## 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

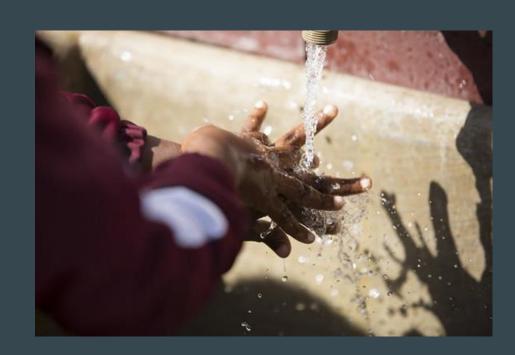
Social media toolkit

#### 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.

Washing Behavior of 71	Observed (all the time)	Reported (all the time)
Wash <b>hands</b> before <b>eating</b>	7	65
Wash <b>hands</b> before <b>drinking</b>	0	41
Wash <b>face</b> before <b>eating</b>	0	46
Wash <b>face</b> before <b>drinking</b>	0	31

What ideas do you have about how to improve

## 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



#### 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.

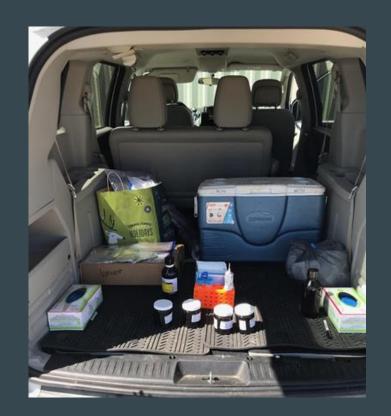


#### We faced practical challenges in the field.

Difficulty wetting sponges with alcohol in the highheat environment

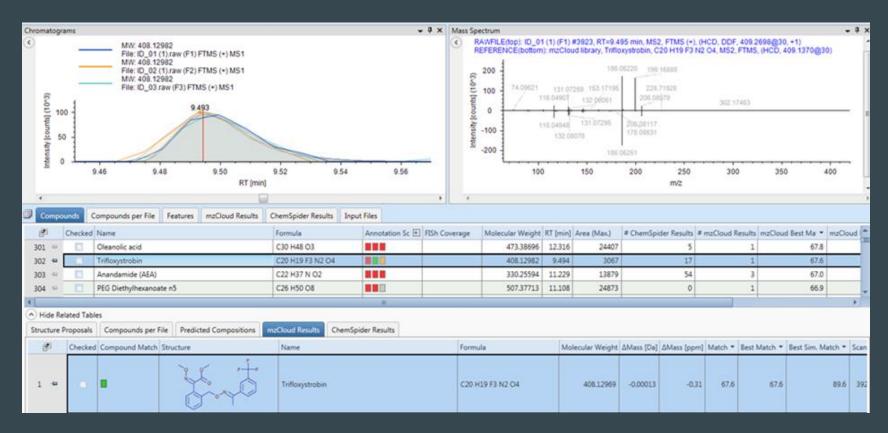
Contamination of sponges due to wind, dust

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!

#### www.FarmworkerHealthLiteracy.com



Digital Inclusion and Health Literacy.

#### www.FarmworkerHealthLiteracy.com

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

<u>Video 3:</u> Google advanced search

Video 4: Basic PubMed searching

Short videos to increase farmworkers' digital literacy

#### www.pesticideresources.org









#### www.pesticideresources.org

#### What questions do you have for us?

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