE
- ▶ CHRONIC: PROLONGED OR FREQUENT EXPOSURE
- ▶ BOTH HAVE MULTIPLE ROUTES OF EXPOSURE
- ▶ OVERALL NATURE OF HAZARD DETERMINES PROPER PPE

# ROUTES OF EXPOSURE



CONTACT



# ROUTES OF EXPOSURE



INGESTION

# ROUTES OF EXPOSURE



INHALATION

# POISONING SYMPTOMS

## ▶ MILD SYMPTOMS:

- Headache
- Fatigue
- Weakness
- Nausea
- Dizziness
- Skin\Eye\Nose\Throat Irritation
- Soreness In Joints
- Diarrhea

# POISONING SYMPTOMS

## ▶ MODERATE SYMPTOMS:

- Stomach Cramps
- Excessive Perspiration
- Trembling
- Loss of Muscle Coordination
- Muscle Twitches
- Difficulty Breathing\Cough
- Confusion
- Rapid Pulse
- Flushed or Yellow Skin



# POISONING SYMPTOMS

## ▶ SEVERE OR ACUTE POISONING:

- Fever
- Intense Thirst
- Increased Rate of Breathing
- Vomiting
- Uncontrollable Muscle Twitches
- Pinpoint Pupils
- Convulsions
- Inability to Breathe
- Unconsciousness

# + FIRST AID +

- ▶ First Aid: *The initial effort to help a victim while medical help is on the way.*
  - ▶ STEP #1: **Protect yourself from exposure.**
  - ▶ STEP #2: Move victim from contaminated area.
  - ▶ Step #3: Check for breathing. Perform artificial respiration if needed.
  - ▶ Step #4: Call Rocky Mountain Poison Control. If person is unconscious, convulsing or having breathing problems call 911.
  - ▶ Step #5: Follow all directions given by medical personnel.
  - ▶ Step #6: Keep patient comfortable and continue treatment. Do not leave alone.
- Communicate to emergency staff what chemical(s) are involved
  - Provide label to emergency staff
  - Refer to product label for specific first aid procedures within the Statement of Practical Treatment section

ROCKY MOUNTAIN POISON CONTROL:  
1-800-222-1222

# FIRST AID KIT CONTENTS

- ▶ **In addition to a standard first aid kit:**
- ▶ Gloves
- ▶ Soap or Detergent
- ▶ Rubbing Alcohol
- ▶ Eye Wash Bottle
- ▶ Paper Towels
- ▶ Clean Plastic Bottle
- ▶ Mouth Barrier
- ▶ Any antidote indicated on product label
- ▶ Activated Charcoal\*
- ▶ Fresh Water—At least 10gal

# FIRST AID FOR PESTICIDE POISONING

## ▶ SKIN:

- Rinse Affected Area(s)
- Remove Clothing
- Wash Thoroughly With Soap and Water
- Faster poison is removed, less damage

## ▶ EYE:

- Position affected eye below uncontaminated eye
- Hold eyelid(s) open and gently rinse with running water.
- Recommended flush time of 15min\5gal an eye
- Cover eye and seek medical attention.



# FIRST AID FOR PESTICIDE POISONING

## ▶ INHALATION:

- Contact emergency personnel
- If in an enclosed space, do not enter without air supplied respirator.
- Move victim to fresh air\ensure adequate ventilation.
- Loosen all tight clothing.
- If victim is convulsing, monitor breathing and protect from falling\striking head.
- Keep chin up so airway will remain clear

# FIRST AID FOR PESTICIDE POISONING

## ▶ INGESTION:

- Contact emergency personnel
  - DO NOT INDUCE VOMITING UNLESS DIRECTED BY PRODUCT LABEL
  - DO NOT INDUCE VOMITING ON UNCONSCIOUS VICTIM
- Call Rocky Mountain Poison Control at:  
1-800-222-1222

# PERSONAL PROTECTIVE EQUIPMENT

- ▶ Refer to precautionary statements on product label.
- ▶ Listed PPE is the minimum requirement.
- ▶ PPE Usage:
  - Gloves (Butyl, Nitrile)
  - Clothing
  - Eye Protection
  - Footwear
  - Headwear
  - Respirator

# TIPS FOR AVOIDING PESTICIDE EXPOSURE

- ▶ Wash gloves \ hands thoroughly after use.
- ▶ Avoid fabric lined gloves.
- ▶ Wash hands before eating, drinking, using tobacco, or using the bathroom.
- ▶ Do not store herbicides or contaminated clothing with food or water
- ▶ Do not carry herbicide within the passenger compartment of any vehicle
- ▶ Throw away heavily contaminated clothing
- ▶ Properly clean up all spills and sites of cross contamination
- ▶ Properly clean and maintain all PPE.
- ▶ Keep chemicals in original labeled containers



THANK YOU!

