Pesticide Handlers
Risk Factors & Solutions

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Risk Factors & Solutions

Teams & participants

Solutions
✓ Managers & growers
✓ Pesticide Handlers
✓ Expert Interview participants
✓ Expert Working Group
✓ Communications Advisory Group
✓ WSDA
✓ WSU - Extension
✓ COPER

Risk Factors
✓ Washington State University
✓ Seattle University
✓ Heritage University
✓ UW Schools of Public Health/Medicine
✓ WA Tree Fruit Research Commission
✓ Yakima Valley Farm Workers Clinic
✓ Central WA Occupational Medicine
✓ WA Dept of Health
✓ WA Dept of Agriculture
✓ WA Dept of Labor & Industries
Two Approaches
2006 - 2011

❖ Risk Factors
Risk Factors For Cholinesterase Depression among Pesticide Handlers
Matthew Kiefer, PI (NIOSH)

❖ Experts
Minimizing Agricultural Worker & Family Pesticide Exposures
Richard Fenske, PI (NIOSH)
Risk Factors

- Risk factors
  - Applying multiple OP and CB pesticides
  - Mixing and loading

- Protective factors
  - Wearing chemical protective boots
  - Storing PPE in lockers
Experts: solutions

- Training with fluorescent tracers
- Cab vs. no cab on tractor
- Scrub brush vs. high pressure washer
- Splash protection: mixers’ eyes
Experts: practical & farm based

Practical Solutions for Pesticide Safety

- Faster turn around than “research”
- Easy to make & accessible materials
- Used by other farmers

Mr. Castro set up this sink system … …because he found thorough cleaning of PPE is easier. The sink can be used for cleaning smaller items and soaking PPE. The raised sink also reduces back strain.
Experts: new directions

- Improving PPE Effectiveness in Ag Applications
  *Michael Yost, PI (DEOHS-MA/AF)*

- Nitrile gloves: Do they protect?
- Respirator cartridges: Realistic change out schedule?
- Hats: Practical Design?
Experts: new directions

  *Kit Galvin/Nadine Lehrer, PIs (NIOSH)*
  - Education & dissemination
  - Removing H&S barriers by stakeholder engagement: Safety climate
  - Spanish language for pesticide labels

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

WSU - Decision Aid System
*Better IPM through science and technology.*
New Directions: Impact

❖ Who: audiences
  - Large meetings: handlers, managers, & growers
  - Recertification classes: licensed handlers
  - Extension: educators & managers

❖ What: knowledge/information
  - Retention
  - Transfer
  - Implementation

❖ How: data collection
  - End of meeting surveys
  - Follow-up by phone
  - Online DAS survey
  - 2016 WA State tree fruit industry survey
Safety is the “work of changing minds, and it’s not done overnight.”

~ ‘Practical Solutions’ project participant