CLINICIANS SOWING SEEDS IN KANSAS
Providing Care for Vulnerable Populations Working in Agriculture

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Disclosure and Disclaimer

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Disclosure: We have no real or perceived vested interests that relate to this presentation nor do we have any relationships with pharmaceutical companies, biomedical device manufacturers, and/or other corporations whose products or services are related to pertinent therapeutic areas.

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Kansas is Best Known For?

Tell us who you are
A True Tale of Two Injuries

Paper mill Worker
- Severed a flexor tendon on one finger
- Seen right away
- Surgery
- Workers Comp
- Accommodation made
- 3 months to normalcy

A True Tale of Two Injuries

Broccoli Worker
- Cut tip off one finger
- Dropped at ER
- “Nothing to do with work”
- No insurance
- Given 3 days of pain meds, closed wound
- No work
- Lost to follow-up
Objectives

• Work and the environment as social determinants of health
• Clinician’s role in recognizing and managing environmental and occupational health conditions
• Resources and approaches to address environmental and occupational health conditions

Founded in 1984

Oldest clinical network serving the mobile poor

MCN’s primary constituents

• Federally qualified health centers
• State and local health departments

10,000 constituents
OUR MISSION

To be a force for health justice for the mobile poor

Data Data Data
OCCUPATIONAL DISEASE AND INJURY IN US

3.1 MILLION TO 5.5 MILLION
work related injuries/year

4-5,000
on the job DEATHS /year

~14 workers die EVERY DAY

2ND MOST EXPENSIVE HEALTH CONDITION
Occupational injury/disease

OTHER IMPACTS

54,000
work-related illness deaths/year

SIMILAR TO INFLUENZA AND KIDNEY DISEASE
8TH LEADING CAUSE OF DEATH

2.4 TO 4.8% of CANCER DEATHS are occupational

15% of ASTHMA DEATHS due to work exposures

14% of deaths due to CHRONIC OBSTRUCTIVE PULMONARY DISEASE
2 Latino workers die every single day
What’s the most dangerous industry?
A Kansas man died in an accident just after 6 p.m. on Monday at a farm located one half mile east of Deerfield in Kearney County.

James D. Morphew, 67, rural Kearney County, died on a tractor, when he was pinned by a grain auger, according to a media release from the Kearny County Sheriff’s Office.

Morphew had been teaching a teenager how to operate the tractor and she was backing it up when the auger began to tip, according to the Sheriff’s Department.

Morphew took control, but the auger continued falling toward them. He pushed her from the tractor and was struck by the auger. An investigators determined the front-end bucket was raised too high, causing the auger to tip.

Number and rate of fatal work injuries by industry sector, 2015

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Number of Fatal Work Injuries</th>
<th>Rate per 100,000 Full-time Equivalent Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>937</td>
<td>10.1</td>
</tr>
<tr>
<td>Transportation and warehousing</td>
<td>765</td>
<td>13.8</td>
</tr>
<tr>
<td>Agriculture, forestry, fishing and hunting</td>
<td>570</td>
<td>22.8</td>
</tr>
</tbody>
</table>
What are the work-related concerns in agriculture?

- Musculoskeletal
- Injuries and Trauma
- Pesticide and other Chemical Exposures
- Heat Illness/ Frost Bite
- Eye Injuries
- Burns
- Green Tobacco Illness
- Bladder Infections
- Dermatitis
- Infectious Diseases
- Transportation
- Sexual Harassment

Tractor Rollovers #1 Cause of Death on Farms
Injuries

- Roll-Over
- Fall
- Crush
- Pull In
- Thrown Object
- Shear/Cutting Point
- Eye Injuries

Musculoskeletal

- Lifting
- Stooping
- Slips and falls from ladders
- Carrying
- Reaching
Heat Illness

28 workers die from heat each year

Worker Heat Related Fatalities 2008-2014

Source: OSHA
Confined Space

Slips/Trips/Falls
Wet Floors and Uneven Surfaces

Dust
Noise

Animal Handling Injuries

- Pinned
- Crushed
- Kicked
- Stepped on
- Bitten
- Hit in Eye with Tail
Average weight of a worker: 150 - 200 lbs
Average weight of a cow: 1,200 - 1,500 lbs

• 31% of all dairy injuries associated with livestock-handling
  ✓ 50% associated with milking tasks in the parlor

• Animal injuries more common, machinery injuries more deadly

Douphrate et al. 2006, 2009
Infectious Disease: Fecal Oral Routes of Disease Transmission

Needlesticks
Chemical Hazards

Real lives

Agmart and Carlitos
Within 7 weeks of one another...
4 pregnant women worked in the same fields in North Carolina and Florida

4th baby with similar birth defects in Mexico

Carlitos born without arms or legs
Navarrete born with Pierre Robin syndrome
Violeta born with multiple birth defects, died within 3 days

How do we know about these cases?
Pesticide Exposure

- 10,000-20,000 occupational poisonings per year in US (EPA 1996)
- Inconsistent and incomplete surveillance system
  - 30 states require reports
  - 12 states do surveillance
- Latinos farmworkers most exposed
- Over 1 billion pounds of pesticides used each year, mostly in agriculture

World-wide

3 million poisonings
200,000 deaths

Under reported
~ 25 million poisonings (if all cases counted)

98% under-reporting to surveillance systems
(Studies from Central America)
Are clinicians required to report pesticide exposures in Kansas?
How does EPA know about problems with a registered chemical?

- Reports from Clinicians
- Surveillance data
  - State systems
  - NIOSH SENSOR system
    - Both dependent on clinician reporting
- Poison Control Data
  - Mostly Clinician reports are biased toward children and exposures not poisonings
Worker Exposure to Pesticides

- Mixing, Handling, Applying Pesticides
- Working in Fields/Orchards Treated with Pesticides
- Drift

Exposure to Family Members

- “Take home” exposure
- Drift
- Home application of pesticides
- Lawn and vegetable and flower gardens
Beyond the workplace

- Substandard Housing
- Water and Sanitation
- Infectious diseases

Migrant Health

Underserved population whose health is worsened by...

- Migratory lifestyle
- Cultural and language barriers
- Immigration status
- Inherent dangers and health risks of occupation
- Lack of access to insurance or financial resources
- Lack of regulatory protection
Farmworker Exceptionalism

- Beyond pesticides...
- Few OSHA standards to protect farmworkers
  - Water and sanitation, 1987
  - Only farms with 11 workers or housing
- Collective bargaining
- Child labor
- Workers’ compensation

Worker Protection Standard
The Clinician

Primary Care can be a Gateway
Obstacles for Primary Care Providers/ Staff

• BUSY
• Unfamiliar terminology/practice
• Public Health Paradigm
• Workers’ Compensation/Legal system/Reporting
• Office Based
EOH Screening Questions for the Primary Care Setting

Preguntas para sondear en los lugares de atención a la salud

1. OCCUPATION
   Ocupación
   Describe what you do for work.
   Describa lo que hace en su trabajo.

2. ACTIVITIES AND CAUSES
   Actividades y Causas
   Are there any physical activities that you do — at work or away from work — that you feel are harmful to you?
   ¿Hay alguna actividad física en el trabajo o en otro lugar que crea usted es dañina para usted?

3. SUBSTANCES/PHYSICAL HAZARDS AND CAUSES
   Substancias/Peligros Físicos y Causas
   Are you exposed to chemicals, fumes, dusts, noise, and/or high heat at your work or away from work? Do you think these are harming you?
   ¿Está usted expuesto a químicos, gases, polvo, ruido y/o altas temperaturas en su trabajo o en otro lugar? ¿Piensa usted que estas cosas lo pueden dañar?

Workers Compensation
Are agricultural workers eligible for workers’ compensation in Kansas?

1. Yes
2. No
3. Unsure
Coverage for Farm Workers: Optional


Coverage for Undocumented Workers: Yes

Case Law: Acosta v. Nat'l Beef Packing Co., L.P., 44 P.3d 330 (Kan. 2002) (allowing undocumented worker to collect worker's compensation award); but see Doe v. Kansas Dep't of Human Res., 90 P.3d 940 (Kan. 2004) (holding that the same undocumented worker as in Acosta, who obtained workers' comp benefit through use of assumed name, could have penalties and fines assessed against her).


Online Forms: Forms and Publications

State Workers' Compensation Website: Kansas Department of Labor
When is illness or injury work related?

Any injury or illness resulting from or sustained in the course of any occupation or employment.

More than 50% likely due to work

USE THESE WORDS:

• “More likely than not” due to work
• Work “most likely” cause of the condition
• “But for the work” the condition would not exist

What else needs to be done?

• Document/Chart
• Work Related
  – Exposure
  – Illness
  – Injury
• Refer for expert legal help
1,300 employees at Quality Pork Processors
14 developed new neurological disease

Was it work related?

- All worked near “blowing brains” area
- Only 3 plants use technique
- Several workers consulted company nurse—actions?
- Interpreter reported to physician that she heard the “same story” from three patients

**Progressive Inflammatory Neuropathy (PIN)**

Could have been a lot more imaginative and called it...

**Progressive Inflammatory Global-neuropathy Syndrome**

**PIGS**
Resources

Resources, Training, Technical Assistance, and Information from MCN

www.migrantclinician.org
Patient Education Materials

- Colorful images
- Simple language
- Health and Safety information
- Available from MCN website
Contact

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