Safety Concerns and Personal Protection Relative To Application Method and Product

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PPE Minimizes Your Exposure While Handling Pesticides

The absolute minimum to wear:

- Long-sleeved shirt
- Long trousers or coveralls
- Gloves, waterproof
- Closed-toe shoes plus socks
- Hat, waterproof

Protect Yourself!
understand PPE’s limitations
Read the Label for the Required PPE!!!

- Follow all label directions for PPE
  - Handlers (measuring & mixing)
  - Applicators
  - Maintenance & cleanup

- *Minimum* requirements are given – you can wear more
Chemical-Resistant Clothing

- Read the label
  - Specifically, required clothing or equipment
- Watch for signs of wear & degradation:
  - Color changes – spongy – swollen – jelly-like
  - Cracked – brittle
- Plastic is the most chemical-resistant PPE material and most common one found
Your Greatest Protection Is Using Gloves!

- Especially when handling concentrates
- Unlined and waterproof
- Check for holes
- If spraying overhead, tuck sleeves inside gloves...

... and fold the cuffs up

Gloves can reduce dermal exposure by as much as 99% when mixing, loading, and applying pesticides
Chemical-Resistant Suits

- Offers the most protection
- Wears out with chemical contact over time
- Made of coated plastic or rubber
- May be too warm on hot days
  - Drink plenty of water!
  - Take frequent breaks!
  - Watch out for heat stress

Tyvek, Tychem, etc.
Foot & Head Wear

• No sandals, tennis shoes, leather footwear!

• Consider wearing unlined, rubber boots... even if not required

• Hang pant legs outside the boots!

• Use a liquid-proof wide brimmed hat or hood
  – When required by the label’s PPE
  – Important for overhead applications
  – Needed for spray & fogging applications
Eyewear

- When required by the label!

Several types of protective eyewear are available:
  - Goggles
  - Face shield
  - Safety glasses with brow and side shields
  - Full helmet with skirt and respirator filters (Kasco helmet)
Respirators
Air-Purifying

- Mechanical filter respirators (dust masks)
- Chemical cartridge respirators

- National Institute of Occupational Safety and Health (NIOSH)
- Make sure the cartridge or filter is rated for the pesticide you are using
Now, Let's Look at Some Examples!

• Tell me what’s wrong in each case …
  – First picture:
Is this guy doing anything right? No PPE! Wrap-around sunglasses okay? Tripping on hanging line possible?
Hearing protection is good!
Eye protection appears okay
Gloves?
Long sleeve shirts?
Respirators?
Tennis shoes are a NO.
Close quarters? Could they spray each other?
Will a dust mask suffice?  
Glove cuffs turned up - better.  
Straw hat with ventilation a NO!  
Glasses—side & top shields?  
Hearing protection?
Long sleeved shirt? 
Eye protection, maybe not! 
Brimmed hat? 
Hearing protection, hard to tell for sure?
Looks pretty good doesn’t it? Tyvek pant legs outside boots. Can’t tell about eye protection or respirator. Gloves may be inside sleeves?
Looks pretty good doesn’t it?
Did he check backpack sprayer for leaks?
Respirator looks like a dust mask, iffy.?
Wide-brimmed hat looks to be cotton, so may be iffy too.
Now this is the way to avoid PPE mistakes!
This looks pretty good too! Assuming the pilot is wearing his required protection.
The wonders of Bti.
Is PPE required here?
Label defines all!
Is This How You Spray?
Zika Response Miami
'They use small doses at a time, but over several months that adds up. It depends on how long it will be sprayed. It could be for the rest of the year. If that is the case, we should be concerned about that.'

Michelle Harriott, science and regulatory director of a Washington-based NGO called Beyond Pesticides.

http://www.dailymail.co.uk/health/article-3779056/Florida-politicians-urge-use-Intrexon-GM-mosquitoes-Zika.html#ixzz4K1qCyuHS
Any Questions?