ACUTE PESTICIDE-RELATED ILLNESS AMONG FARMWORKERS

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Presenter

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**Authority** Chapter 70.104 RCW

- Notifiable condition
  WAC 246-101-101

- Illness reporting relationships with:
  - Washington State Poison Center
  - Washington State Department of Labor & Industries
  - Washington State Department of Agriculture

- Memorandum of Understanding
Occupational Status, Farmworkers, and Pesticide Illness

Pesticide Illness Data (2010-2016)
Acute Pesticide Illness

**Sign & Symptom Groups**
- Neurologic = 66%
- Respiratory = 51%
- Gastrointestinal = 49%
- Eye = 46%
- Dermal = 32%
- Cardiovascular = 4%
- Other = 6%

**Severity**
- **High (2)**
  - Life threatening illness commonly involving hospitalization to prevent death.
- **Moderate (89)**
  - Usually involves systemic illness. Medical treatment may be required to return to normal functioning without residual disability.
- **Low (440)**
  - Often include symptoms such as headache, nausea/vomiting, dizziness, muscle weakness, fatigue. Usually recover within 3 days.

Pesticide Illness Data (2010-2016)
# Root Causes of Pesticide Illness Among Farmworkers

## Root Causes in Farmworker Cases

<table>
<thead>
<tr>
<th>Root Causes in Farmworker Cases</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drift</td>
<td>282</td>
</tr>
<tr>
<td>Notification/posting lacking or ineffective</td>
<td>164</td>
</tr>
<tr>
<td>Decontamination not adequate or timely</td>
<td>131</td>
</tr>
<tr>
<td>Label violation (NOS)</td>
<td>114</td>
</tr>
<tr>
<td>Required PPE not worn or inadequate</td>
<td>76</td>
</tr>
<tr>
<td>No label violation identified but person still exposed/ill</td>
<td>75</td>
</tr>
<tr>
<td>Applicator not properly trained or supervised</td>
<td>47</td>
</tr>
<tr>
<td>Application equipment failure</td>
<td>22</td>
</tr>
<tr>
<td>Spill/splash of liquid or dust (not involving application equipment)</td>
<td>22</td>
</tr>
<tr>
<td>People were in the treated area during application</td>
<td>22</td>
</tr>
<tr>
<td>Early re-entry</td>
<td>15</td>
</tr>
</tbody>
</table>

Pesticide Illness Data (2010-2016)
Causes of Pesticide Illness Among Farmworkers

Pesticide Illness Data (2010-2016)
Number of Illness Cases Among Farmworkers by Type of Application Equipment

- Airblast-HPG: 150
- Aerial: 110
- Ground sprayer-LP: 15
- Chemigation: 5
- Soil injector: 4
- Other: 3
Conclusions

Factors that repeatedly appear as key contributors to illnesses related to pesticide drift:

- Pesticides are toxic
- Advance communication is lacking
- Airblast sprayers and aerial applications pose higher risk for drift
- Proper training is essential
Questions?