Addressing Farmworker Wellbeing in the Northeast

Pamela J. Tinc, PhD
Who we are

Bassett Healthcare Network
New York Center for Agricultural Medicine and Health

NORTHEAST CENTER
FOR OCCUPATIONAL HEALTH AND SAFETY
Determining Priorities

- Emerging issues
- Injury, Illness, Fatality data
- Feedback from community and partners
- Work-related exposures
- Farm Clinic cases
Traumatic Injuries

- Contact with farm equipment
- Incidents with motorized vehicles
- Struck by animals

Using hospitalization data for injury surveillance in agriculture, forestry and fishing: a crosswalk between ICD10CM external cause of injury coding and The Occupational Injury and Illness Classification System

Erika Scott️, Liane Hirabayashi, Judy Graham, Nicole Krupa & Paul Jenkins
Other Health and Safety Topics

• Respiratory illness
• Chemical/pesticide exposures
• Hearing loss
• Ergonomics
• Sun safety
• Heat and cold weather safety
• Tick borne illnesses
• CPR and First Aid
• Mental Health
NYCAMH/NEC Cores

Research

Health Services

Outreach
The Public Health Model

1. Define the problem
2. Identify risk and protective factors
3. Develop and test prevention strategies
4. Assure widespread adoption
Public Health Intervention in NYS Model for Rest of Country

March 13, 2019

Cooperstown, NY – At least 10 lives and more than four million dollars were saved in New York State (NYS) between 2007 and 2017 thanks to a program designed to increase the retrofitting of rollover protective structures (ROPS) on tractors built before 1985. An analysis of the program’s effectiveness was recently published...
Personal Protective Equipment Program

**Disposable N95 Respirators**
Certified by NIOSH for protection from harmful dusts. N95 respirators shown on this page do not protect against vapors or gases, paint vapors, formaldehyde, and certain pesticides. Respirators with exhalation valves offer the same level of protection and provides comfort for longer periods of use by reducing heat build-up inside the respirator.

- **Moldex 2200 N95**
  - Without exhalation valve.
  - Size M/L: $40.00/box of 20

- **Moldex 2201 N95**
  - Size Small: $40.00/box of 20

- **Moldex 2300 N95**
  - With exhalation valve.
  - Size M/L: $41.00/box of 10

- **Moldex 2301 N95**
  - Size Small: $41.00/box of 10

- **3M™ 8210 N95**
  - Disposable respirator. Size M/L: $22.00/box of 20
  - Size Small: $28.00/box of 20

**Earplugs**
Disposable soft foam earplugs. Each pair enclosed in a poly bag, NRR 32 and 33 dB.

- **3M™ E-A-R™ Taper Fit™ earplugs**
  - $0.25/1 pair
  - $41.50/box of 200

- **3M™ Skull Screws™**
  - Uncorded, foam earplugs. Push-to-fit style requires no roll down and makes for easier, quicker, and hygienic insertion. NRR 30 dB.
  - $0.75/pair
  - $90.00/box of 120

- **3M™ E-A-R™ Push-Ins™**
  - Corded, reusable, foam tip earplug. Push in style requires no roll down. NRR 26 dB.
  - $0.80/1 pair
  - $76.00/box of 100

- **Moldex Rockets®**
  - Corded, reusable, push in style, flange earplugs. Pocket Pak® carry case included. NRR 27 dB.
  - $2.75/1 pair
  - $124.00/box of 50

**Chemical Skin Protection**
Before using any pesticide or chemical, it is important to read the label and Safety Data Sheet (SDS) to verify PPE requirements and instructions for proper use.

- **Uline Nitrile gloves**
  - Unlined 15 mil, silicone and latex free.
  - Sizes: S/M/L/XL/2XL
  - $2.00/pair

- **Honeywell North® Silver Shield gloves**
  - 2.7 mil, five layer barrier laminate gloves, construction provides excellent chemical resistance to over 280 chemicals, think and lightweight, good liner gloves.
  - Sizes: 7/8/9/10/11
  - $9.00/pair

- **Chemical resistant apron**
  - 18 oz. Hycar (nitrile blend), protects against great and animal fats. Works well in cold conditions.
  - $23.50
Safety Education

- On-Farm Safety Walkthroughs
- On-Farm Safety Trainings
- Farm Emergency Response Program
Health Services

- Respiratory fit testing
- Hearing screening
- Vision screening
- Blood pressure checks
- Skin cancer screening
- DOT/firefighter physicals
- Farmer’s Clinic
Mental Health
1980s Farm Crisis

- Debt loads
- Operating costs
- Interest rates

- Returns
NYCAMH’s Response

House calls with social workers –
the Farm Partners Program

“In retrospect many clients later remarked that the initial appearance of a staff member at the farm conveyed a powerful message of concern and commitment that influenced their decision to participate.”
1980s-1990s, Mental Health

One Hundred Randomly Selected FP Clients

Percent Affected

Predominant Stressors

* p ≤ .05
** p ≤ .01

< 41 years □ 41-60 years □ > 60 years
Farm Partners Today

- Counseling
- Case Management
- Emergency Response
- Referrals

Job posting (Location: Fly Creek): [https://bit.ly/3DmISxJ](https://bit.ly/3DmISxJ)
The Beginning of Mental Health Research

- Study pertaining to machinery shielding
  - High frequency
  - 60% lead to amputations
  - Leads to loss of farm/livelihood
  - High medical costs

This is all irrelevant when we can’t put food on our tables or keep our lights on.
Known Farm Stressors

- Isolation
- Weather
- Safety and health
- Government policies
- Immigration status
- Farm transition
- Workload and workforce
- Employment status and sufficiency
- Business planning
- Finances
- Other social determinants of health
- Family
# Farmer and Worker Characteristics

<table>
<thead>
<tr>
<th>Farm Owner and Manager Characteristics</th>
<th></th>
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<tbody>
<tr>
<td>Total producers (n)</td>
<td>285,210</td>
</tr>
<tr>
<td>Hired managers (n)</td>
<td>17,066</td>
</tr>
<tr>
<td>Male</td>
<td>62%</td>
</tr>
<tr>
<td>Average age (years)</td>
<td>57</td>
</tr>
<tr>
<td>Race - White</td>
<td>88.6%</td>
</tr>
<tr>
<td>Ethnicity - Hispanic</td>
<td>1.1%</td>
</tr>
<tr>
<td>Farming as primary occupation</td>
<td>44.4%</td>
</tr>
<tr>
<td>Works off farm 1+ days per year</td>
<td>60.3%</td>
</tr>
<tr>
<td>Works off farm 200+ days per year</td>
<td>38.4%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Farm Worker Characteristics</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Hired workers (n)</td>
<td>223,168</td>
</tr>
<tr>
<td>Hired migrant workers (n)</td>
<td>34,416</td>
</tr>
<tr>
<td>Worked 150+ days during year</td>
<td>46.1%</td>
</tr>
<tr>
<td>Unpaid workers (including family) (n)</td>
<td>218,238</td>
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</tbody>
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Access to Healthcare

I Would Go if My Arm Were Hanging off: A Qualitative Study of Healthcare-Seeking Behaviors of Small Farm Owners in Central New York State

David J Drouillard ¹, Pamela J Tinc ², Julie A Sorensen ²

Don't ... Break Down on Tuesday Because the Mental Health Services are Only in Town on Thursday: A Qualitative Study of Service Provision Related Barriers to, and Facilitators of Farmers' Mental Health Help-Seeking

Caitlin Vayro ¹ ² ³, Charlotte Brownlow ⁴ ⁵, Michael Ireland ⁴ ⁵, Sonja March ⁴ ⁵
The Problem

71% of studies report worse mental health among farming populations

Up to 60-70% of farmers/workers experience anxiety

Up to 50-60% of farmers/workers experience depression

Farmers are >2x as likely to die by suicide than non-farmers
COVID Impacts on Mental Health

In Your Community Have You Noticed Individual Who Seem Down, Depressed or Hopeless Due to COVID?

- No: 34
- Yes: 44

In Your Community, Have You Noticed Individuals Who Seem Tense, Anxious, Restless or Nervous Due to COVID?

- No: 36
- Yes: 42

In Your Community Have You Noticed Individuals Who Are Verbally or Physically Abusive to Members of Their Own Household Since March 2020?

- No: 5
- Yes: 72
Farm Bureau COVID-19 Study

- 2,000 participants
- Noted that their own mental health was impacted by COVID
  - 66% of farmers; 53% rural adults
- Reported feeling nervous, anxious, or on edge
  - 65% farmers, 55% rural adults
- 22% increase in farmers reporting social isolation as a problem (compared to pre-pandemic)
What are we doing about it?
Stakeholders Team up for Action in NY Dairy

Female Farmers/Farm Wives
Male Farmers/Farm Husbands
Agricultural Organizations
Dairy Organizations
Government
Healthcare Organizations
Mental Health Organizations
Distributers
Top Trends Identified

- Pressure from external forces
- Pressures of land use
- Cost of production

- Milk prices
- Marketing and effectiveness of check-off
- Overall health of farmers and workers
- Provider availability
- Skilled labor
Priority Areas

- Peer Support
- Milk Pricing
- Business Planning
- Education, Research, Technology
- Environment
- Healthcare
- Marketing & Consumer Education
- Regulations
- Workforce
### National Violent Death Reporting System

#### Prior Studies
- Higher rate of suicide among farmers
- Comparison between means, etc.
- All available states

#### Our Study
- Northeast region
- Incorporate fishing and forestry
- Include other violent deaths
- Incorporate narratives into analysis
Needs Assessment

How do farmers and farm workers think about, talk about, and cope with mental health challenges?
Socio-Ecological Model

How can we best design or modify resources to better serve farmers/workers?
Staff Training

Mental Health First Aid
https://www.mentalhealthfirstaid.org

Question, Persuade, Refer (QPR)
https://qprinstitute.com
Thank you!

Pam Tinc | pam.tinc@bassett.org
www.nycamh.org | www.necenter.org


• Drouillard D, Tinc PJ, Sorensen JA. "I would go if my arm were hanging off": A qualitative study of healthcare-seeking behaviors of small farm owners in central New York State. *J Agric Saf Health*. 2017;23(1):67-81.

• Fouts HN. The Socio-Ecological Model: A framework for promoting healthy weight. 2019: