TSE’s Pesticide Education Program

Washington State Department of Agriculture

Ofelio Borges, Technical Service and Education Program Manager
WSDA’s TSEP Training Programs - Topics

- Background.
- Training programs.
- Achievements.
Background
Hands-on Handler Training

• Created by UC Davis.

• Pat O’Conor.

• Adopted by Washington in 1998.
Background
Farmworker Education Program

- Hands-on handler training.
- Bilingual group of trainers.
- Industry and State Agencies.
Background

WSDA & WSU → Farmworker Education Program

- Modified training curriculum.
- Offered 3 workshops/season.
- Trained new industry trainers every year.
Background
Changes – Training Demand Increased

• Demand for handler training increased every year.
  – From 3 workshops in 2002 to 19 in 2018.
  – From Hands-on (50 people) to Interactive (240 people).
  – From 150 to 2,296 trained people in a season.
Background - New Training Programs Developed

• WSDA created and piloted a WPS Train the Trainer program for Washington in late 2002.
  – Based on a national EPA model.
  – Demand increased from 2 workshops in 2003 to 10 workshops in 2018.
  – From an 8-hour workshop to 2-day workshop.
Background - New Training Programs Developed

- Respirator Train-the-Trainer was developed and piloted in 2014.
  - Offered a workshop in 2014 and one in 2015.
- Piloted the Airblast Calibration and BMPs program in 2015.
  - Have offered an average of 4 workshops/season.
- Participated in various pesticide re-certification and grower meetings.
Training Programs and - Handler Training

- Target unlicensed applicators – considered most at risk.
- Overcome language and literacy barriers.
- Use of interactive training methods.
Training Programs - Handler Training

- Initially, we conducted 3 hands-on workshops per season.

- We conducted an average of 16 workshops per season, with no more than 50 attendees per workshop.

- Still not able to meet demand and forced to be creative.
Training Programs - Handler Training

Training for Pesticide Handlers

- **Hands-on**
  - Up to 50 participants
  - **PPE**
    - (Whole group of 50 persons)
  - **Respirators**
    - (15-17 persons)
  - **Decontamination**
    - (15-17 persons)
  - **Mixing & Loading**
    - (15-17 persons)
  - **Additional WPS Information**
    - (whole group of 50 persons)

- **Interactive**
  - Up to 240 participants
  - **PPE**
    - (60 persons)
  - **Decontamination**
    - (60 persons)
  - **Mixing & Loading**
    - (60 persons)
  - **Respirators**
    - (60 persons)
  - **Additional WPS Information**
    - (whole group of 240 persons)
Training Programs - WPS Train the Trainer (TtT)

- Designed for farm owners, managers, supervisors and trainers.
- Provides the tools and information for trainers to conduct interactive training sessions based on WPS requirements.
- Helps improve overall compliance with WPS requirements.
Training Programs - WPS Train the Trainer

**Training Modules**

- Pre Training and Training Process
  (Before and during training)
- Basic Pesticide Information
  (Label information)
- Overview of WPS Requirements
  WPS Training requirements
- Training Methodology
  (6 training methods)
- Trainers’ first practice
  Training Criteria for Workers
  - 20 minutes for preparation
  - 3 minute practice
  - WSDA Trainers’ feedback
Second Day Activities

1. WPS Training Criteria for Pesticide Handlers & Fieldworkers
2. WPs Knowledge Assessment
3. WPS Mock Training to Obtain Certification
Training Programs - WPS Train the Trainer Certification

- Trainers are issued with a WSDA TtT card and are entered in our licensing database as Certified Trainers.
- Trainers can issue WSDA’s training verification cards.
- WSDA keeps records of all WPS training verification cards issued to trainers.
## Other organizations Served

<table>
<thead>
<tr>
<th>Other Establishment Participants</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIC Trainers</td>
<td>9</td>
</tr>
<tr>
<td>WSDA employees</td>
<td>4</td>
</tr>
<tr>
<td>Agrochemical companies</td>
<td>4</td>
</tr>
<tr>
<td>L&amp;I employees</td>
<td>3</td>
</tr>
<tr>
<td>Oxarc employees</td>
<td>2</td>
</tr>
<tr>
<td>Food Safety Auditors</td>
<td>2</td>
</tr>
<tr>
<td>NW Berry Co-op</td>
<td>2</td>
</tr>
<tr>
<td>WSU teacher</td>
<td>1</td>
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</table>
Training Programs - Airblast Sprayer Calibration and Best Management Practices

• Designed for people who handle pesticide application equipment.

• Provides participants with the tools to improve effectiveness of pesticide applications while reducing off target drift.

• Highly interactive and hands-on classroom and field activities.
Airblast Sprayer Calibration and Best Management Practices

• 8-hour program offered in English and Spanish simultaneously.

• Has been offered in conjunction with WSU.

• Targets radial-type orchard sprayers.
Training Program - Airblast Sprayer Calibration and Best Management Practices

Training Modules

Module 1: Knowing Your Equipment and Safety.
Classroom & Field Exercise

Module 2: Sprayer Calibration.
Classroom & Field Exercise

Module 3: Sprayer Configuration.
Classroom & Field Practice

Module 4: Environmental Conditions and New Technology.
Classroom & Field demo
Training Programs Airblast Sprayer Calibration and Best Management Practices

Module 1: Knowing your equipment
Module 2: Sprayer Calibration
Calibration of an airblast sprayer.
Module 3: Sprayer Configuration
Optimization of the Use of Airblast Sprayer.
Training Program - Airblast Sprayer Calibration and Best Management Practices

Module 4: Environmental Conditions and New Technology
New Sprayers, New Tools, Smart Phone Apps.
Module 4: Environmental Conditions and New Technology
New Sprayers, New Tools, Smart Phone Apps.
Training Program - Airblast Sprayer Calibration and Best Management Practices

Temperature Inversion Images
Training Programs – Private Applicator (PA)
Pre-license Course

• Unlicensed applicators.

• Use WSU’s Private Applicator study manual as training curriculum.

• 20-hour course in (four hrs., five days) Spanish only.
Training Programs - Pre-license Courses - Barriers

– Academic.
  • Literacy.
  • Comprehension.
  • Mathematical ability.
  • Test taking ability.
– Physical.
– Study habits.
  • Use of study guide.
Training Program - Pre-license Courses

Content

– Laws and Safety.
– Pesticide labels.
– Pest identification.
  • Insect
  • Weeds
  • Plant diseases
– IPM concept.
– Application equipment.
– Calculations.
Training Programs - Pre-license Courses

Tools

• Training materials.
  – PA Study manual
  – TurningPoint quizzes
  – Labels and handouts

• Visuals.
  – Power Point
  – Videos

• Demonstrations.
  – Personal Protective Equipment.
  – Mix and load materials.
Training Programs - Respirator TtT Program

- Have not been able to offer in the last two years.
- Highly interactive program.
- Tailored to agriculture.
### 2018 Training Overall Achievements

<table>
<thead>
<tr>
<th>Workshop Name</th>
<th>Number of Workshops in FY 2018</th>
<th>Number of Participants</th>
<th>Number of Agriculture Establishments</th>
<th>Number of partnerships</th>
<th>Certification</th>
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<tbody>
<tr>
<td>Hands-on Pesticide Safety for Pesticide Handlers</td>
<td>6</td>
<td>163</td>
<td>51</td>
<td>8</td>
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<td>Interactive Pesticide Safety Training for Pesticide Handlers</td>
<td>13</td>
<td>2123</td>
<td>336</td>
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<td>WPS Train the Trainer</td>
<td>10</td>
<td>250</td>
<td>150</td>
<td>9</td>
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<td>Airblas Sprayer Calibration and BMPs</td>
<td>4</td>
<td>159</td>
<td>66</td>
<td>3</td>
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<td>Pre-License Classes</td>
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<td>185</td>
<td>-</td>
<td>0</td>
<td>61</td>
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<tr>
<td><strong>TOTALS</strong></td>
<td><strong>38</strong></td>
<td><strong>2880</strong></td>
<td><strong>603</strong></td>
<td><strong>56</strong></td>
<td><strong>190</strong></td>
</tr>
</tbody>
</table>
Achievements - Training Partnerships

- WA State Tree Fruit Association
- G.S Long
- WA State Potato Commission
- WA WorkSource
  - Columbia Basin
  - Mt Vernon
  - Sunnyside
  - Yakima.
- Ag Center of Excellence
- WA Wine Growers
- WA Farm Bureau
- Columbia Gorge Growers Association
- Oregon State University
- WSU
  - Prosser
  - Mt. Vernon
  - Whatcom
Achievements - Training Partnerships

- NW, Berry Co-op
- G.S. Long
- Apple King, LLC
- Zirkle Fruit
- Gebbers Farms

- Wilbur Ellis
- Opportunities Industrialization Center (OIC, Yakima)
- Kershaw Orchards
Comments from participants

• “I want to thank the master trainers for your titanic labor trying to educate us at a very important level. Although I have attended this class several times, I would like to continue attending every year because every time I find it more interesting and constructive. Thank you.”

• “Not what I expected it to be, But very informative and helpful. Glad I took the class. Trainers were very supportive and honestly cared about us learning. Overall fun, positive experience!”
Questions?
Contact Us

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