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Hurricane Preparedness for Migratory and Seasonal Agricultural Workers

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Organizers and Moderators



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National Center for Farmworker Health

The National Center for Farmworker Health is a private, not-for-profit organization located in Buda, Texas, whose mission is **“To improve the health of farmworker families.”**

Services we provide across four main areas:

- **Capacity Building**
- **Health Promotion and Education**
- **Migratory and Seasonal Agricultural Worker (MSAW) Outreach**
- **Data Collection**





Today's Speakers



Marysel Pagán-Santana, DrPH, MS
Director of Environmental and Occupational Health
Senior Manager for Puerto Rico
Migrant Clinicians Network



We will learn...

- How hurricanes represent a weather emergency.
- The impact of hurricane emergencies on MSAWs and employers.
- Examples of prevention and mitigation actions for MSAWs and employers.
- Recognize how hurricanes represent a weather emergency.
- Identify the impact of hurricane-related emergencies on MSAWs and employers.
- Describe prevention and mitigation strategies for clinicians, MSAWs, and employers.

Assessment of weather emergencies and their impact



Challenges of Agricultural Industry

- Crop damage
- Soil eruption
- Infrastructure
- Supply chain interruption
- Workforce
- Crop calendar/ Production process

Recent Events in the US and Territories

Hurricanes Irma/Maria

- 80% crop loss in Puerto Rico
- 69% of farmers experienced at least one month of food insecurity in the aftermath



Recent Events in the US and Territories

Hurricane Ian

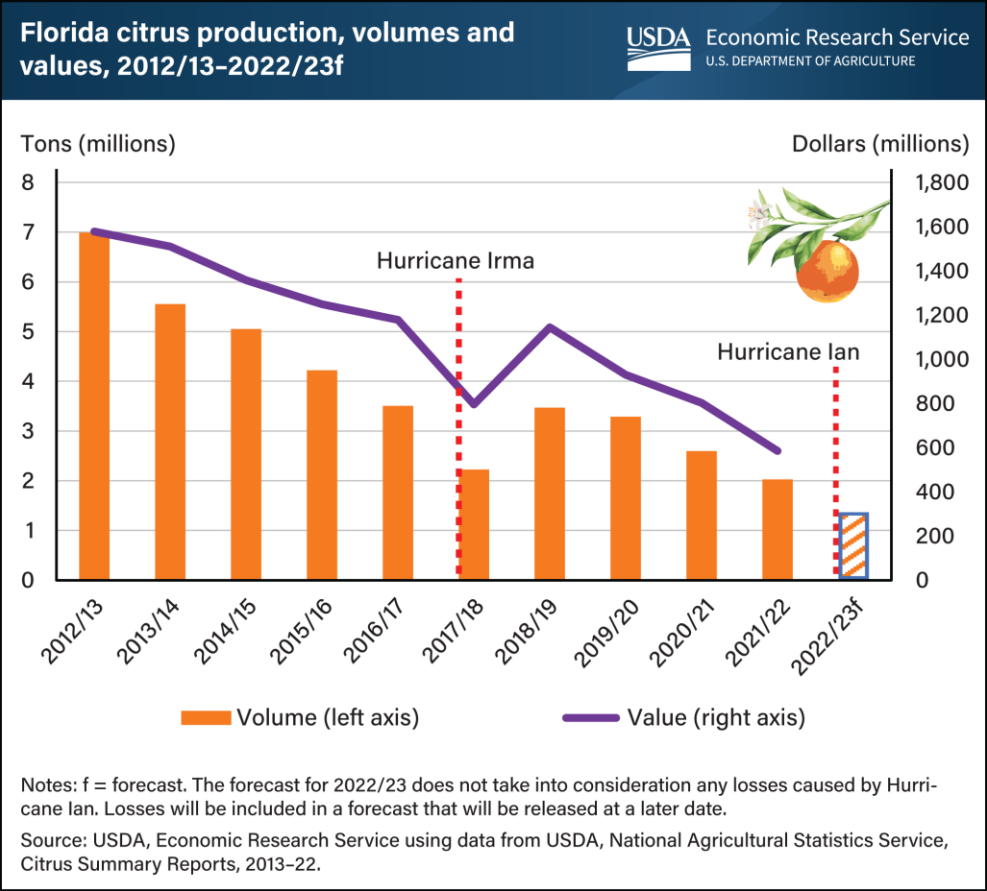
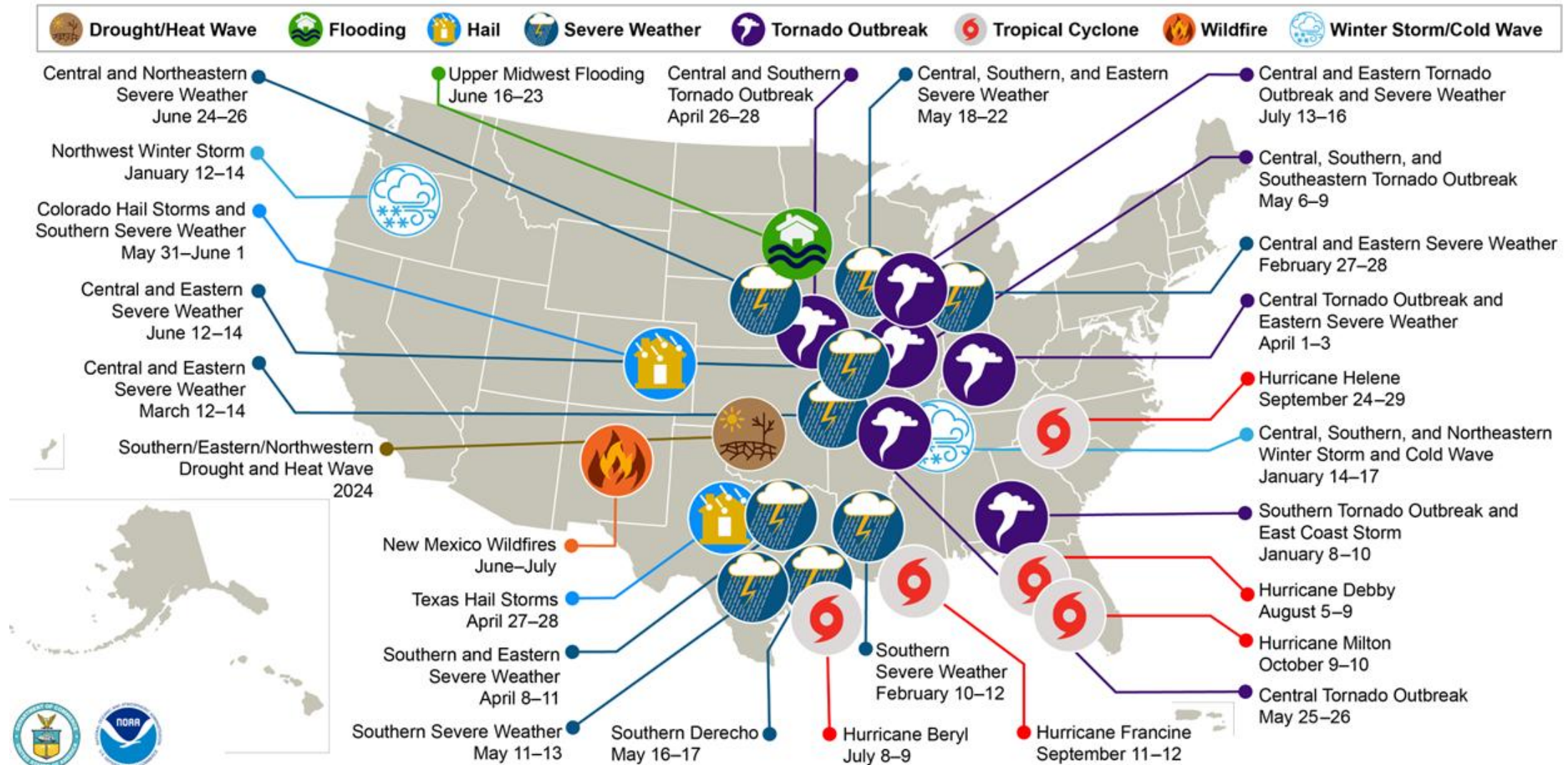


Figure 1. U.S. 2024 Billion-Dollar Weather Disasters



This map denotes the approximate location for each of the **27 separate billion-dollar weather disasters** that impacted the United States in 2024.

Source: NOAA



Recent Events in the US and Territories

Hurricane Helen's significant damage to pecan farms in Georgia.

Experts estimate the cost to farmers, timber growers and other agribusinesses from Florida to Virginia will reach more than \$10 billion.



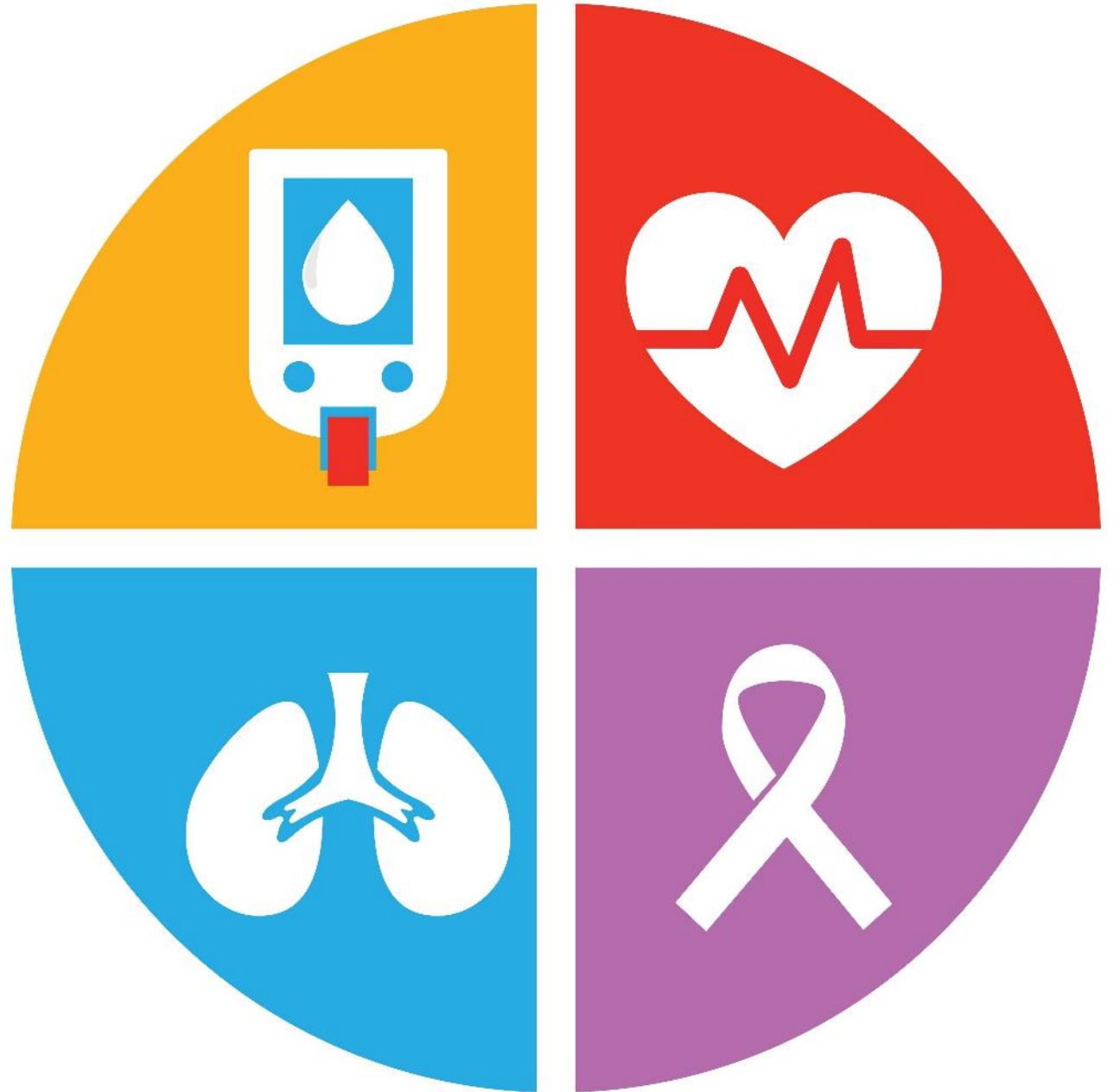
Who can be impacted?

Individuals:

- Who work outside
- Have low income
- Have a chronic illness
- Are pregnant
- Are Elderly
- Are Children
- Are Mobile

Some conditions that can be affected

- Diabetes
- Heart disease
- Dementia
- Chronic obstructive pulmonary disease
- Asthma
- Mental health disorders
- Others



What about the health of MSAWs?

- MSAWs may be more at risk to the impacts of weather-emergencies including flooding
- Often working in areas in danger
- Physical labor
- Working outdoors
- May have other risk factors which put them more at risk:
 - Heat
 - Pesticide exposure
 - Dehydration
 - Underlying lung problems
 - Exposure to other air pollution



MSAW dig an irrigation canal around a field of strawberries as the Salinas River begins to overflow its banks on January 13, 2023 in Salinas, California. Several atmospheric river events continue to pound California with record rainfall and high winds. (Photo by Justin Sullivan/Getty Images)

Additional Challenges

- Differences in their language, customs and traditions
- Wage
- Inherent dangers and health impacts of their work
- Mobility/displacement
- Limited access to health care or financial resources



How does flooding events impact the MSAW workforce?

- Chemical exposure due to spills
- Injuries/Illness
 - Heat after the disaster
 - Falls/injuries during hazard mitigation events
 - Mental health and wellbeing
- Viral/bacterial infections
- Chronic diseases management and care interrupted



“Hurricanes are massive heat pumps, redistributing heat for a large spatial distance around the center of the storm, and they leave massive destruction in their wake that can knock out the energy grid. That combination is often dangerous because it slows recovery and poses risks to human health.”

-Zackry Guido, an assistant research professor University of Arizona

LIKELIHOOD OF DEATH FROM HEAT-RELATED ILLNESS

Risk to
Average
Worker



Construction
Workers

13x

Agricultural
Workers

35x



Biological Agents

- Mosquitoes
- Mold and mildew
- Bacteria in polluted water



Impact on Community Health Centers

Operational

Clinical

Programmatic

Staff

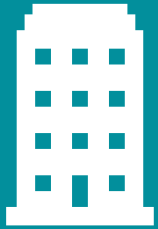


What can we do?

**Strategies to Protect the Health
of Communities that are Being
Impacted by Extreme Weather Events**

Community Health Centers and Change in Weather

1



Infrastructure

Energy and water systems and back-ups (solar)

2



Relationships with the community and partnerships

- Health Center integration with community resources
- Community mobilization

3



Clinical training and support

- Patient care
- Community- relevant resources
- Appropriate language and support for Limited English Proficiency (LEP) speakers.

4



Mental health, well-being, and support for health center staff

Psychosocial support for staff impacted by disasters while caring for patients who are also impacted

Why do we need to engage communities in Emergency Management?

History

- Recent experiences with natural disasters and appropriate responses.

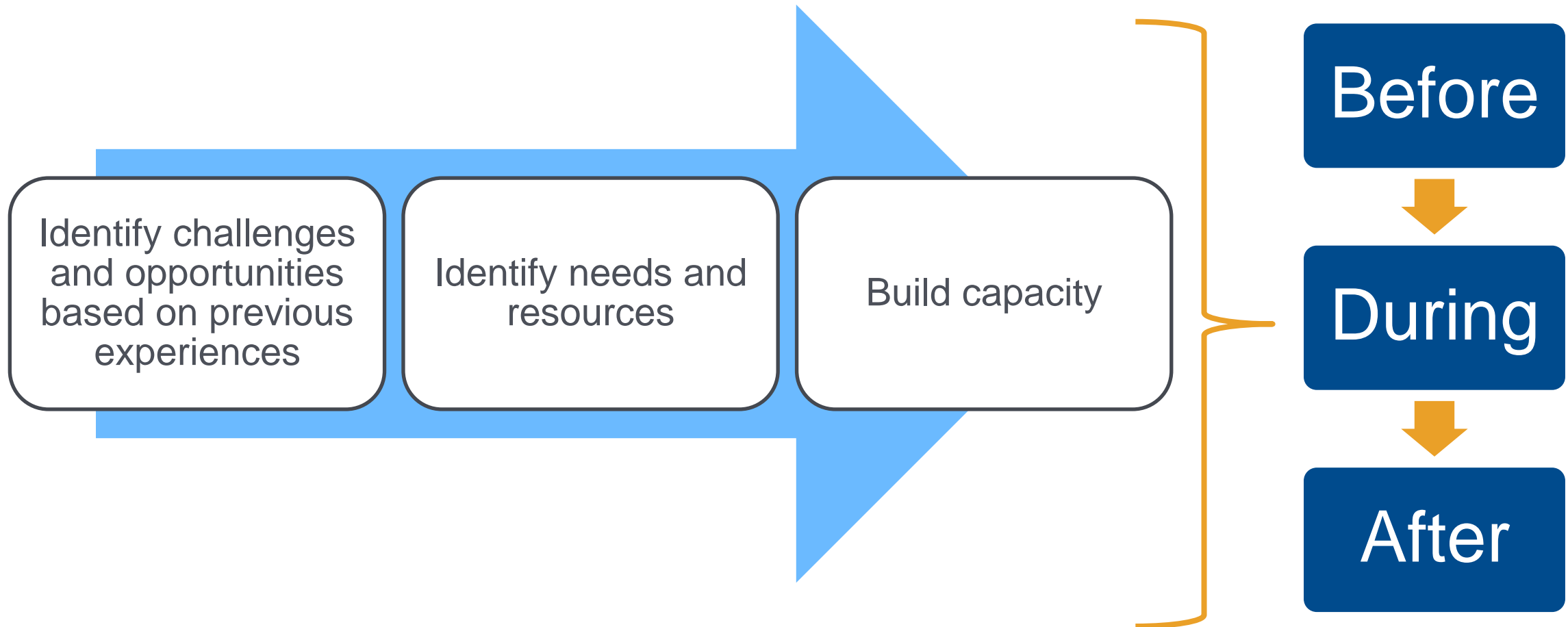
National Emergency Management Framework

- Limitations and challenges
- “Bottom Up” Approach

Compliance and Management

- Health Center mission
- Direct and indirect benefits for the health centers

Working with communities using the community mobilization model





MIGRANT CLINICIANS NETWORK



Community Mobilization

Impact on Communities

Community
strengthening

Capacity building

Self-efficacy



Role of clinicians

- Seen as trusted messengers
- Understand healthcare options and connection to care
- Support preventive practices
- Adapt information to the needs of the MSAW community

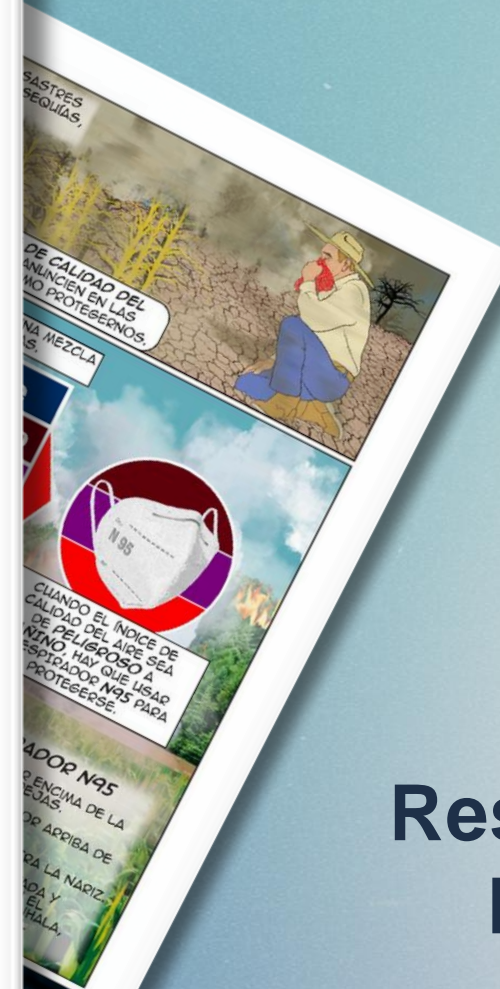
Talk to your patients and community about...

- Proper chemical storage
 - Secure cabinets
 - Chemical inventory
 - Personal Protection Equipment (PPE)
- Preventing risks at work
- Emergency Plans
 - Care management
 - Mental Health

Heat-Related Illness

- Heat-related Illness and MSAWs - Training Curriculum and Facilitator Guide (SPA/ENG - <http://bit.ly/3EcHayH>)
- Heat-Related Illness Clinician's Guide - June 2021 (SPA/ENG - <http://bit.ly/3EzHjhc>)





Respiratory Health

[Nadie sabe que respira...](#)
[¡hasta que le falta el aire!](#)
[\[Clear the Air! Protect Your Health from Bad Air\]](#)

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Speaker Contact Information

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Questions & Answers





NCFH Additional Resources



Una Voz Para La Salud
Call for Health

1 (800) 377-9968

1 (737) 414-5121 WhatsApp

<http://www.ncfh.org/callforhealth.html>

Helpline for MSAWs and their families

- Connects MSAWs to healthcare and social services
- Assists with limited financial resources for health services



Emergency Preparedness Office Hours



NCFH will be offering targeted training and technical assistance to enhance health center capacity to mitigate, prepare for, respond to, and recover from public health emergencies, disasters, and potential health effects associated with them. Take advantage of the opportunity to learn about health center preparedness plans, farmworker communication strategies during emergencies, including them ahead of time and considering chronic conditions, as well as resource sharing and networking.

What is the benefit of participating?

Encourage engagement and interaction within the network and provide a space for health center staff to voice questions, share ideas and get feedback from experts in the field and peers.

When: June 19th, 2 pm CST. **Register in** advance for the office hours!



National Center for Farmworker Health

AGRICULTURAL WORKER HEALTH SPRING SYMPOSIUM

In-Depth Learning | Community & Connectedness | Leadership Development

Agricultural Worker Health Symposium ***Bridging the Health Care Gap for Agricultural Workers***

May 28-30, 2025

Grand Rapids, MI

Learn more <https://www.ncfh.org/symposia>.





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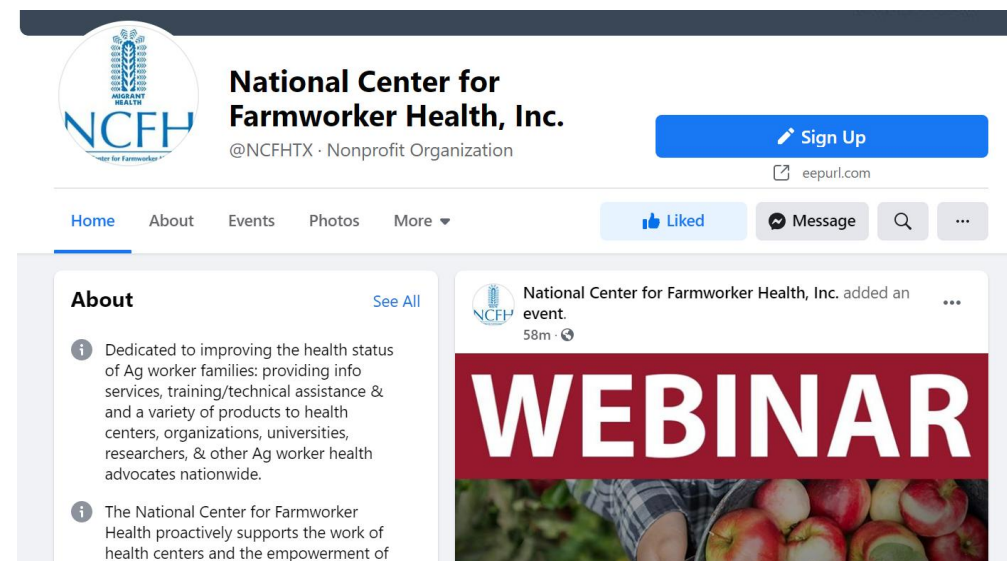
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Thank you!

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