Improving Farmworker Health through Handwashing

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What will we cover during this presentation?

An overview of a study focused on washing in the field
Materials we’ve developed to improve handwashing
Steps we’ve taken to test how well those materials work
Resources that you can use and share:
  - Health education materials
  - How to find information online
  - Social media toolkit
Why is washing important?

Pesticides can enter the body through skin, breathing, or eating/drinking.

Exposure through the skin and eyes is most significant for farmworkers.

Farmworkers should wash their hands and face with soap and water to minimize exposure.
Washing of the hands and face in the field needs to be improved.

For a group of NC farmworkers working in tobacco, what we saw farmworkers doing in the field was really different from what they said they were doing.

<table>
<thead>
<tr>
<th>Washing Behavior of 71</th>
<th>Observed (all the time)</th>
<th>Reported (all the time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash <strong>hands</strong> before <strong>eating</strong></td>
<td>7</td>
<td>65</td>
</tr>
<tr>
<td>Wash <strong>hands</strong> before <strong>drinking</strong></td>
<td>0</td>
<td>41</td>
</tr>
<tr>
<td>Wash <strong>face</strong> before <strong>eating</strong></td>
<td>0</td>
<td>46</td>
</tr>
<tr>
<td>Wash <strong>face</strong> before <strong>drinking</strong></td>
<td>0</td>
<td>31</td>
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What ideas do you have about how to improve handwashing in the field?
We are working with outreach workers and farmworkers to improve handwashing.
First, we listened to outreach workers about handwashing education.

We conducted 3 discussions with outreach workers across North Carolina.

We sent a survey to all North Carolina outreach workers about handwashing education.
Outreach workers told us what types of methods and messages were best for handwashing education.

Preferences for handwashing education methods with farmworkers:

1. pesticide residue activity
2. one-on-one discussion
3. brochure
4. poster

Priority messages for handwashing education with farmworkers:

1. Practical solutions when washing isn’t possible
2. How germs and pesticides are different
3. Risks of not washing
4. When it is important to wash
Then, we developed a handwashing toolkit.

Pesticide residue activities using fluorescent tracer

One-on-one and group discussion questions

Trainers’ guide in English and Spanish detailing the learning objectives, supplies needed, and step-by-step instructions

PNASH Fluorescent Tracer Manual:
How can we tell if the toolkit is working?

Community partner-led user satisfaction survey

Researcher-led measurement of pesticides on hands

Can we measure pesticides on farmworkers’ hands using hand wipes?

Does washing hands decrease the amount of pesticides we measure?
Can we measure pesticides on farmworkers’ hands using hand wipes?

Participants wiped the whole hand with a sponge moistened alcohol and then wiped each finger and the palm of the same hand with a second sponge.

Both sponges were placed in the same jar for storage and analysis.
We faced practical challenges in the field.

Difficulty wetting sponges with alcohol in the high-heat environment

Contamination of sponges due to wind, dust

Excessive amount of time required to prepare sponges in the field
How can we overcome these challenges and others?
We’re still learning what pesticides are on farmworkers’ hands.
What are our next steps?

Complete measurement of pesticides on hand wipe samples we have already collected.

Use hand wipe samples to measure differences in pesticide levels for farmworkers who have been trained using the toolkit and those who have not.
Resources that you can use and share!
Our project, “Addressing Migrant and Seasonal Farmworker Health Disparities with Information Resources,” focuses on improving the daily lives of migrant/seasonal farmworkers by expanding internet connectivity and access to online health information for farmworkers and their families. Our project has three aims: (1) identify and make available educational materials for farmworker health, (2) work with farmworker outreach workers on professional development and new technology, and (3) provide internet access and training to farmworkers and their families.

Digital Inclusion and Health Literacy.
Hundreds of patient education materials for outreach workers to use with farmworkers during health outreach, arranged by topic

Short videos about finding information online available in English and Spanish

- Video 1: Searching for and evaluating health information
- Video 2: Free consumer health resources
- Video 3: Google advanced search
- Video 4: Basic PubMed searching

Short videos to increase farmworkers’ digital literacy
www.pesticideresources.org
What questions do you have for us?

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