

# CLINICIANS SOWING SEEDS IN KANSAS

Providing Care for Vulnerable Populations Working in Agriculture

Tuesday, February 21, 2017 - 12:00 - 1:00 PM (Central Time)

**Ed Zuroweste, MD**  
**Chief Medical Officer**  
**Migrant Clinicians**  
**Network**



## Disclosure and Disclaimer

### Faculty:

Ed Zuroweste, MD

**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.

### Disclaimer

*This material was produced, in part, under Assistance Agreement No. X883487601 awarded by the U.S. Environmental Protection Agency. It has not been formally reviewed by EPA. EPA does not endorse any products or commercial services mentioned in this product.*



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



10,000  
constituents

Founded in  
1984

Oldest clinical  
network serving the  
mobile poor

MCN's primary  
constituents

- Federally qualified health centers
- State and local health departments

# Migrant Clinicians Network



## 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**

**2<sup>ND</sup>**

**MOST EXPENSIVE HEALTH CONDITION**

*Occupational injury/disease*

## OTHER IMPACTS

**54,000**

work-related illness deaths/year

**SIMILAR TO INFLUENZA  
AND KIDNEY DISEASE**



**8<sup>TH</sup>**  
**LEADING  
CAUSE OF  
DEATH**



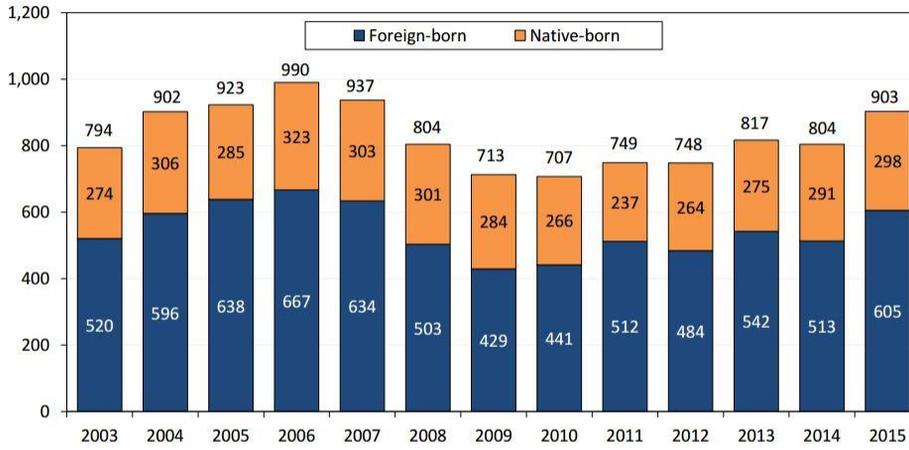
**2.4 TO 4.8%** of **CANCER DEATHS** are occupational



**15%** of **ASTHMA DEATHS** due to work exposures

**14%** of deaths due to **CHRONIC OBSTRUCTIVE PULMONARY DISEASE**

### Fatal work injuries involving Hispanic or Latino workers, 2003-15



Fatal work injuries involving Hispanic or Latino workers increased in 2015 to its highest level since 2007. Around two-thirds of fatally-injured Hispanic or Latino workers in 2015 were born outside of the United States.

Source: U.S. Bureau of Labor Statistics, 2016.



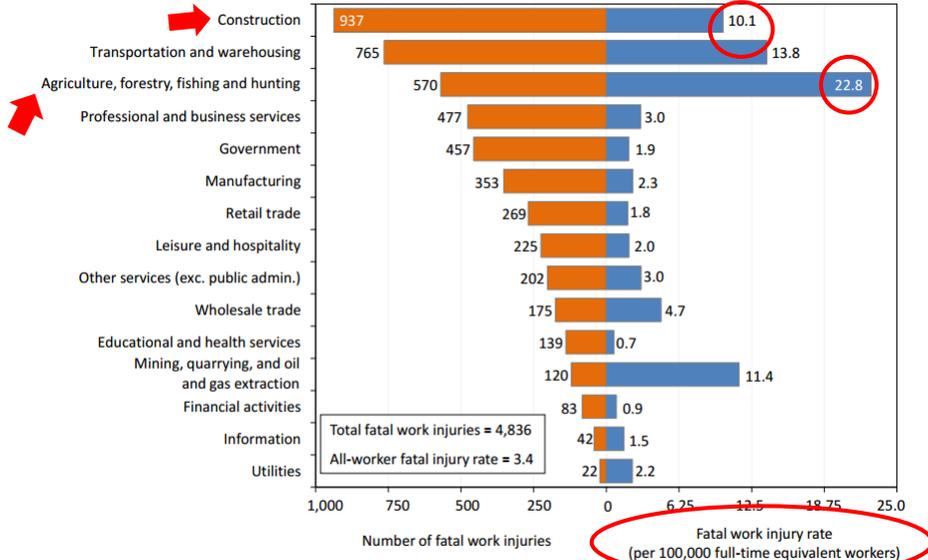
2 Latino workers die every single day



What's the most dangerous industry?



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



Private construction had the highest count of fatal injuries in 2015, but the private agriculture, forestry, fishing and hunting sector had the highest fatal work injury rate.

Note: Fatal injury rates exclude workers under the age of 16 years, volunteers, and resident military. The number of fatal work injuries represents total published fatal injuries before the exclusions. For additional information on the fatal work injury rate methodology, please see [www.bls.gov/iif/oshnotice10.htm](http://www.bls.gov/iif/oshnotice10.htm). Source: U.S. Bureau of Labor Statistics, Current Population Survey, Census of Fatal Occupational Injuries, 2016.

### Ohio Dairy Farm Worker Killed In Feed Mixer Accident

JUNE 8, 2015  
MADISON COUNTY, OHIO - Farm Journal  
A dairy farm vet in Ohio was tragically killed in an accident over the weekend.  
The worker was apparently pushing hay into a mixer when he fell in.  
TMR mixers and tub grinders can be especially dangerous since they have powerful mixing screws often edged with sharp knives used to reduce particle size of long-stemmed forages. Because these screws often don't rotate at exceptionally high speed, they can look deceptively benign. But once caught in their grasp, it's virtually impossible to extract one self, say safety experts.  
...  
The [safety] recommendations go back to the standard machinery recommendations," she says. "Power off, lock out machine before repair or unplugging."

### Kansas man dies in farm accident

MAY 4, 2016  
KEARNEY COUNTY — Hutch Post  
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 The Kearney 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.

### 43-year-old man killed in Kansas harvest accident

JUNE 22, 2016  
BELOIT, Kan. (AP) - Associated Press  
Authorities say a man has been killed in a wheat-harvest accident in north-central Kansas.  
The Mitchell County Sheriff's Office identified the victim in a news release as 43-year-old Michael Alan Anderson, of Beloit. The Salina Journal reports that he was pronounced dead Tuesday at the scene of the accident about 7 miles south along Highway 14.  
... a problem with a

### 2-year-old boy killed in Kansas farm accident

October 20, 2011  
BELLEVILLE, Kan. (AP) - AP Wire  
A 2-year-old Belleville boy has died after being run over by a payloader tractor near Scandia in north-central Kansas.  
The Salina Journal reports Cayden Michael Dunstan was with his father, who was strapping down large hay bales that had been loaded onto a semitrailer.  
The Republic County Sheriff's Office says the tractor was being backed away from the trailer when Cayden ran into its path and was run over just after 7 p.m.  
Saturday.  
Cayden's parents took him to a hospital in Belleville, where he died as a LifeWatch helicopter waited to fly him to a hospital in Omaha, Neb.

### About 25 hit by fungicide drift from crop duster in Tippecanoe County

7/15/2015  
WILLIAMSPORT — Indiana Economic Digest  
About 25 people were hit by drifting fungicide Wednesday while a crop duster sprayed a neighboring field.  
The group, primarily teens, were detasseling corn on a field owned by Hubner Industries, said Roger Vall, safety manager for the seed production company.  
About 50 people were working but only about half were subcontractor who manages the workers.  
The affected detassellers were transported in a school bus to St. Vincent Williamsport Hospital where they were treated outside by a hazardous materials team from the Tippecanoe County Emergency Management Agency and hospital staff.  
Five people were admitted to the emergency room for treatment while others were treated in the decontamination area, according to Tudie Kuiper, a spokeswoman for the hospital.  
All of the people affected by the fungicide drift have been released, according to Kuiper.  
Some of the teens reported symptoms, including throat, eye and skin irritation, according to hospital staff.

### Farm worker dies after being buried under pile of corn

March 24, 2015 • Associated Press  
LEBANON, Conn. — A Connecticut farm worker has died after a pile of milled corn collapsed on him.  
Police say the collapse happened when 54-year-old Donald Merchant, of South Windham, was using equipment to move corn from a large mound at the Square A Farm on Monday. When he got off the equipment, some of it toppled onto him.  
Merchant was found unresponsive by other farm workers, who dug him out.

## 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



21

© Earl Dotter - NFM

# Musculoskeletal



Lifting



Stooping

Slips  
and falls  
from  
ladders

Carrying



Reaching



28 workers die from heat each year



Worker Heat Related Fatalities 2008-2014

Source: OSHA

# Confined Space



© Earl Dotter - NFMC

# Slips/Trips/Falls



© Earl Dotter - NFMC

## Wet Floors and Uneven Surfaces



## Dust

# Noise



## Animal Handling Injuries



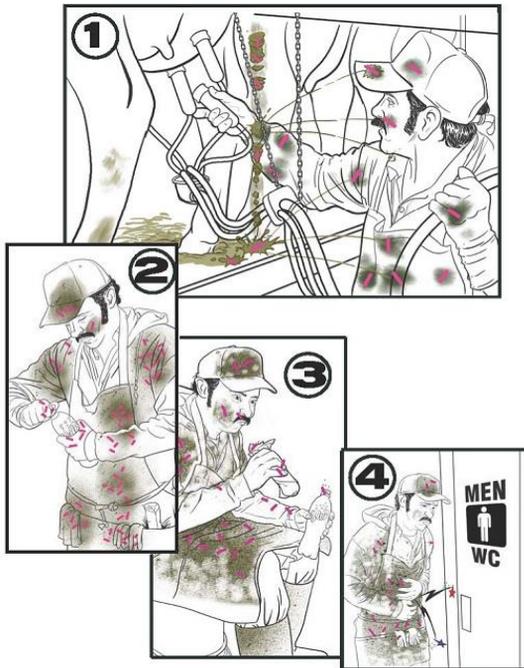
- Pinned
- Crushed
- Kicked
- Stepped on
- Bitten
- Hit in Eye with Tail



- 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

© Earl Dotter - NFMIC

Douphrate et al. 2006, 2009



© Salvador Saenz - MCN

## Infectious Disease: Fecal Oral Routes of Disease Transmission



## Needlesticks

© Earl Dotter - NFMC

# Chemical Hazards

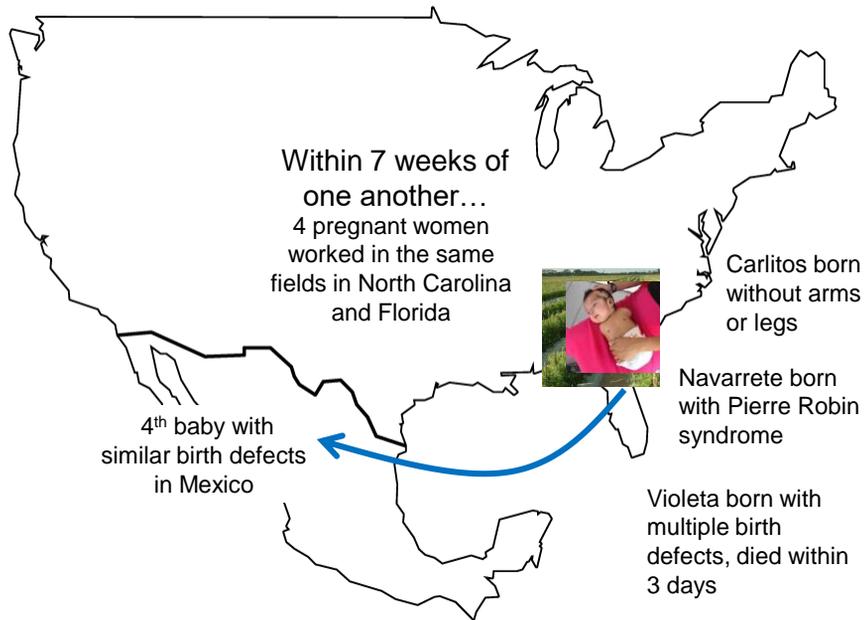


## Real lives

Agmart and  
Carlitos



AP Photo



How do we know about these cases?





Photo © earldotter.com

## 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?



About **Explore**  Connect Don

Home » Environmental and Occupational Health » **Pesticide Reporting and Assessment**

**CONTINUING EDUCATION**

- Upcoming Webinars
- Archived Webinars
- Online Courses

**UNDERSTANDING MIGRATION**

- Migrant Health Overview
- Migrant/Seasonal Farmworkers Profile

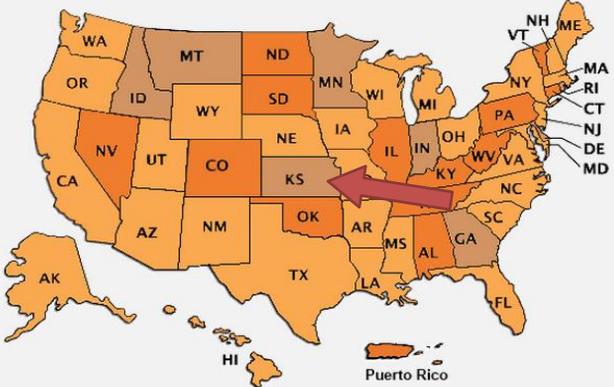
**ISSUES IN MIGRANT HEALTH**

- Behavioral Health
- Cancer
- Children's Health
- Diabetes
- Eye Care
- Family Violence

**Report Pesticide Exposures**



Pesticide Clinics



**PUERTO RICO**

**PESTICIDE REPORTING REQUIREMENT:**

- Required
- Optional
- None

Pesticide Reporting and Workers' Compensation Information for Kansas

Report Exposure Workers' Compensation

**Report Exposure: Poison Control**  
 Phone: 1-800-222-1222

**Pesticide Reporting Requirements**  
 Required to Report: Optional  
 What to Report?: Any Pesticide-Related Exposure  
 Who is Required to Report?: .  
 Additional Info:

Visit the Kansas Department of Agriculture for more information on Pesticides in Kansas: <https://agriculture.ks.gov/divisions-programs/pesticide-fertilizer>

**WPS Enforcement**  
 Worker Protection Standard Enforcement Agency:

Worker Protection Standard complaints can be made to the following agencies: Kansas Department of Agriculture:785.296.3786 US Environmental Protection Agency Region 7 Office: 1.800.223.0425 Department of Agriculture: <https://agriculture.ks.gov/divisions-programs/pesticide-fertilizer/pesticide-applicator>

Legal Services Referral for Violations:  
 Hays Legal Services at 785-625-4514 (<http://www.kansaslegalservices.org>)

## 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



Illustration: Salvador Sáenz from MCN's *Lo que bien empieza...*



## 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



Photo © earldotter.com

## Worker Protection Standard





Photo @ Robyn Garibaldi

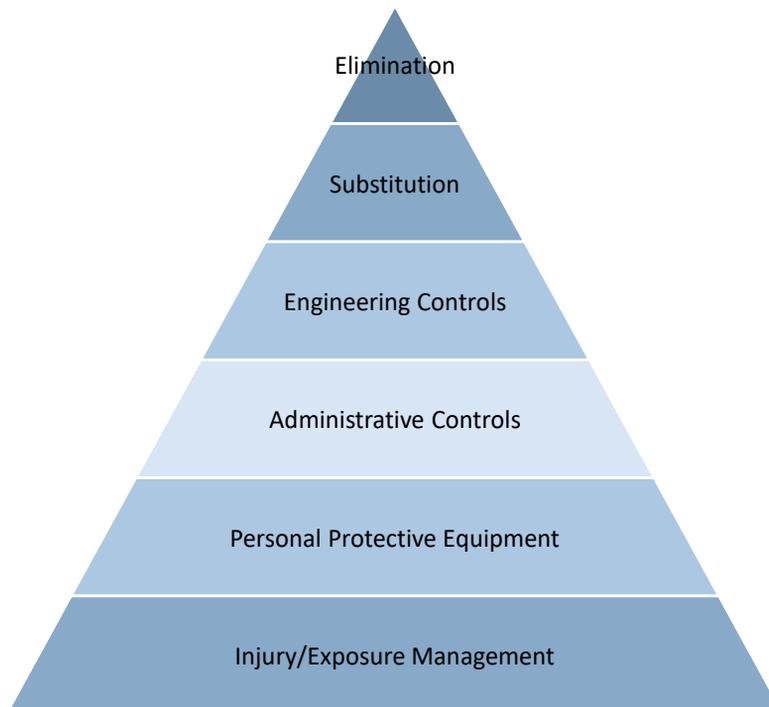
# The Clinician

# 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 CAUSA

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 CAUSA

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



- Medical treatment for injured patient
  - Immediate
  - Long term
  - Access to Specialty Care
- Wages
- Return to Work
- Prevention - Hazard Control
- Public Health
  - Surveillance

Are agricultural workers eligible for workers' compensation in Kansas?

1. Yes
2. No
3. Unsure



About **Explore**  Connect

Home » Environmental and Occupational Health » Pesticide Reporting and Workers' Compensation

**CONTINUING EDUCATION**

- Upcoming Webinars
- Archived Webinars
- Online Courses

**UNDERSTANDING MIGRATION**

- Migrant Health Overview
- Migrant/Seasonal Farmworkers Profile

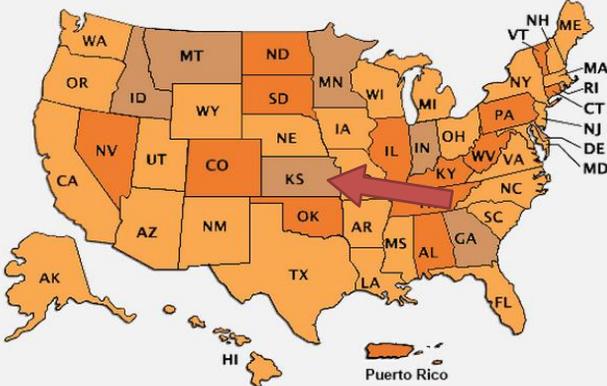
**ISSUES IN MIGRANT HEALTH**

- Behavioral Health
- Cancer
- Children's Health
- Diabetes
- Eye Care
- Family Violence

Pesticide Clinics

**Report Pesticide Exposures**





**PESTICIDE REPORTING REQUIREMENT:**

- Required
- Optional
- None

**Workers' Compensation in Agriculture**

Pesticide Reporting and Workers' Compensation Information for Kansas Close or Esc Key

Report Exposure
**Workers' Compensation**

**Coverage for Farm Workers: Optional**

Limitations: Employer may elect to become subject to workers' compensation law. Kan. Stat. Ann. § 44-505(b).  
 Statute: Kan. Stat. Ann. § 44-505(a)(1) (2008)  
 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).  
 Benefits Available for Undocumented Workers: Undocumented worker was allowed to collect on award for temporary partial disability and permanent partial disability payments. Acosta v. Nat'l Beef Packing Co., L.P., 44 P.3d 330, 334-35, 341 (Kan. 2002).  
 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

© earldotter.com



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](http://www.migrantclinician.org)

## Patient Education Materials

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



# Contact



[www.migrantclinician.org](http://www.migrantclinician.org)



**Amy K. Liebman, MPA, MA**

Director of Environmental and  
Occupational Health

(512) 579-4535

[aliebman@migrantclinician.org](mailto:aliebman@migrantclinician.org)

**Ed Zuroweste, MD**

Chief Medical Officer

(814) 571-4279

[ezuroweste@migrantclinician.org](mailto:ezuroweste@migrantclinician.org)