Partners in Health and Safety / Compañeros en Salud y Seguridad: Providing Health Services to Immigrant Hispanic Farmworkers

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What’s happening in our rural communities?

• Dairy production has increased with a decline in number of herds and shift to larger farms
Small family farms have gross cash farm income (GCFI) less than $350,000. Midsize family farms have GCFI of $350,000 to $999,999. Large scale-family farms have GCFI of $1,000,000 or more. Nonfamily farms are those where neither the principal operator, nor individuals related to the operator, own a majority of the business.

Challenges

• Agriculture is the most hazardous industrial sector in the U.S. based on fatality rates Lack of occupational health and safety delivery
• Lack of governmental regulation and reporting systems
• Lack of access to preventive care - rural
• Home and workplace are the same – children exposed
• High risk of respiratory disease, diseases of the skin, hearing loss, mental health
• Advancing age associated with chronic disease – Cardiovascular – more younger and older workers
Number and rate of fatal occupational injuries, by industry sector, 2013

- Construction: 828 injuries, rate 9.7 per 100,000
- Transportation and warehousing: 733 injuries, rate 14.0 per 100,000
- Agriculture, forestry, fishing and hunting: 500 injuries, rate 23.2 per 100,000
- Government: 484 injuries, rate 2.8 per 100,000
- Professional and business services: 430 injuries, rate 2.1 per 100,000
- Manufacturing: 312 injuries, rate 1.9 per 100,000
- Retail trade: 263 injuries, rate 1.9 per 100,000
- Leisure and hospitality: 207 injuries, rate 1.9 per 100,000
- Wholesale trade: 201 injuries, rate 5.3 per 100,000
- Other services (exc. public admin.): 186 injuries, rate 2.7 per 100,000
- Mining, quarrying, and oil and gas extraction: 155 injuries, rate 12.4 per 100,000
- Educational and health services: 135 injuries, rate 0.7 per 100,000
- Financial activities: 87 injuries, rate 0.9 per 100,000
- Information: 40 injuries, rate 1.5 per 100,000
- Utilities: 24 injuries, rate 2.6 per 100,000

Total fatal work injuries = 4,585
All-worker fatal injury rate = 3.3 per 100,000 full-time equivalent workers
Changing Demographics

• Large influx of Hispanic immigrants to fill demand for dairy workers in Wisconsin
  – 2000-2010 Percent Hispanic workers increased from 5% to 40% (60% on farms with more than 300 cows)
  – 2010 Census shows increase in several west central Wisconsin Counties greater than 175%

Interactive Graphics
• Work an average of 57 hours per week and took off about 4.8 days per month.

• 2009 estimate of 12,500 dairy workers in WI

• ~5300 immigrant farm workers
Barriers to Health Care for Hispanic Immigrant Workers

- Lack of insurance
- High cost of health care services
- Lack of access to preventive care and other health care services (e.g. dental, mental health)
- Communication issues
- Transportation

- Social situation
- Environment
- Separation from family
- Culture shock
The Partnership

- University of Wisconsin Eau Claire – College of Nursing and Health Sciences
- Buffalo County Public Health
- Pepin County Public Health
- Bridges / Puentes
- Dairy Producers
- Chippewa Valley Free Clinic
Funding

- University of Wisconsin Differential tuition funding (Domestic Intercultural Immersion) 2011-2013, 2014-2016
- In kind UWEC CONHS, Buffalo and Pepin County Health Departments, Puentes/Bridges, Dale Omtvedt-Gable, farm owners
- Funding from Wisconsin Department of Health Services Contract G0271 DPH14 Spring 2014, 2015
- Diary producers
- Pepin County “Get Yourself Tested” Grant
Who does this?

• Nurse practitioner nursing faculty with certification in Agricultural Health and Safety
• 53 senior nursing students over 8 semesters and summer (5-8 per semester)
  • Most students have a minor in Spanish for health care or some Spanish language skills
• Spanish language translators (1-2)
• Public health nurse (1-2)
Why nurses / nursing students?

- Largest sector of health care profession
- Uniquely positioned across the continuum of health care – often in rural areas
- Viewed as trusted and credible sources of health care information
- Can integrate knowledge of agricultural health and safety and immigrant workers into their practices throughout their careers
The Project

• Engage students in learning rural culture, Hispanic culture, agricultural health and safety, and public health.
• Enhance communication skills of students, farm owners, and farm workers
• Provide education for farmworkers in both Spanish and English
• Provide health and safety screening at dairy farms in west central WI which employ Hispanic workers
• Collaborate with public health departments
Where do we go?

- Buffalo & Pepin County
- 17 large dairies and one heifer farm in west central WI
- Milking: mean = 685, range 300-1000
- Young stock (half) with mean 600
- All with parallel or herringbone parlors
- All CAFOs
What do we do?

- Students / faculty meet once a week for 4-5 weeks in preparation.
- Students develop a teaching project each semester.
- 2 – 5 farms per day for 4 -6 days (trial at Lyster Church)
- Education on a variety of topics related to health and safety
- Health screenings – BP, BMI, TB, cholesterol, glucose, tobacco, alcohol use, vision, STI
- Immunizations – Tdap, Influenza
- Supply PPE with education and demonstration
- [Nursing immersion program - YouTube](https://www.youtube.com)
Who did we see?

- 323 Unique Individuals
- 860 Visits
- 87.1% Hispanic, 12.9% White
- 88.9% Male, 11.1% Female
- Age (Significant at p<.001)
  - Hispanic: M=32.1 years, Median=28, Mode =22
  - White: M=53.73 years, Median = 48, Mode =36
Screenings per Semester

Number of Screenings

- Tdap (n=162)
- Td (n=3)
- Influenza (n=295)
- Blood Pressure (n=732)
- Cholesterol (n=352)
- BMI (n=346)
- T Spot (n=192)
Screening results

• Elevated BP 14%
• BMI (Obesity) 26%
• Elevated cholesterol 34%
• TB screen positive 7% (all Latent TB)
Education

General Health
• Blood pressure
• Cholesterol
• Antibiotic Use
• Health diet / exercise
• Alcohol use / misuse
• Self care for URI
• Tuberculosis
• Safe and Responsible Sex / STI

Occupational Health
• Hearing protection
• Respiratory protection
• Ergonomics
• Zoonotic infection
• Exposure to hot and cold environments
Follow up

- Lack of insurance in the Hispanic population is problematic
- Partner collaboration
- TB follow up with Public health (MOU with UWHealth) – State funding
- Chippewa Valley Free Clinic
- Pepin County Family Planning
Outcomes/Lessons Learned

• Students report an interest in public health
• Students demonstrate evidence of increased cultural competence related to the Hispanic, rural, and agricultural life in journaling as well as behavior.
• Students have the opportunity to bring this experience and knowledge with them throughout their career
“I formed interesting perceptions about Mexican and rural farming cultures through language styles, values and comparison to my own cultural existence. I have learned more about listening and critically thinking than any other clinical experience I had leading up to this one and have made observations that have helped me realize significant views I have about worldly value systems. My understanding of communication within and surrounding cultures has expanded, along with my reflections of global diversity. Lastly, I have been exposed to and better understand the impacts of culture and language on the practice and profession of nursing. “
Outcomes/Lessons Learned

• Communication / translation is essential
• Trust is everything
• A caring presence
• Preparation of students builds confidence and competence
• Referral and recommendation within the community makes it happen
• Transportation is a barrier
• Partnerships are invaluable
• Everyone reaps the benefits
• Owner support = worker support
• Jump in...... try again if it fails... listen and learn...
What next?

• Further develop assessment plan to evaluate program effectiveness
• Consider inclusion of other disciplines Environmental Public Health and / or Social Work
  • NP Students
  • UW River Falls collaboration
  • Expand program to surrounding counties, including collaboration with public health / other nursing schools
  • Explore local rural resources
  • Seek new funding opportunities

