

Farmworker Health in the United States

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Learning objectives

1. Describe the characteristics of seasonal, migrant, and immigrant farmworker populations in the United States.
2. Examine the health care and social challenges experienced by seasonal, migrant, and immigrant farm workers.
3. Identify resources, educational opportunities, and potential community collaborations for assisting in meeting the needs of seasonal, migrant, and immigrant farmworker populations.



Agenda

1. Migrant & Immigrant Farmworkers
 - National perspective
 - Local perspective
2. Midwest Examples:
 - Nebraska Migrant Farmworker Health Study, 2016
 - Health & Job Hazards of Immigrant Swine CAFO Workers, 2015
 - Health & Safety Risks among Latino Immigrant Cattle Feedlot Workers in the Midwest, 2020
3. Response to Health & Safety Concerns
4. Conversation & Questions





Nebraska State Historical Society, 1926. Used with permission.

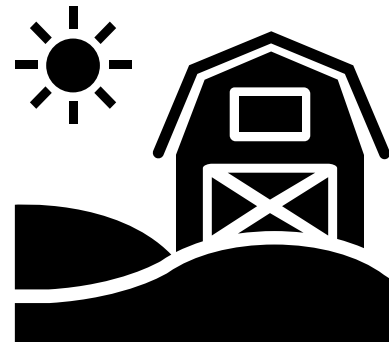
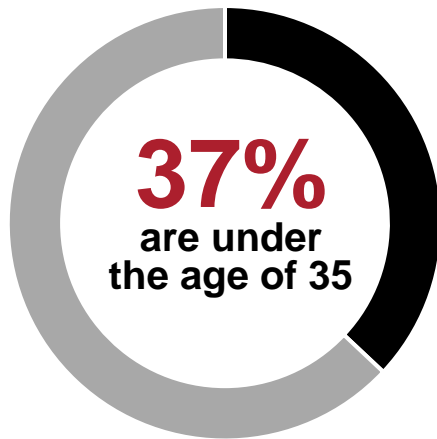
Eighty five Mexican beet laborers listening to a lecture in Spanish on how to increase beet yields per acre and thereby secure a larger bonus check for their labor.

(2)

Agricultural worker demographics

2.2 million

estimated farmworkers in U.S. ¹

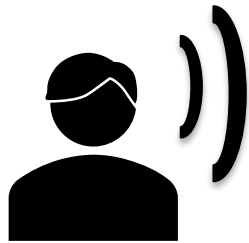


265,600 youth are hired to work on farms³

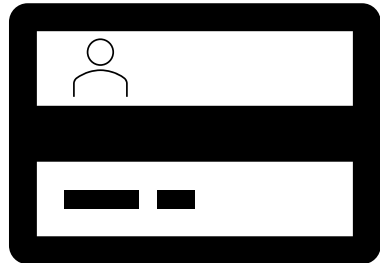
1. USDA 2022 Census of Agriculture. Hired farm labor – workers and payroll.
2. National Agricultural Workers Survey (NAWS) 2019-2020.
https://www.dol.gov/sites/dolgov/files/ETA/naws/pdfs/NAWS_Research_Report_16.pdf
3. National Children's Center for Agricultural Safety and Health. (2022). *2022 Fact Sheet Childhood Agricultural Injuries*.
https://marshfieldresearch.org/Media/Default/NFMC/National%20Childrens%20Center/2022_Child_Ag_Injury_Fact_Sheet.pdf



Agricultural worker demographics

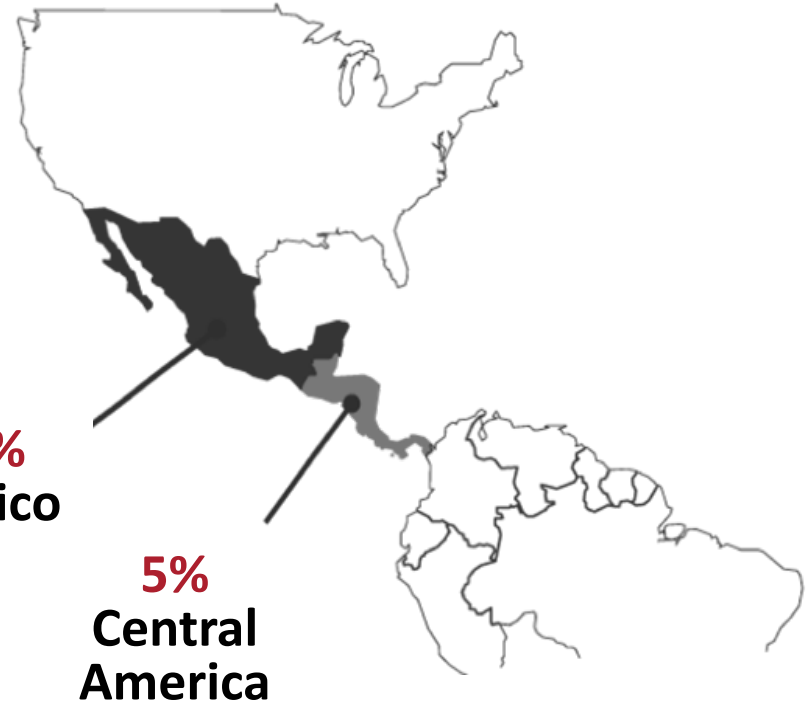


62% Spanish language dominant¹



44% without work authorization¹

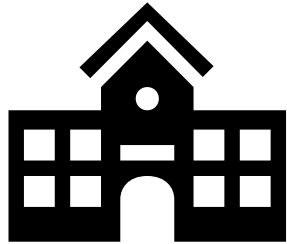
78% Hispanic¹
66% foreign born²



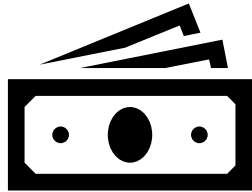
1. National Agricultural Workers Survey (NAWS) 2019-2020. https://www.dol.gov/sites/dolgov/files/ETA/naws/pdfs/NAWS_Research_Report_16.pdf
2. USDA. (2022). Farm labor. <https://www.ers.usda.gov/topics/farm-economy/farm-labor/>



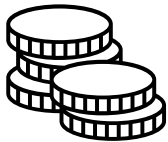
Agricultural worker demographics



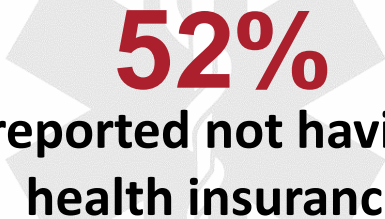
Farmworkers, on average, have an **9th grade education**




Mean and medium individual income ranged from **\$20,000-\$24,999**; Mean and median family income ranged from **\$25,000-\$29,999**



20% of farmworker families had total family incomes below 100% of the Federal Poverty Level



52% reported not having health insurance



35% had not visited a U.S. healthcare provider in last 2 years



Definitions

Seasonal Farmworker:

An individual who is employed, or was employed in the past 12 months, in farmwork of a seasonal or other temporary nature and is not required to be absent overnight from his/her permanent place of residence. A worker who moves from one seasonal activity to another, while employed in farmwork, is employed on a seasonal basis even though he/she may continue to be employed during a major portion of the year.

Migrant Farmworker :

A seasonal farmworker who travels to the job site so that the farmworker is not reasonably able to return to his/her permanent residence within the same day.

- Guest workers who temporarily live in the U.S. through the federal H-2A program to work in agriculture are also considered “migrant” farmworkers.



Immigrant labor force

- U.S. agriculture is dependent on an immigrant workforce.
- Approximately, 75% of all crop workers and 50% of livestock workers in U.S. agriculture were born outside the United States.

PUSH		PULL
Persecution Violence War	➔	Safety and Stability Freedom
Poor wages Lack of jobs	➔	Higher wages Job prospects
Crop failure and famine Pollution Natural disaster	➔	Food availability Better environment
Limited opportunities Lack of services Family separation	➔	Family Reunification Better quality of life Availability of services



<https://www.azcentral.com/story/news/politics/immigration/2014/07/11/immigration-crisis-la-bestia-pipeline/12544453/>

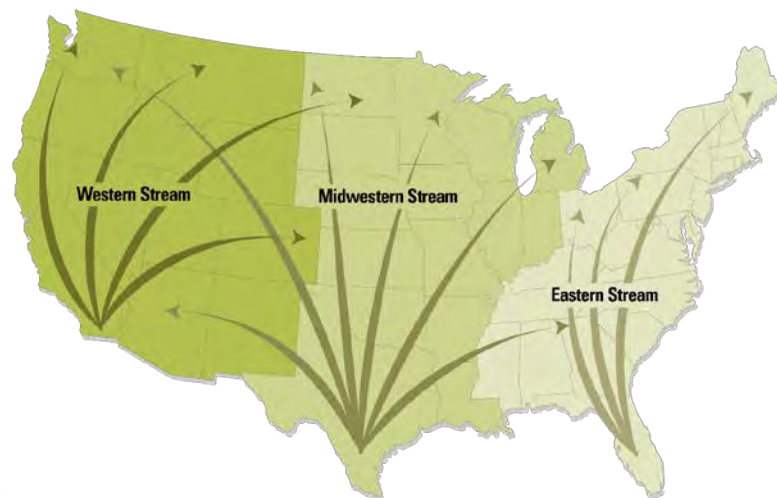


<https://www.vox.com/2018/10/24/18010340/caravan-trump-border-honduras-mexico>



Changing patterns of migration

TRADITIONAL MIGRATION PATTERNS

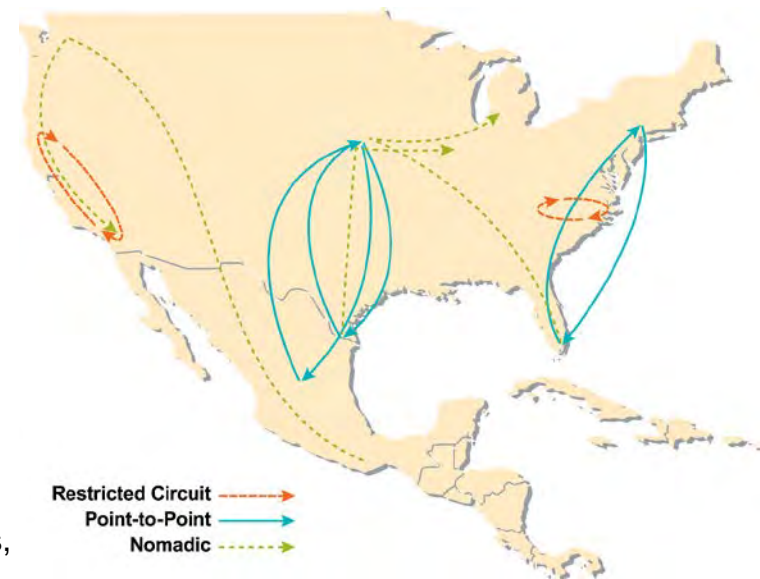


Eastern stream: apples, berries, citrus, Christmas trees, collards, cucumbers, melons, peaches, sweet potatoes, tobacco, and tomatoes

Midwestern stream: bell peppers, cauliflower, cherries, corn, cucumbers, flowers, mushrooms, nursery plants, pears, pumpkins, sugar beets, tomatoes, and watermelons

Western stream: apples, apricots, asparagus, blueberries, broccoli, cherries, grapes, lemon, melons, onions, lettuce, potatoes, and strawberries

CURRENT MIGRATION PATTERNS



Agricultural exceptionalism

A form of structural oppression excluding farmworkers from most major worker protection laws in the country:



- Fair Labor Standards Act
 - Overtime
 - Child labor protections
- Workers' compensation
- Minimum wage
- National Labor Relations Act
 - Collective bargaining protections
- Few regulations/standards to protect farmworkers
 - Field Sanitation Standard (EPA)
 - Only applies to farms with 11 or more workers or if housing is provided (OSHA)



Migrant and seasonal farmworkers are entitled to legal protections

The Migrant and Seasonal Agricultural Worker Protection Act (MSPA) protects migrant and seasonal agricultural workers by establishing employment standards related to:

- Wages
- Housing
- Transportation
- Disclosures and recordkeeping

The MSPA also requires farm labor contractors to register with the U.S. Department of Labor.

FARM WORKER RIGHTS

The Wage and Hour Division helps all workers in the United States. We enforce the law without regard to a worker's immigration status.

Agricultural employees at most farms in the U.S. must receive:

- Information about your job and your pay
- Payment at the proper rate for every hour you work
- Safe transportation
- Safe and clean housing

H-2A workers must also receive:

- Reimbursement for visa-related expenses you incur
- Payment for your transportation, food and lodging

If your employer does not provide these things, or you have questions, call us at **1-866-487-9243**. It is illegal for you to be fired or retaliated against for contacting us or exercising your rights.

Our services are **free** and **confidential**.



To learn more about federal agricultural labor law:

<https://youtu.be/tjYEFvsUeq0>



H-2A guest worker visa program

Allows employers who meet specific regulatory requirements to bring foreign workers to the United States to fill temporary agricultural jobs

To qualify for H-2A program, the employer must:

- Offer a job that is of a temporary or seasonal nature.
- Demonstrate that there are not enough U.S. workers who are able, willing, qualified, and available to do the temporary work.
- Show that employing H-2A workers will not adversely affect the wages and working conditions of similarly employed U.S. workers.
- Generally, submit a valid temporary labor certification from the U.S. Department of Labor with the H-2A petition.

95% of all H-2A visas were issued to Mexicans, 3% to South Africans, and 2% to Jamaicans.

Program Requirements:

- Adverse effect wage rate
- “Three-fourths” guarantee
- Meals
- Housing
- Transportation – inbound/outbound + daily
- Workers’ compensation
- Record keeping

U.S. Department of Labor. H-2A: Temporary agricultural employment of foreign workers.

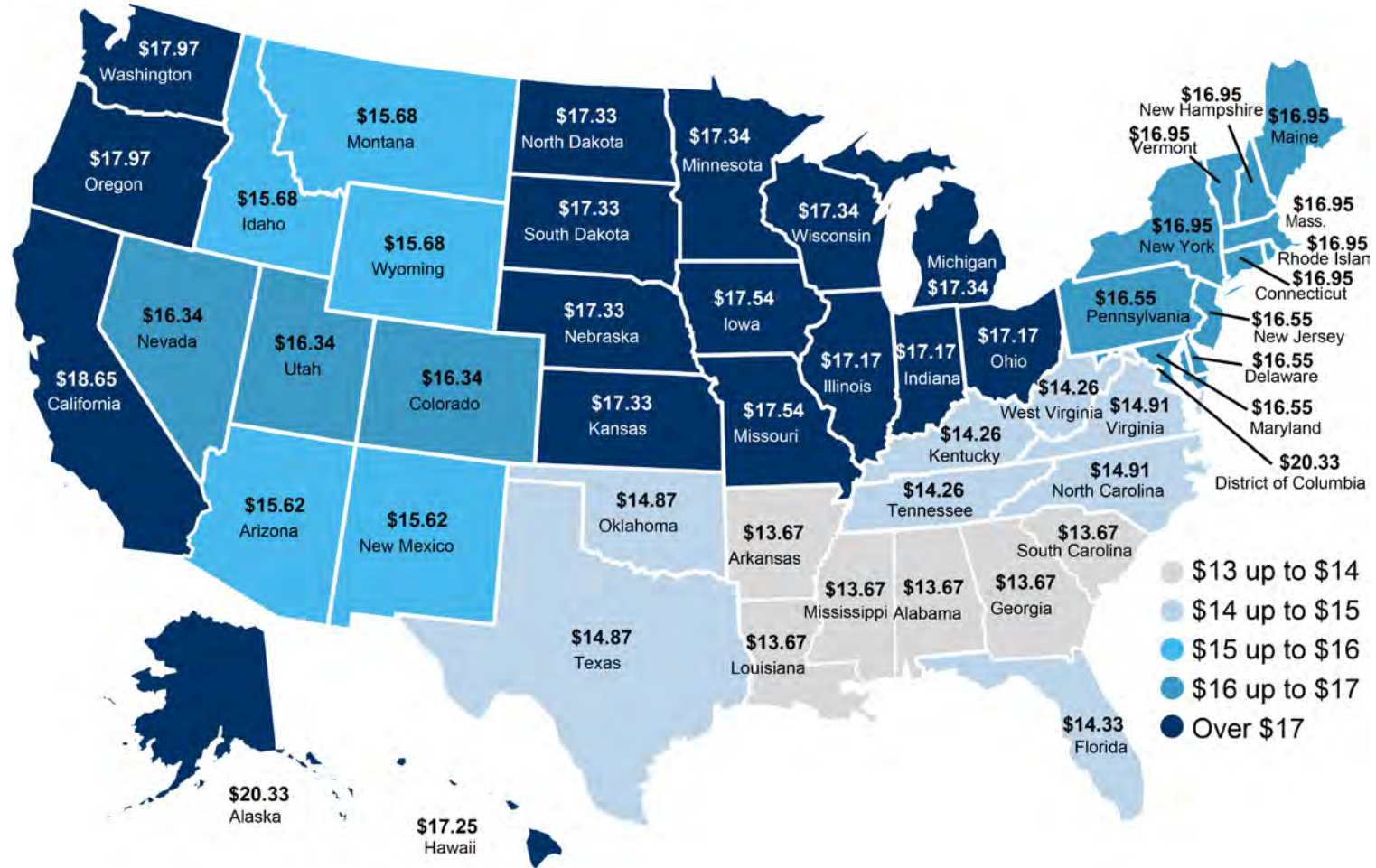
<https://www.dol.gov/agencies/whd/agriculture/h2a>

Farmworker Justice. (2012). *Questions and answers about the H-2A agricultural guest worker program.*

<https://www.farmworkerjustice.org/sites/default/files/documents/H-2A%20Factsheet%207-30-2012.pdf>



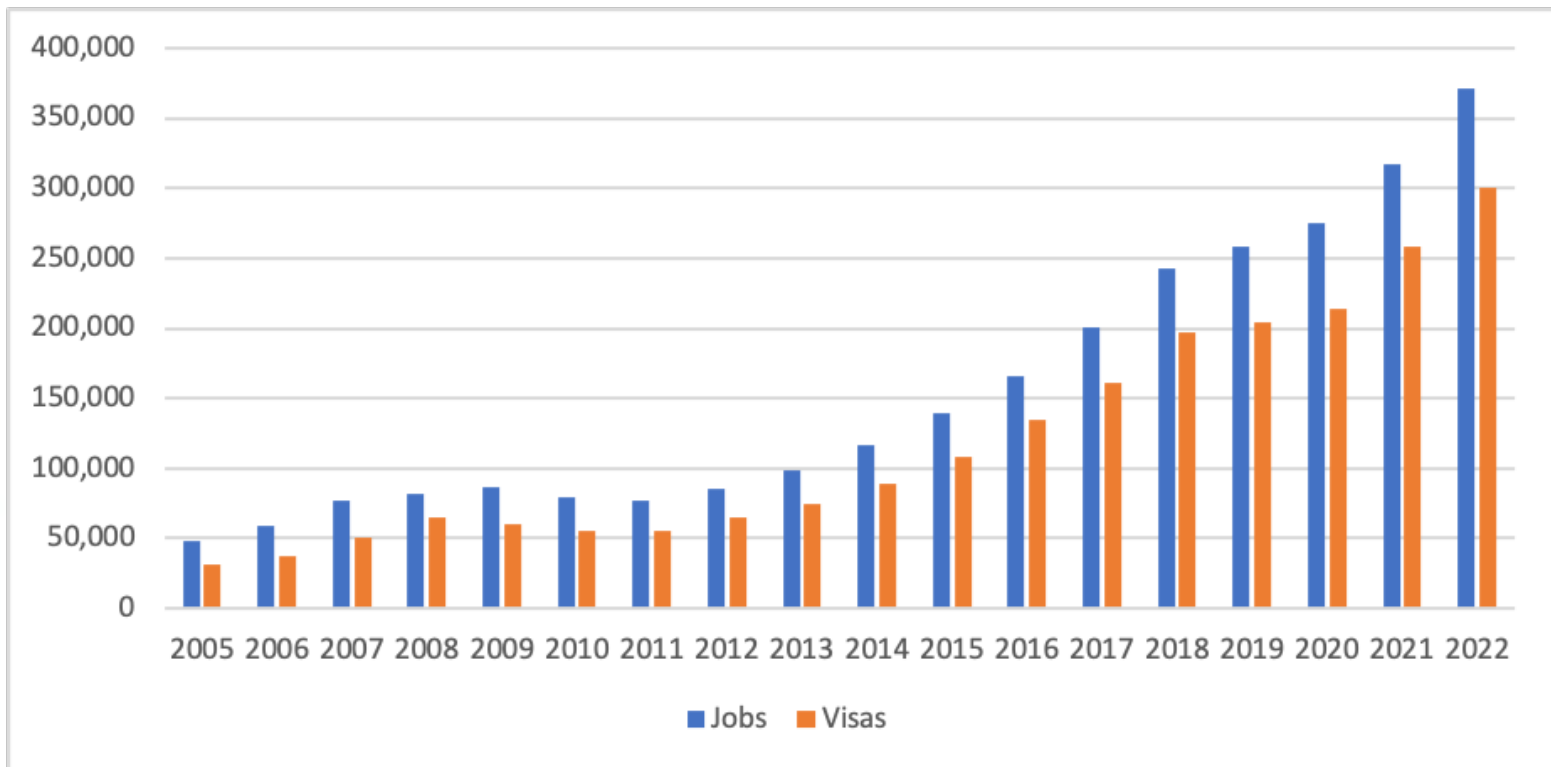
Adverse Effect Wage Rate 2023



<https://flag.dol.gov/wage-data/adverse-effect-wage-rates>



Growth of the H-2A program, 2005-2022



University of California-Davis. (2023). H-2A program expands in 2023. Rural Migration News, Blog 330.
<https://migrationfiles.ucdavis.edu/uploads/rmn/blog/2023/07/Rural%20Migration%20News%20Blog%20330.pdf>



Farmworkers in Nebraska

Red or Green text in the county shows either a decrease or an increase of farmworkers in 2022. The numbers in black correspond to the 2017 Census. The county color shows the range of farmworkers in the county by the Color Code List below.

Total Farmworkers in the State 43,740



1,038 migrant workers / 226 farms

IDRC. (2024). Nebraska farmworker numbers.
 USDA. 2022 Census of Agriculture.





Fresh
Florida.

Packed Fresh
Strawberries



Fresh
Florida.

Packed Fresh
Strawberries

Definitions

World Health Organization (WHO):

“**Health** is a state of complete physical, mental and social *well-being* and NOT merely the absence of disease or infirmity.”

“The **social determinants of health (SDOH)** are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels.”



Common health & safety concerns among farmworkers

Work-related concerns:

- Occupational injuries and illnesses
 - Slips, trips, and falls
 - Musculoskeletal injuries
 - Eye injuries
 - Respiratory illnesses
 - Skin disorders
 - Chronic pain
 - Noise-induced hearing loss
 - Livestock-related concerns
- Machinery/vehicles
- Fatigue
- Weather exposures
 - Sun and heat-related illnesses
 - Cold exposures
- Pesticide and chemical exposures
- Access to water and bathroom facilities during the workday
- Access to and information to use PPE



Immigrants in agriculture

Immigrants represent a significant portion of the agricultural labor force. They have been deemed a “vulnerable” worker population by NIOSH.

Below are some of the factors affecting immigrant workers’ occupational health:

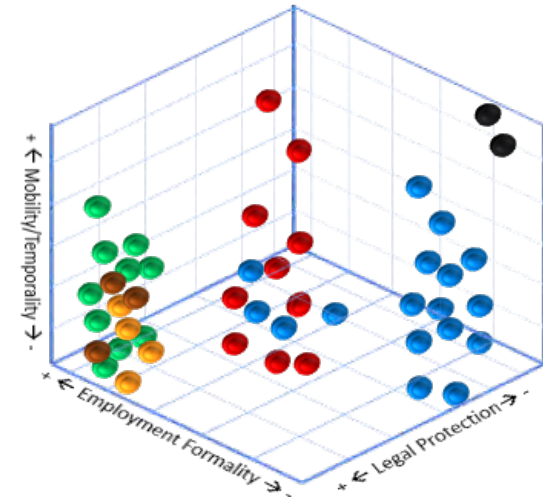
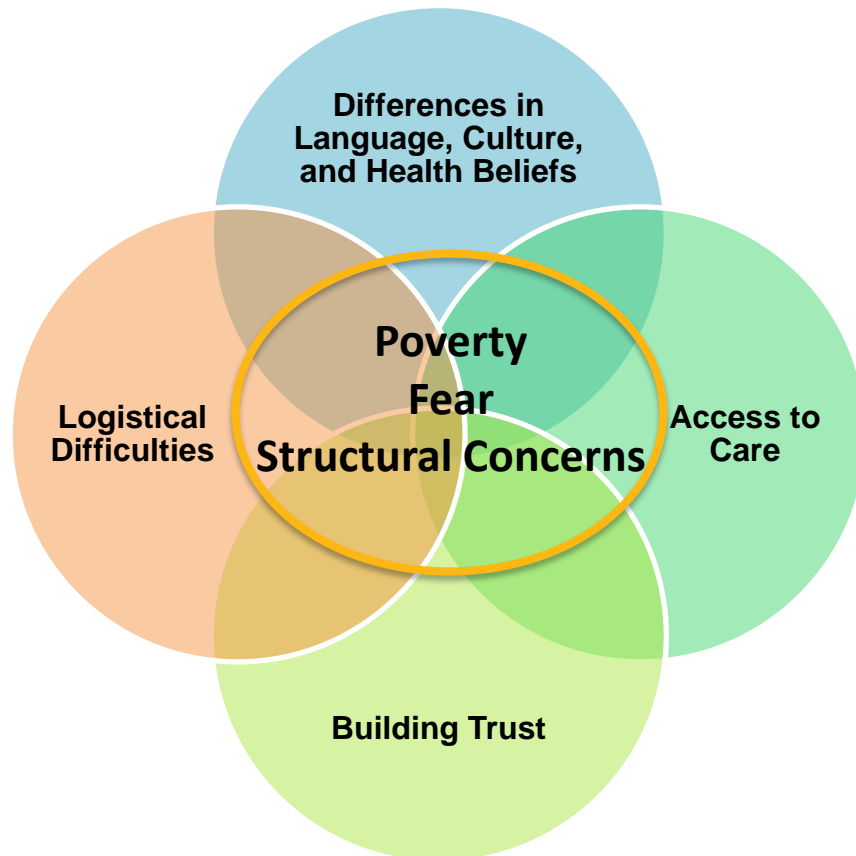
- Hazardous work: dangerous conditions, high demands, long hours, inadequate rest, time pressure, and repetitive tasks
- Little or no safety training or personal protective equipment
- Low levels of formal education
- Low level of literacy
- Language, cultural, and logistical barriers
- Discrimination and immigration-related fear
- Inadequate knowledge of labor rights and reluctance to speak up about unfair treatment or hazardous conditions



3-D work: Dangerous, Dirty, and Demanding



Challenges faced by farmworkers



- Independent farmers, ranchers, fishers
- Corporate farmers, ranchers, fishers
- Employees of farmers, ranchers, fishers
- H-2A or H-2B Workers
- Undocumented Workers
- Trafficked Workers

Acrury, T.A., Grzywacz, J.G., Sidebottom, J., & Wiggins, M.F. (2013). Overview of immigrant worker occupational health and safety for the agriculture, forestry, and fishing (AgFF) sector in the southeastern United States. *American Journal of Industrial Medicine*, 56, 12–924.



Common health & safety concerns among farmworkers

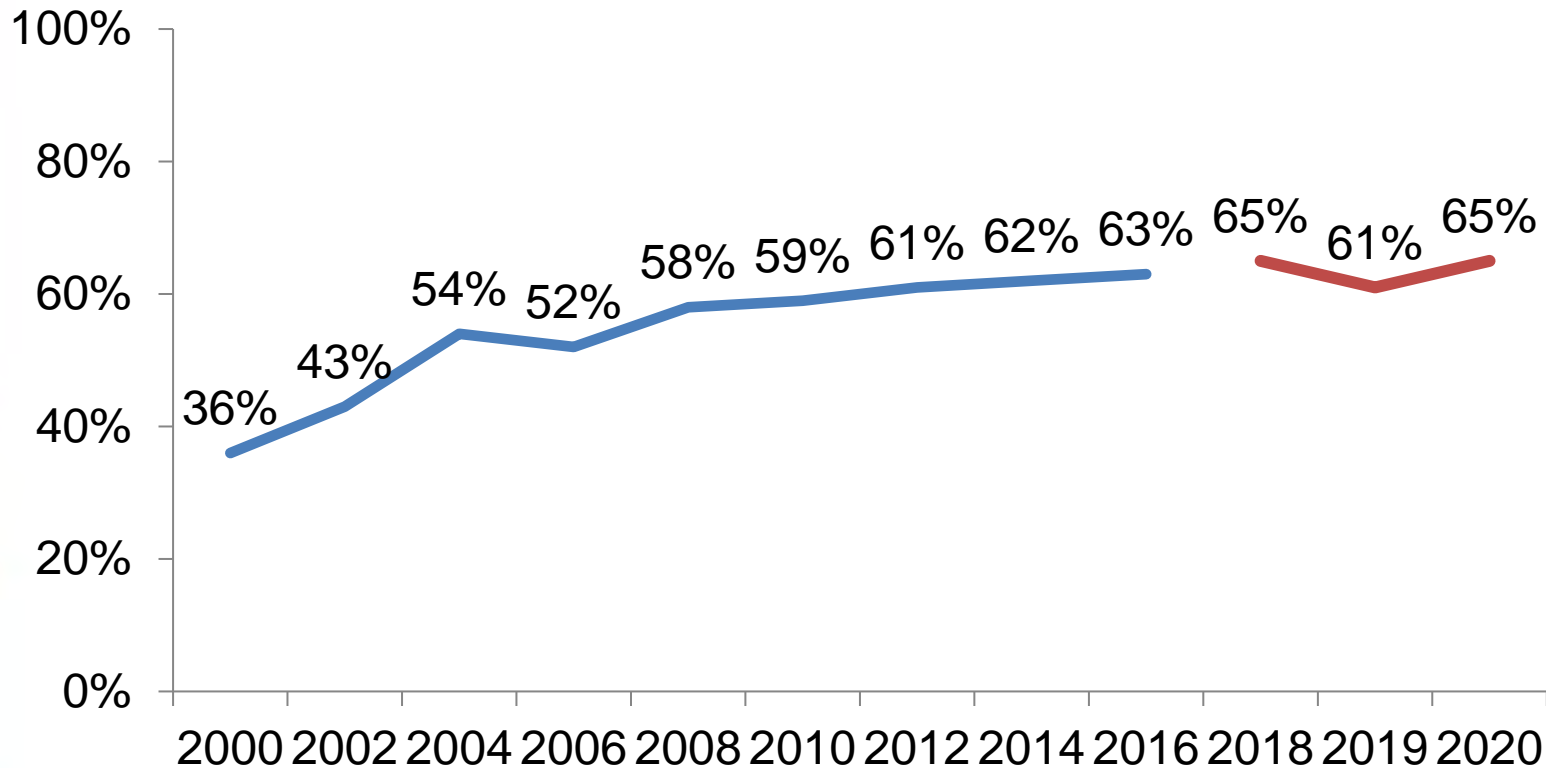
General Health Concerns:

- Access to healthcare/continuity of care
 - Cost/portability/lack of insurance
 - Lack of providers
 - Transportation
- Behavioral health
 - Depression, anxiety, and stress
 - Substance use
- Chronic conditions (e.g., high blood pressure, diabetes, obesity)
- Health literacy
- Oral health (e.g., cavities)



Share of farmworkers visiting a healthcare provider, 1999-2020

*For Injury, Routine, Illness, or Preventive Care



National Agricultural Workers Survey (NAWS), 1999-2020.

- 2000 to 2016 “in the last two years” shows data for two fiscal years combined (e.g., “2016” is 2015–2016 combined).
- 2018 to 2020 “in the last 12 months” shows data for one fiscal year at a time.
- Only partial data were available for fiscal year 2017 and were excluded from the chart.

Gabbard, S. & Loyola Briceno, A.C. (2021). *Digital and health access for agricultural workers and their families*. Presented at the Virtual Forum for Migrant and Community Health.



HRSA 330g program

The Public Health Service Act created migrant health centers.

In 2021, 175 sites were funded to provide health services to:

- **Migratory agricultural workers** who are individuals whose principal employment is in agriculture, and who have been so employed within the last 24 months, and who establish for the purposes of such employment a temporary abode;
- **Seasonal agricultural workers** who are individuals whose principal employment is in agriculture on a seasonal basis and who do not meet the definition of a migratory agricultural worker;
- Individuals who are no longer employed in migratory or seasonal agriculture because of **age or disability** who are within such catchment area; and/or
- Family members of the individuals described above.

Agriculture refers to farming in all its branches, as defined by the North American Industry Classification System (NAICS) under codes 111, 112, 1151, and 1152.



Right to health standard (AAAQ)

Element	Key questions
AVAILABILITY	<ul style="list-style-type: none"> • Are healthcare services sufficiently available?
ACCESSIBILITY Includes four elements: <ol style="list-style-type: none"> 1. Physical accessibility 2. Economic accessibility 3. Information accessibility 4. Non-discrimination 	<ul style="list-style-type: none"> • Are facilities and services physically accessible? How long does it take to get to services? Are hours of service convenient for farmworkers? Is transportation assistance available? • Are services affordable? Are fees assessed on sliding scale? Are free services or waivers available for farmworkers who cannot pay? • Is appropriate health information available to farmworkers? Is the information in a format that is understandable? Are language access services available? • Are services provided free from discrimination, both in policy and in practice? Are services available to all including undocumented farmworkers?
ACCEPTABILITY	<ul style="list-style-type: none"> • Are services provided in a respectful manner? • Do services adhere to medical ethics? • Are services culturally and linguistically appropriate?
QUALITY	<ul style="list-style-type: none"> • Are good quality services provided? • Do providers have the appropriate skills to work with farmworkers? • Are appropriate health monitoring and evaluation strategies in place?



Social Ecological Model of Migrant Farmworker Health





Nebraska's ag economy



1 in 4 jobs in Nebraska is related to agriculture.

Agriculture contributed more than \$21.4 billion to Nebraska's economy in 2019 and 5.8% of the U.S. total.

Nebraska rankings:

- 1st in popcorn/commercial cattle slaughter
- 2nd in ethanol production
- 3rd in corn (grain)/corn exports
- 4th in beef cows



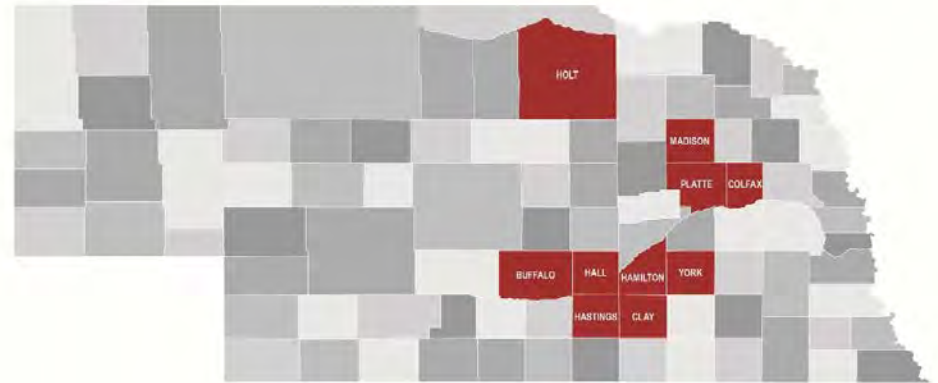
Nebraska Migrant Farmworker Health Study 2016

Inclusion criteria:

1. Be at least 19 years of age
2. Be of Hispanic/Latino descent
3. Currently work as a migrant farmworker in Nebraska

Cross-sectional survey conducted between July-September 2016

- 241 participants
- Completed through oral interviews with workers at camps after working hours
- Each interview lasted between 45-60 minutes
- Interviews were divided into five sections: (1) general health, (2) work context, (3) stress and emotional health, (4) social well-being, and (5) demographics
- All materials available in English/Spanish
- Each participant was given \$15 cash



Participants were recruited from 10 counties: Adams, Buffalo, Clay, Colfax, Hall, Hamilton, Holt, Madison, Platte, and York



Results:

Demographic characteristics

Data was collected from participants located in rural (41.5%), micropolitan (52.7%), and metropolitan areas (5.8%)

Demographically, the sample was consistent with national survey data:

- Mainly male; mainly immigrant
- More than 70% had not completed a high school education
- Nearly 90% of participants lived in or below the poverty line; household size ($M = 4.9$, $SD = 2.1$)
- About 5% identified as indigenous (Maya, Zapotec, Mixtec, etc.)

Over 95% of participants were considered to have low acculturation.

Variables	N (%)	Mean (SD)
Sex		
Male	190 (78.8)	
Female	51 (21.2)	
Age		36.4 (13.7)
19-24	66 (27.4)	
25-40	80 (33.2)	
41-60	81 (33.6)	
61+	14 (5.8)	
Educational Attainment		
No Formal Schooling	4 (1.6)	
Completed Less than High School	166 (68.9)	
High School Graduate or GED	60 (24.9)	
Some College or Higher	11 (4.6)	
Nativity		
United States	39 (16.2)	
Mexico	196 (81.3)	
Central America	6 (2.5)	
English Language Proficiency		
Very Good	33 (13.7)	
Good	16 (6.6)	
Not Very Good	72 (29.9)	
Not At All	120 (49.8)	

Results:

Occupational characteristics

Corn production is a major industry in Nebraska:

- Temperatures ranged from 59-99°F; humidity ranged from 78-100%
- More 90% of workers lived in motel rooms that were shared with other workers
- Once work started, most worked 7 days a week.
- Most workers did not perceive their job to be dangerous
 - ✓ Heat, sun, chemicals and pesticides, and uneven ground were the major factors cited as reasons for being dangerous
- H-2A workers comprise approximately 2-5% of the farmworker population; however, they represented 45% of this sample.

Variables	N (%)	Mean (SD)
Years Working in Agriculture		12.9 (12.0)
Time Spent as Migrant Farmworker		
Less than 1 Year	41 (17.1)	
1-3 Years	36 (15.0)	
3-5 Years	30 (12.5)	
More than 5 Years	133 (55.4)	
Current Task		
Detasseling Corn	171 (71.0)	
Sorting Seed Corn	55 (22.8)	
Vegetable Production	15 (6.2)	
Length of Contract		
Less than 8 Weeks	191 (80.6)	
More than 8 Weeks	46 (19.4)	
Number of Hours Per Week		54.2 (10.7)
Perceived Occupational Risk		
Not At All Dangerous	132 (55.2)	
A Little Dangerous	78 (32.7)	
Dangerous or Very Dangerous	29 (12.1)	
H-2A Visa		
Yes	107 (45.1)	
No	130 (54.9)	



“Yesterday, my aunt broke her ankle in the field. She tripped on uneven ground. We couldn’t call for help. We had to wait almost an hour in the field until a nurse finally came. She was the one who decided it was an emergency. Almost three hours had passed by the time an ambulance came to take my aunt to the hospital.”
- A Latina farmworker from Texas



Healthcare access and lifestyle behaviors among migrant farmworkers in Nebraska

Most participants (75%) reported their general health as “good” to “excellent”.

Most were either overweight (38%) or obese (27%).

Less than 25% of participants reported having health insurance coverage.

Few participants (19%) reported having someone they considered as their healthcare provider.

Over 30% reported hazardous drinking.

Over 30% smoked cigarettes.

Ramos, A.K. (2019). The ghosts in our fields: Migrant farmworker health in Nebraska. In K. Dombrowski & K. Gocchi Carrasco (Eds.), *Reducing health disparities: Updates from the field* (pp. 57-80). Lincoln, NE: UNL Minority Health Disparities Initiative.

Ramos, A.K., Trinidad, N., Correa, A., & Carlo, G. (2019). Correlates and predictors of alcohol consumption and negative consequences of alcohol use among Latino migrant farmworkers in Nebraska. *American Journal of Orthopsychiatry*, 89(5), 559-568. DOI: 10.1037/ort0000401



“I have been doing farm work for the last 20 years. I have really bad diabetes, and my feet swell all the time. I had a diabetic attack a little bit ago and one of my *compañeros* had to drive me three hours to get to a hospital. It was an emergency. I don’t have insurance so I can’t go to a doctor until I get back to the Valley [referring to the Rio Grande Valley in Texas]. Then I’ll go to Mexico where I have *Seguro Popular* [Mexican public insurance program similar to Medicaid]. For now, I just continue working and use crutches when my feet swell.”

- An undocumented farmworker from Mexico





AERO
POSTAL
NY-C

HONOR

Good jobs, bad effects

Animal feeding operations provide “good jobs”

- Good pay
- Stability
- Benefits
- “Upward mobility”



3-D Jobs (Dirty, Dangerous, Demanding)

Effects of structural violence:

- Racism
- Discrimination
- Xenophobia
- Exclusion
- Unequal distribution of power and resources



Negative behavioral health outcomes:

- Stress
- Depression
- Substance use



Why work at an animal feeding operation?

Consistent with the “Good Job, Bad Effects” discussion:

Workers feel they are paid well:

“Well, more than anything, we work there because the CAFO we are paid better than in other jobs and we like farm work.”

“It’s a job where you earn a little more than in other workplaces because we know that other places it’s hard to get in given our situation of being immigrants.”

“The work is less difficult because in a restaurant, I know, they work so many hours and they are not paid well.”

Workers believe there are opportunities to move up:

“You can earn up to \$16-\$17 [per hour] depending on your abilities and capacity to understand the work and quickly move up.”



Training



- Only about 60% of workers reported receiving any job-related training.
- Of those who received training, most were trained when hired, and only about 20% received any type of annual refresher.

“When I started, I started as a power washer - that is area is a little harder and where you run more risk in getting injured. In this case when I started as a power washer, they just told me do it like this and this. Then they told me here are your coworkers, you’re going with them, watch them, and do it like they do. There you do depend on your coworkers if they teach you or not because there are some who don’t teach you and you just have to watch and others who come and actually tell you how to do things and introduce you if you’re lucky.”



PPE provision & use

Although most workers had access to employer provided PPE, use was inconsistent.

Type of PPE	PPE Provided By Employer (All Workers) N (%)	Sow Barns (n = 23)			Nursery Piglets (n = 7)			Finishing (n = 2)			Washing/Maintenance (n = 8)		
		Never N (%)	Sometimes N (%)	All of the Time N (%)	Never N (%)	Sometimes N (%)	All of the Time N (%)	Never N (%)	Sometimes N (%)	All of the Time N (%)	Never N (%)	Sometimes N (%)	All of the Time N (%)
Respirator	37 (92.5)	2 (8.7)	12 (52.2)	7 (30.4)	1 (14.2)	3 (42.9)	3 (42.9)	0 (0.0)	2 (100.0)	0 (0.0)	0 (0.0)	5 (62.5)	2 (25.0)
Hearing Protection	38 (95.0)	3 (13.0)	11 (47.8)	8 (34.8)	2 (28.6)	2 (28.6)	3 (42.9)	0 (0.0)	2 (100.0)	0 (0.0)	0 (0.0)	2 (25.0)	5 (62.5)
Uniforms/Coveralls	38 (95.0)	0 (0.0)	2 (8.7)	21 (91.3)	0 (0.0)	0 (0.0)	7 (100.0)	0 (0.0)	0 (0.0)	2 (100.0)	0 (0.0)	1 (12.5)	6 (75.0)
Rubber Boots/Disposable Shoe Covers	39 (97.5)	0 (0.0)	2 (8.7)	21 (91.3)	0 (0.0)	0 (0.0)	7 (100.0)	0 (0.0)	0 (0.0)	2 (100.0)	0 (0.0)	0 (0.0)	7 (87.5)
Gloves	39 (97.5)	0 (0.0)	3 (13.0)	20 (87.0)	0 (0.0)	0 (0.0)	7 (100.0)	0 (0.0)	1 (50.0)	1 (50.0)	0 (0.0)	1 (12.5)	6 (75.0)
Goggles	36 (90.0)	3 (13.0)	13 (56.5)	6 (26.1)	1 (14.2)	4 (57.1)	2 (28.6)	0 (0.0)	2 (100.0)	0 (0.0)	0 (0.0)	3 (37.5)	4 (50.0)
Hair Covers	13 (32.5)	17 (74.0)	2 (8.7)	1 (4.3)	4 (57.1)	3 (42.9)	0 (0.0)	2 (28.6)	0 (0.0)	0 (0.0)	4 (50.0)	2 (25.0)	1 (12.5)

- Workers consistently used coveralls, boots, and gloves, but NOT hearing protection, respirators, or goggles.
- Workers may understand immediate dangers or nuisances but downplay their susceptibility to long-term occupational health issues such as NIHL or respiratory conditions.

[Worker talking about hearing protection]:

“Well – I know that I should use it, but in all of the other places where I have worked, I really never liked to use them.”



Workers are unaware of community resources

Only 50% of workers had health insurance, but only 33.3% had a regular healthcare provider.

The majority of workers are unfamiliar with community resources that exist and have not used their services.

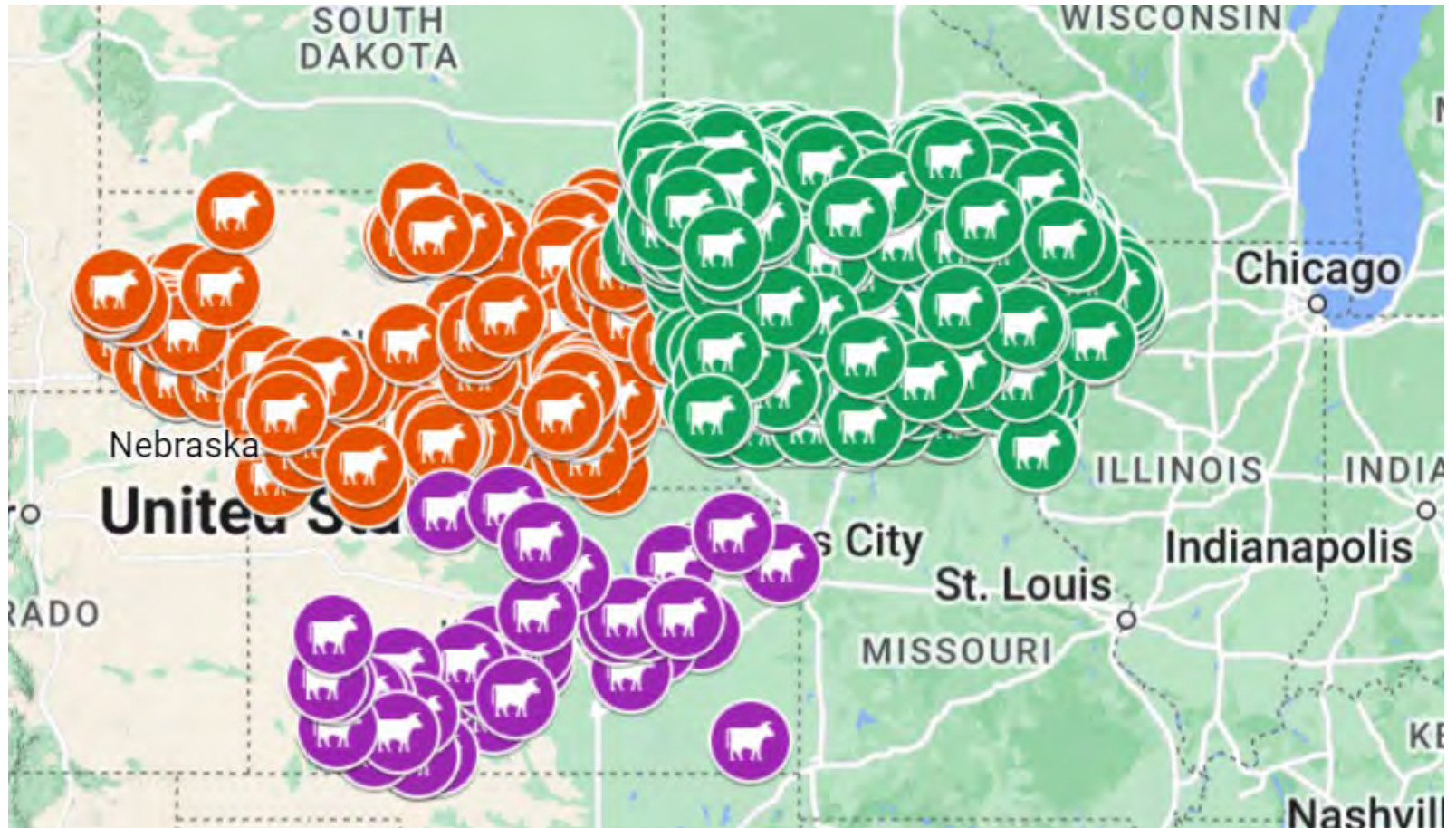
Community Resources	Unaware of Any	Aware of at least 1	Have Participated In/With
Churches	13 (32.5)	16 (40.0)	11 (27.5)
Community Organizations (e.g., food pantry or social services)	29 (74.4)	7 (17.9)	3 (7.7)
Cultural Grocery Store (e.g., Mexican grocery)	1 (2.5)	15 (37.5)	24 (60.0)
Organized Sports Teams	25 (62.5)	6 (15.0)	9 (22.5)
Adult Education Programs	27 (71.1)	10 (26.3)	1 (2.6)
Children's Schools	15 (37.5)	16 (40.0)	9 (22.5)
Activities for Youth	32 (82.1)	5 (12.8)	2 (5.1)

Nearly 85% of workers were not aware of any telephone hotlines to call for help with difficult life situations.





Cattle feedyards in the Central States region



Methods

243 interviews were conducted with Latino immigrant cattle feedyard workers in Kansas and Nebraska

Interviews lasted approximately 1 hour and were conducted in either English or Spanish (based on worker's preference). Workers were given a \$25-\$30 gift card in return for their time.

To be eligible to participate, workers had to be:

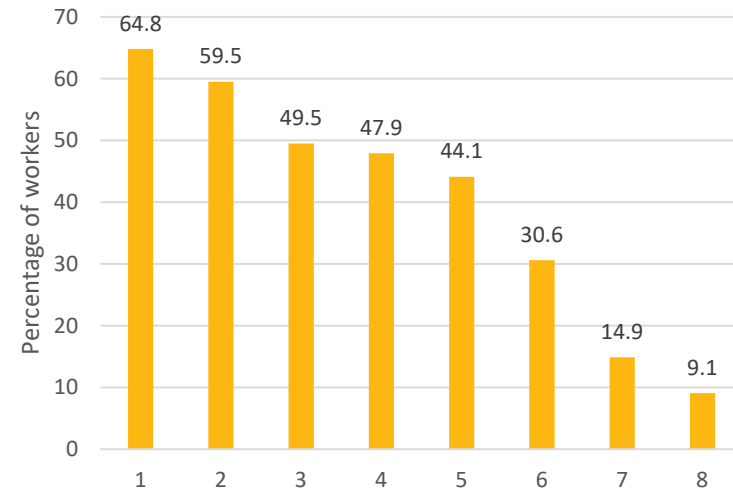
1. Hispanic/Latino immigrants
2. Age of majority in the state of contact (18 KS; 19 NE)
3. Currently employed on a cattle feedlot



Participant characteristics

Variable	N (%)	M (SD)
Sex		
Male	221 (90.9)	
Female	22 (9.1)	
Age (years)		37.7 (10.1)
19-24 years old	12 (6.0)	
25-40 years old	113 (56.2)	
Over 40 years old	76 (37.8)	
Country of origin		
Mexico	169 (69.5)	
Guatemala	42 (17.3)	
El Salvador	15 (6.2)	
Other	17 (7.0)	
Length of time in the U.S. (years) (n = 242)		12.2 (9.7)
Education (n = 241)		
Completed less than high school	145 (60.2)	
High school graduate	37 (15.3)	
Completed at least some college	59 (24.5)	
English proficiency		
Limited English proficient	166 (68.3)	
English proficient	77 (31.7)	
Average weekly pay (n = 241)		\$677.02 (\$161.77)

Percent of Participants by Position



- Most workers had been working with cattle on average for about 6.1 years.
- Most worked about 10 hours a day and 6 days a week.



Results: Injury

More than 71% of workers reported being injured on the job.

- On average, workers experienced 1.1 injuries in the last 12 months.
- Most injuries were due to animal handling; tools and equipment; and slips, trips, and falls.
 - Herding, separating, and vaccinating cattle
 - Cowboy; falling from horse
 - Tractors, mowers, and other machines
- Most common injuries were bruises, lacerations, broken bones, and muscle sprains.
- About half used first aid onsite, and one third sought professional medical care.
- About 40% workers lost work time due to injuries.
- More than 40% believed that they were very likely to be injured on the job in the next 12 months.
- Only about 17% of participants were sure that they would qualify for unemployment benefits if they lost their job.

Workers who had not received any health and safety training were significantly more likely to be injured on the job.

Preventing injuries is important so that workers are able to “take care of their family.”



Results:

Safety climate

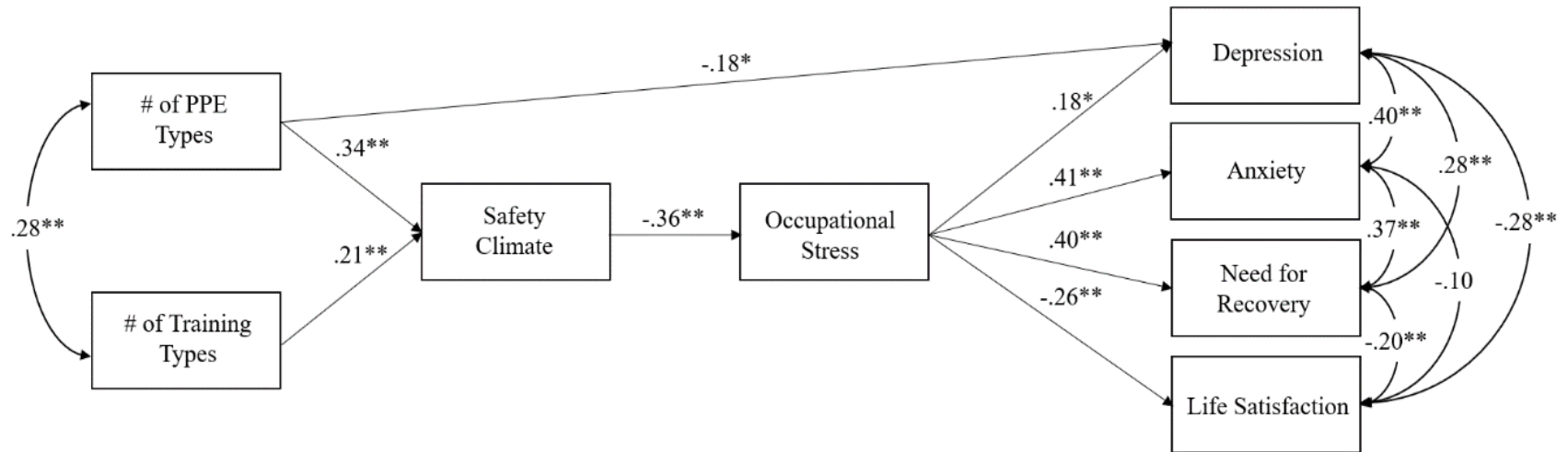
- A majority of workers reported that taking risks was part of their job, and many believed that their employer could do more to make their job safer.
- Safety climate M score = 25.8 (SD = 4.9) out of a possible score of 38.
 - Management's commitment to safety (subscale) $M = 19.4$ (SD = 3.9) out of a possible score of 27
 - Employee engagement (subscale) $M = 6.4$ (SD = 1.8) out of a possible score of 11.
- Safety climate was significantly negatively associated with reporting a work-related injury.

Item	N (%)
Worker's safety practices are very important to management.	207 (85.2)
Workers are regularly made aware of dangerous working practices or conditions.	182 (74.9)
Workers are regularly praised for safe conduct.	137 (56.8)
Workers receive safety instructions/training when they are hired.	193 (79.4)
Employer has regular job safety meetings/talks.	178 (73.3)
Proper safety equipment is always available at your workplace.	182 (75.2)
Workers have almost total control over personal safety.	147 (60.5)
Taking risks is not part of the job.	58 (23.9)
How much do supervisors seem to care about YOUR safety?	
They are only interested in doing the job fast and cheaply.	55 (22.8)
They could do more to make the job safe.	109 (45.2)
They do as much as possible to make the job safe	77 (33.0)
Likelihood of being injured during farm work in the next 12 months	
Not at all likely	15 (6.2)
Somewhat likely	129 (53.5)
Very likely	97 (40.2)

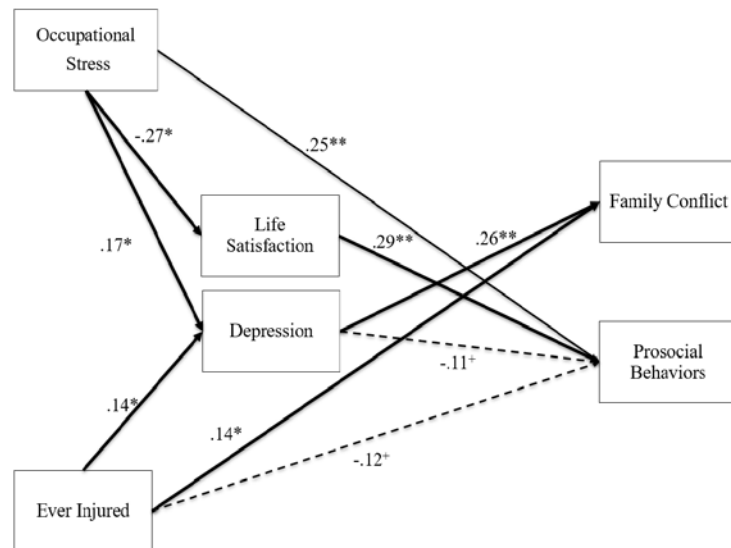


Job-related safety matters even outside of work.

- Safety (PPE/training) is associated with a better safety climate and less job-related stress.
- Stress is associated with depression, anxiety, more need for recovery, and lower life satisfaction.



Job-related stress and injuries affect workers and their families.



Carlo, G., McGinley, M., Maiya, S., & Ramos, A.K. (2023). Associations of work-related injuries and stress to family and youth wellbeing among U.S. Latino/a immigrant cattle feedyard workers. *International Journal of Environmental Research and Public Health*, 20(4), 3361. DOI: 10.3390/ijerph20043361.



Creating a sense of community, belonging, and kinship can help foster a culture of safety.

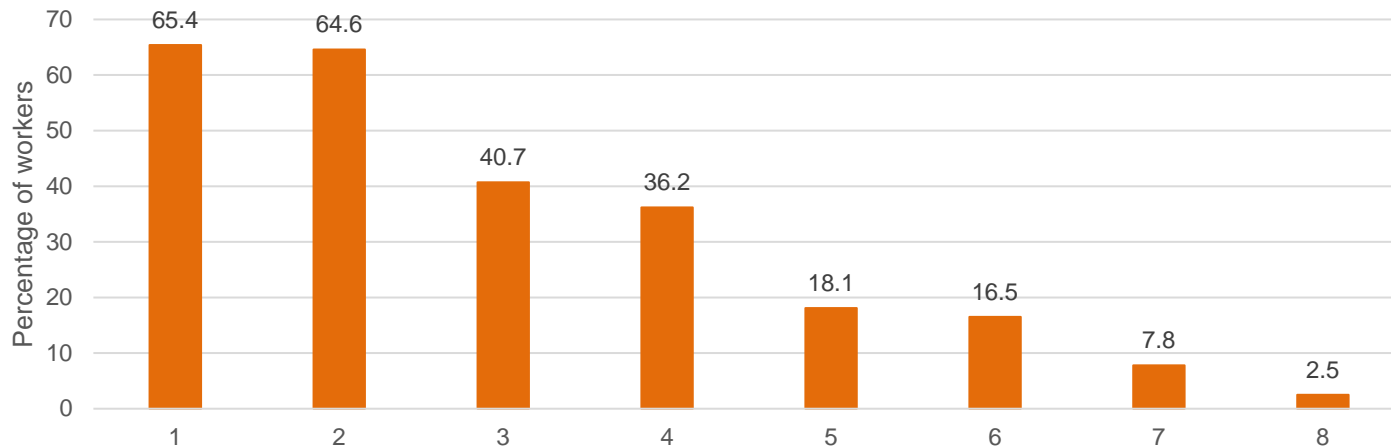


Klataske, R.T. & Ramos, A.K. (2023). Commensality, ritual, and reciprocity: Cattle feedyard managers' perspectives on safety culture. *Anthropological Notebooks*, 29(2) 86-100. DOI: 10.5281/zenodo.10417679



Training preferences & topics

Preferred Format of Training



Specific Topics of Interest

Managing Risks on the Feedyard	Personal Interest
Hazard and injury reporting	Chemical, machinery, and equipment safety
Cattle moving techniques	Injury prevention techniques
Pest management	Low-stress cattle handling
Teamwork	Respiratory health
	Workers' compensation
	Zoonoses

Ramos, A.K., Carlo, G., Grant, K.M., Bendixsen, C., Fuentes, A., & Gamboa, R. (2018). A preliminary analysis of immigrant cattle feedyard worker perspectives on job-related safety training. *Safety*, 4(3), 37. DOI: 10.3390/safety4030037





Response to health & safety concerns

UNDERSTAND THE WORK CONTEXT + THE ROLE OF CULTURE AND LANGUAGE

Heat Safety Module (60 min)
(Available in English & Spanish)

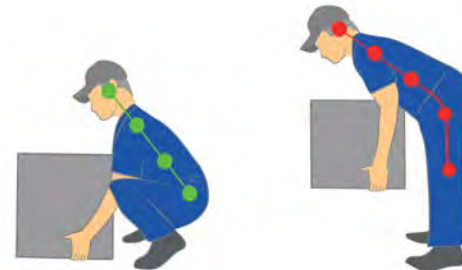
https://aghealth.ucdavis.edu/sites/g/files/dgvnsk261/files/media/documents/Heat%20Packet_English_FINAL.pdf

Spanish Resources:

<https://www.unmc.edu/publichealth/cscash/news/Spanish-resources.html>



Back Safety Module (20 min)
(Available in English & Spanish)

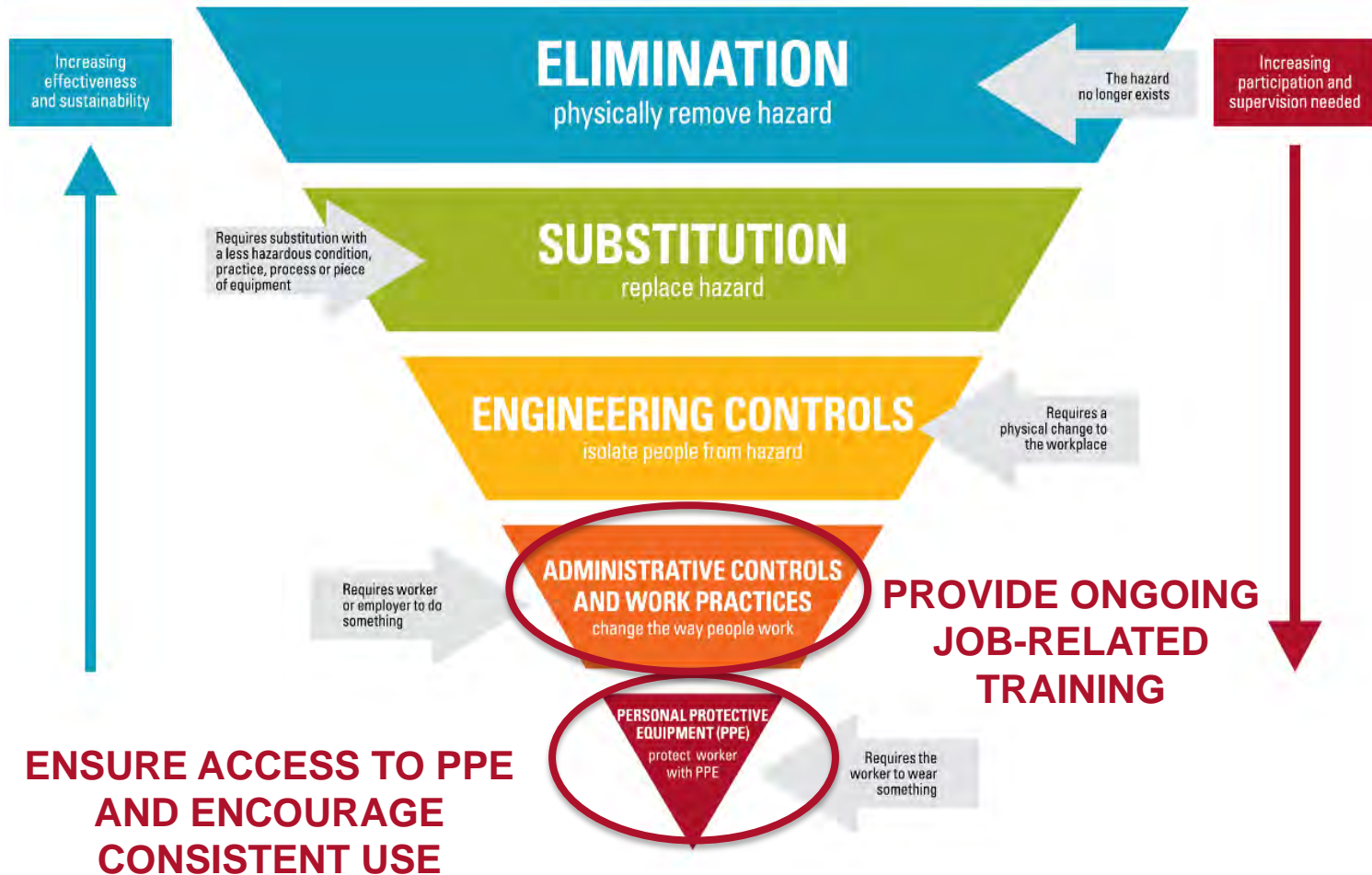


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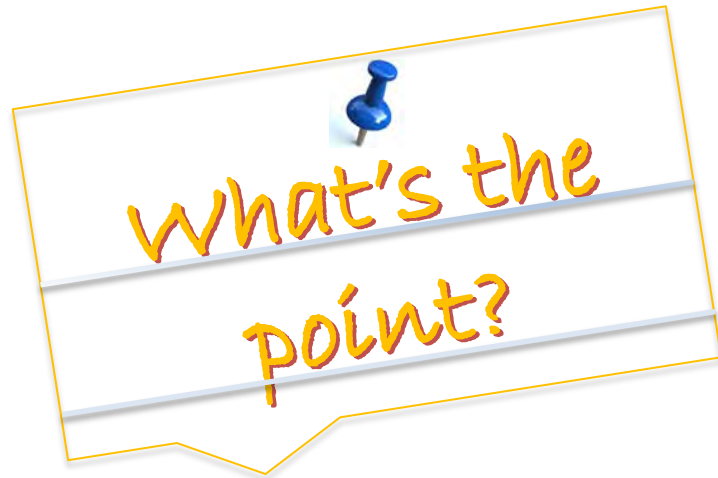
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Practical implications



Practical implications



INDIVIDUAL:

- Educate on health, safety, and workers' rights

RELATIONSHIPS:

- Encourage maintenance of ties with family, friends, and significant others
- Foster trust between workers and supervisors

LOCAL COMMUNITY:

- Enhance outreach strategies to better reach and serve farmworkers.
 - Educate service providers about migrant farmworkers
 - Streamline access to services (e.g., onsite clinic, 1-stop)
 - Develop promotor(es) de salud/outreach worker programs
 - Hire multilingual and multicultural staff
- Incorporate standard screenings and brief interventions into healthcare visits
- Plan community activities where longer-term residents and workers can gather together



Integration into clinical practice

1. Incorporate “occupation” into medical record
2. Use algorithm to identify migrant and seasonal farmworkers
3. Foster cultural and linguistic competence among healthcare providers
4. Encourage engagement in regular self-evaluation and self-critique (cultural humility)
5. Adhere to the CLAS Standards



L	Listen to the patient's perspective
E	Explain and share one's own perspective
A	Acknowledge differences and similarities between these two perspectives
R	Recommend a treatment plan
N	Negotiate a mutually agreed-on treatment plan

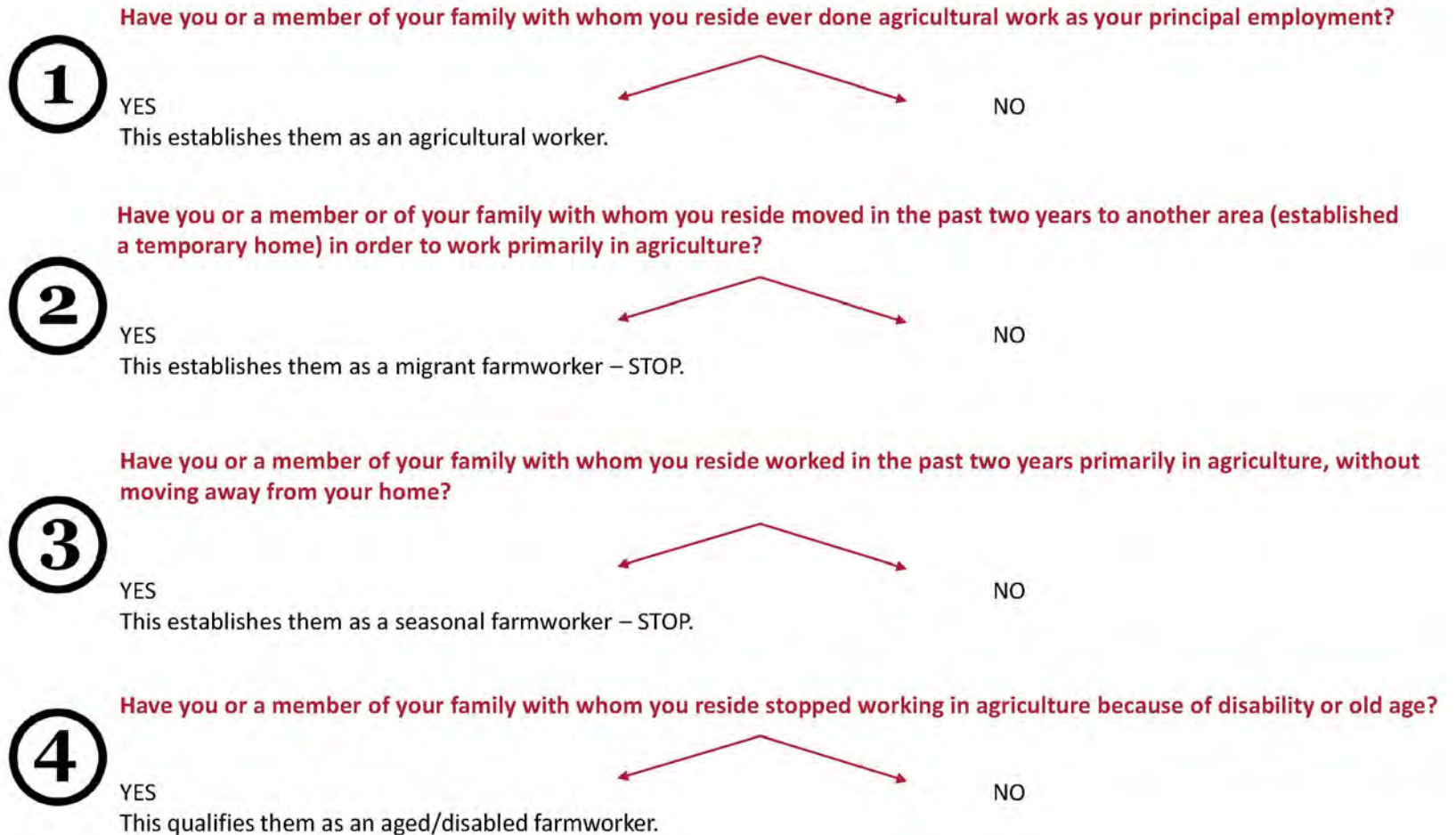
Berlin, E.A. & Fowkes, W.C. (1983). A teaching framework for cross cultural health care: Application in family practice. *Western Journal of Medicine*, 12(139), 93-98.

Association of Clinicians for the Underserved. (2007). Retrieved from http://clinicians.org/images/upload/cultural_competence.pdf

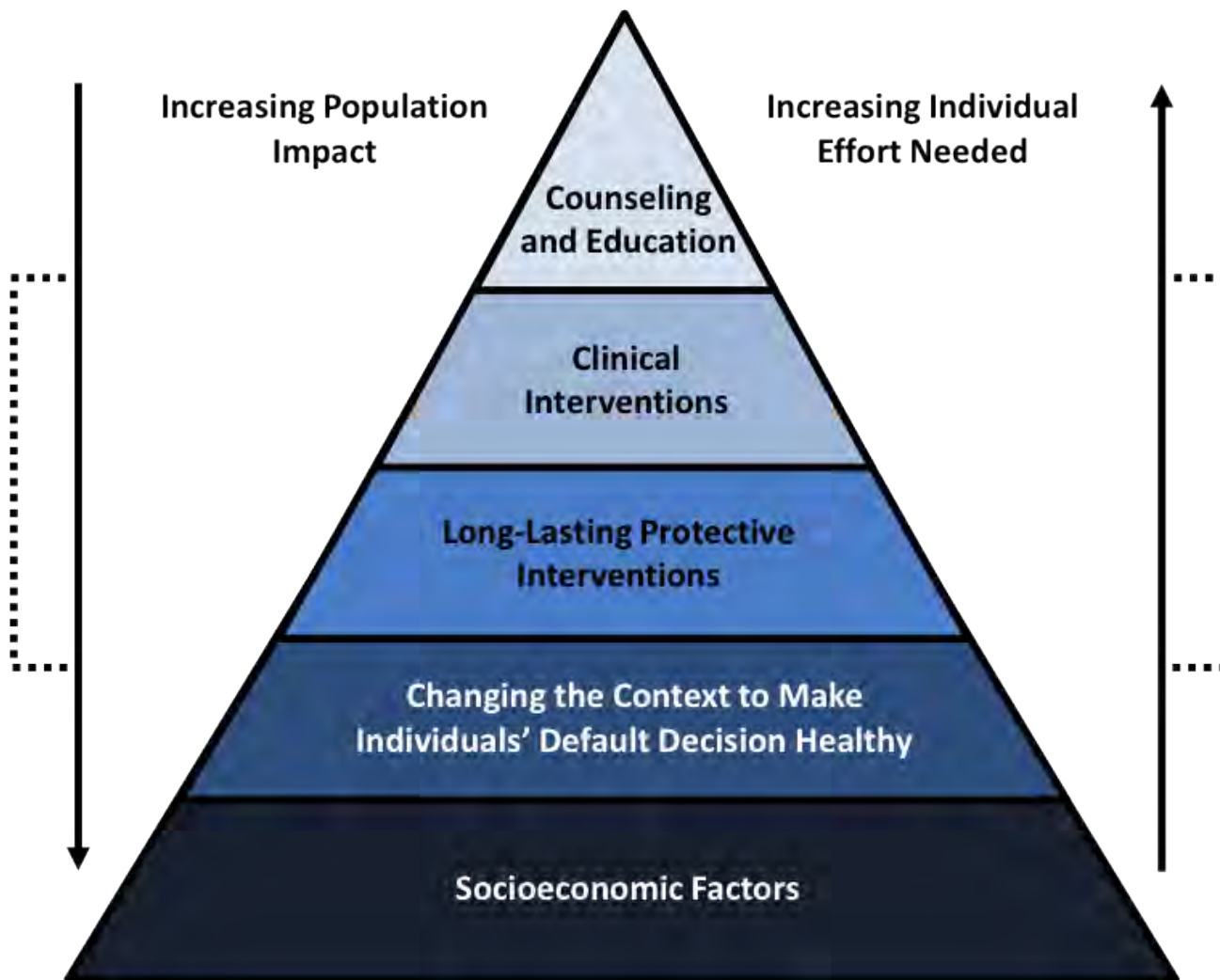


Improve AAAQ

Algorithm for identifying migrant and seasonal farmworkers



Improving farmworker health



Policy implications

1. Laws and policies need to be strengthened, particularly overtime, workers' compensation, and rest breaks.
2. Regulations need to be enforced, especially those pertaining to H-2A workers, minimum wage, and pesticide exposure protection.
3. Farmworkers' right to organize should be protected.
4. Wages should be increased to provide "living wages" for farmworkers.
5. Health insurance through the Exchanges should be extended to all farmworkers, regardless of immigration legal status and transportable across states lines.
6. Immigration reform including a path to citizenship is critical and validates the contributions of farmworkers. Workers should also be informed of potential legal options such as the U-visa and the T-visa.
7. Consumers should be made aware of "labor-friendly" or "fair food" options.
8. International human rights could be used a frame for increased advocacy to improve working and living conditions for farmworkers.



PAY

- ✓ You have the right to be paid a minimum wage of \$12.00 per hour for every hour worked, but as a farmworker you do not have the right to overtime pay if you work more than 40 hours a week.
- ✓ Your employer must pay you on regular paydays. The employer can choose to pay you more often, but they must pay you on the regular payday chosen.
- ✓ Your employer must give you a written statement that says how much you

earned and how it was earned (e.g., the number of hours worked and the hourly rate) and any deductions. The statement must also have the name and address of the employer and the reason and amount of each deduction from your wages.

- ✓ If you do not have a written employment contract, write down what you, and the employer verbally discussed and agreed on.

The U.S. Department of Labor Wage and Hour Division helps all workers in the United States and enforces the law without regard to a worker's immigration status. Services are free and confidential. It is illegal for you to be fired or retaliated against for contacting them or exercising your rights.

For more information: 1-866-487-9243 | www.wagehour.dol.gov

SAFE WORKING CONDITIONS & TRAINING

Under federal law, you are entitled to a safe workplace.

- ✓ You have the right to safe equipment and working conditions that do not pose a risk of serious harm.
- ✓ You have the right to get copies of test results done to find hazards at your workplace.
- ✓ You have the right to review records and logs of work-related injuries and illnesses.
- ✓ You have the right to report an injury or illness and get copies of your medical records.
- ✓ You always have a right to medical care; however, such care may be at your own expense. It is recommended that you find out if your employer provides worker's compensation insurance in case of work-related injury or illness when you are hired.
- ✓ You have a right to be trained in a language that you understand. Training should include identification of workplace hazards, risk prevention strategies, and the OSHA standards that apply to your workplace such as machinery, pesticides or other chemicals, and dust.
- ✓ You have a right to be provided required safety gear and personal protective equipment (PPE) such as gloves, face shields, or helmets.
- ✓ You have a right to be protected from toxic chemicals. You should be aware and have access to safety data sheets (SDS) that describe risks of all chemicals present in your work environment.



Resources to assist and serve migrant and/or immigrant farmworkers

Migrant Clinicians' Network: <https://www.migrantclinician.org/>

- Webinars on topics related to migrant, immigrant, and other underserved populations (offers CNEs/CMEs)
- Bilingual educational resources for farmworkers: <https://www.migrantclinician.org/seguridad>



National Center for Farmworker Health: <http://www.ncfh.org/>

- Bilingual patient education materials: http://www.ncfh.org/patient_education_resources.html
- Links to data resources (e.g., fact sheets, open access data sets, etc.)
- Webinars

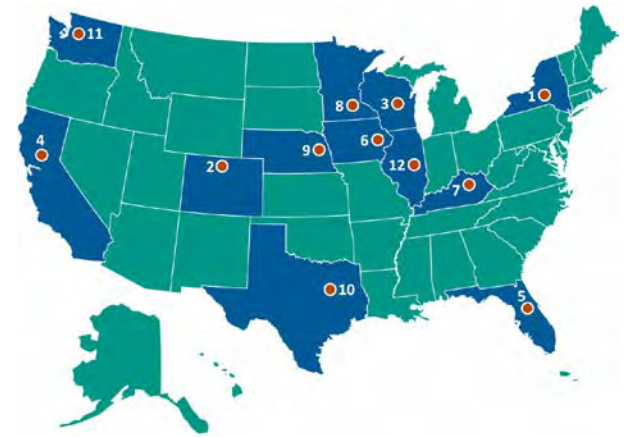
Farmworker Justice: <https://www.farmworkerjustice.org/>

- Advocates for policies to support farmworkers and their families
- Provides legal briefs on health-related topics such as language access: https://www.farmworkerjustice.org/wp-content/uploads/2022/06/Language-Access-Issue-Brief_FINAL_June-2022.pdf
- Bilingual health educational materials: https://www.farmworkerjustice.org/advocacy_program/health-awareness-and-prevention/



Resources to assist and serve migrant and/or immigrant farmworkers

1. [Central States Center for Agricultural Safety and Health \(CS-CASH\)](#)
2. [Great Plains Center for Agricultural Health \(GPCAH\)](#)
3. [High Plains Intermountain Center for Agricultural Health and Safety \(HICAHS\)](#)
4. [National Children's Center for Rural and Agricultural Health and Safety \(NCCRAHS\)](#)
5. [New York Center for Agricultural Medicine and Health \(NYCAMH\)](#)
6. [Pacific Northwest Agricultural Safety and Health Center \(PNASH\)](#)
7. [Southeast Center for Agricultural Health and Injury Prevention \(SCAHIP\)](#)
8. [Southwest Center for Agricultural Health, Injury Prevention & Education \(SWAG\)](#)
9. [Upper Midwest Agricultural Safety and Health Center \(UMASH\)](#)
10. [Western Center for Agricultural Health and Safety \(WCAHS\)](#)
11. [Southeastern Coastal Center for Agricultural Health and Safety \(SCCAHS\)](#)
12. [Great Lakes Center for Farmworker Health and Well-Being](#)

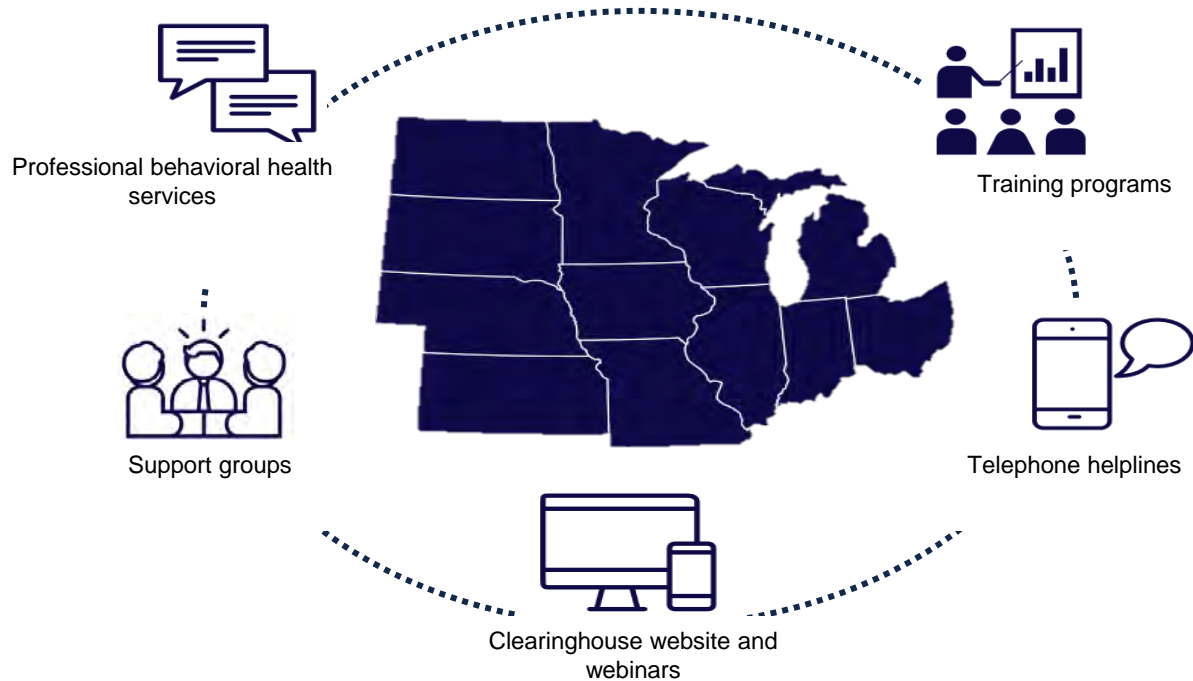


U.S. Ag Centers'
YouTube Channel:
https://www.youtube.com/channel/UCRgk3ryTcY8Wcvvv_uIZgmA





www.farmstress.org



Multilingual behavioral health resources

Multilingual Mental/Behavioral Health Care Provider List

Select/tick the filters below and click outside of the filter box to load the list.
To remove filters click on 'Reset' on top right.

State ▼

Specialty ▼

Language spoken ▼

Or type a language below
 Contains ▼ Clear

Name	Licen...	Organization	Specialty	Language 1	Language 2	Langu...	Phone	Address
1. Zeba Sami, MD	MD	Aurora Family S...	Psychiatry	Hindi	Urdu		262-780-1001	910 Elm Grov...
2. Zakaria Siddiqui	MD	Methodist Jenni...	Psychiatry	Hindi			712-396-6044	933 East Pier...
3. Yvonne Nobles	PhD	Hamm Memorial...	Psychologist	Spanish			651-224-0614	408 Saint Pet...
4. Yukari Matsu...	LIMHP	BAART Commu...	Licensed Mental ...	Japanese			(402)341-6220	1941 S 42ND...
5. Youssef Benh...	QMHP	Community Beh...	Qualified Mental ...	Arabic			216-831-1494	3690 Orange ...
6. Yeshim Oz	LMHP	Yeshim Oz MA ...	Licensed Mental ...	Turkish			(402) 699-2578	11725 Arbor ST
7. Yelena Boriso...	MD	Northwestern M...	Psychiatry	Russian			312-695-5060	676 N St Clai...
8. Yazmin Fuent...	MD	Prevea Clinic Be...	Psychiatry	Spanish			920-272-1200	3860 Monroe ...
9. Yasmin Asvat	PhD	Rush University	Psychology	Spanish			312- 942-5375	1725 West H...
1... Yamileth Oba...	LCSW		Licensed Clinical...	Spanish			630-597-3854	526 Crescent...
1... Yajuan Leonard	APRN	Richard Young ...	Psychiatry	Chinese			(308) 865-2249	1755 Prairie ...
1... Yadira Garcia	LCSW	Mount Sinai Hos...	Licensed Clinical...	Spanish			7732574750	1500 S Fairfi...
1... Xiomara Clan...	LCSW	Family Service a...	Licensed Clinical...	Spanish			708-656-6430	5341 West C...

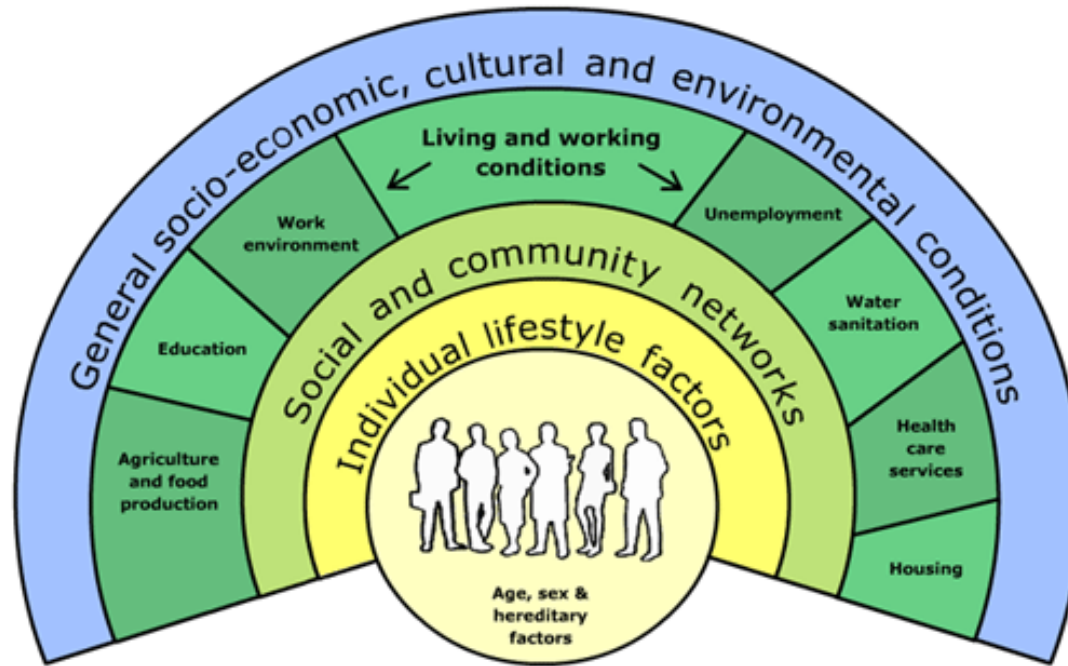
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<https://tinyurl.com/MidwestMHresources>



THINK BROAD



Addressing root causes of health disparities in agriculture requires addressing the **structural** and **social** determinants of health

Social Policy = Health Policy



Acknowledgements

Special thanks to our partners: Nebraska Migrant Education Program, Proteus, Legal Aid of Nebraska, and NE Department of Labor.

We acknowledge the valuable contributions of research team members:

- Rishad Ahmed, UNMC Center for Reducing Health Disparities
- Dr. Trey Andrews, University of Nebraska-Lincoln
- Dr. Casper Bendixsen, National Farm Medicine Center
- Dr. Gustavo Carlo, University of California-Irvine
- Marcela Carvajal-Suarez, UNMC Center for Reducing Health Disparities
- Antonia Correa, Retired
- Axel Fuentes, Rural Community Workers Alliance
- Rodrigo Gamboa, Independent Contractor
- Dr. Kathleen Grant, Retired
- Dr. Ryan Klataske, Kansas State University
- Dr. Meredith McGinley, University of Wisconsin-Parkside
- Dr. Sahitya Maiya, University of New Hampshire
- Roy Rivera, Volunteer
- Dr. Sheri Rowland, UNMC College of Nursing
- Maria Jose Sanchez Roman, UNMC Center for Reducing Health Disparities
- Jose N. Sanchez Sedano, Volunteer
- Priscila Soto Prado, UNMC Center for Reducing Health Disparities
- Natalia Trinidad, UNMC Center for Reducing Health Disparities



Funding provided by Central States Center for Agricultural Safety & Health (CS-CASH) NIOSH U54 OH010162 and USDA NIFA 2020-70028-32728.



**North Central
Farm and Ranch
Stress Assistance Center**

Questions & Conversation

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