Promoting Awareness and Identification of Work Related Symptoms by Community Physician Volunteers and Medical Students at a Mobile Migrant Worker Clinic in CNY

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## Central NY Occupational Health Clinical Center

 CNYOHCC – occupational diagnostic and treatment center, since 1988 Grant funded through NYS DOH Member of NYS Occupational Health Clinic Network multidisciplinary – MD, NP, IH, SW, RN, LPN, Administrative staff In Syracuse, covering 15 counties

## Mission of CNYOHCC

- Accurate diagnosis of occupational disease
- Prevention of occupational disease in at-risk workers
  - Screenings
  - Education in disease and hazard control
  - -Worksite evaluations
- Data collection on occupational disease

### Education and Outreach

#### Key aspect in prevention

Access to workers in high risk jobs

Educating health care providers

 Students, MDs, NPs, PAs, others
 Lecture at UMU, serve as clinical practice site for residents, students

## Reaching the Underserved

- Hard to get access to some groups of workers
  - Unions mostly aware, supportive
  - Small & non-union shops harder
  - Minority & immigrant workers very hard
- Reaching underserved workers became a perennial goal

## **Opportunity!**

#### Discovered SC HOPE 2004

- Salt City Health Outreach Program
  - Free medical care for poor and uninsured since <u>1989</u>
  - Partnership between Onondaga County Health Dept and Upstate Medical University College of Medicine
  - Part time ambulatory care clinic staffed primarily by medical students
  - Supervised and mentored by volunteer community physician
  - (Salt City = Syracuse, once famous for salt mining)

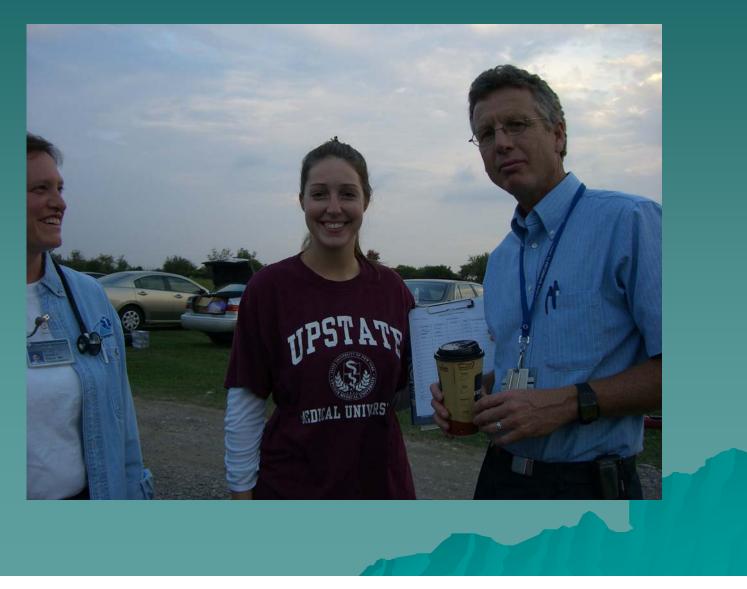
### SC HOPE Expands to Migrant Health Care

 County PHNs long experience with migrant worker health care Earned trust of farmers, workers 2003, experienced PHN consulted with MD with expertise in field clinics PHN ideas and SC HOPE background + outside experience in migrant health = SC HOPE Migrant clinic

## Mobile Medical Care to MFW

 Peter Cronkright, MD is medical director Students volunteer – core group of student coordinators Volunteer medical school faculty and community physicians Health Dept RNs, NPs, bilingual outreach workers

#### Dr C and Student Coordinator



#### Migrant Clinic Team Members



#### Tents, Lanterns, and Earnest Good Will

- Farmers agreed to allow medical care program to expand
- Tents pitched on farms near migrant housing
- Portable exam tables
- Lanterns or mechanic's lights for light —as summer progressed got dark earlier

### One Box at a Time,



#### Health Care Comes to the Farm



### Setting Up



### Pharmacy



#### Intake Area



#### Ready for Record Keeping by Lantern Light



### Hurry Up and Wait



### Watching It Appear



## CNYOHCC and SC HOPE

- Opportunity for CNYOHCC to access minority and underserved workers right in our home county
- Dr Cronkright agreed
- <u>2004 season</u>, CNYOHCC MD, NP, and IH attended as occupational medicine consultants – lots of observation

# Multiple Goals



## Fitting In

- Each Clinic sub group with interdependent goals
- PHNs- immunizations, STDs, TB, identifying medical and psychosocial needs – longest experience with the population
- Outreach workers communication with MFWs
- SC HOPE set up portable clinic, learn H&P skills, charting, pharmacy skills
- SC HOPE Medical Director make sure all participants are safe and quality of care maintained in a field situation
- CNYOHCC added another layer

## **Occupational Medicine Consult**

Changing cast each week
Each participant introduced before exam tents erected
Very brief description of CNYOHCC
Primarily used in musculoskeletal cases

 Circulated tent to tent usually after history underway – slightly awkward
 Also asked to come to some tents

### **Training New Volunteers**



## Challenges

Lots of information gathered, mostly via interpreters
 Sincere attempts made to maintain confidentiality – at times difficult in field conditions
 <u>Process slowed</u> by language barriers and inexperience in field clinic

logistics

### Identifying Needs after 1<sup>st</sup> year

 Spanish language fact sheets with illustrations

 Lifting and carrying, ladder safety, pesticides, exercises for muscle strain

 Developed a library of these, carried in a box to clinics

 These became very popular with physicians – I became the fact sheet lady for a while – Occ Therapist or Physical Therapist

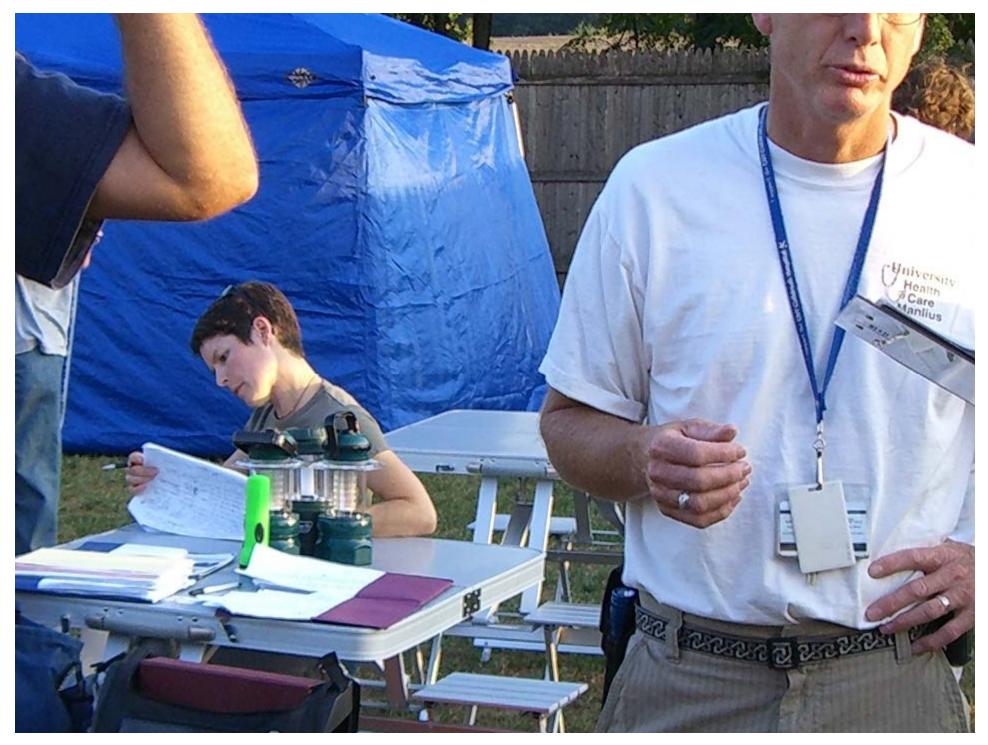
### Expanding Awareness

 Consult & fact sheet experience was good, but limited at increasing physician and med student ability to identify work related problems

 Simple occupational medicine questionnaire developed

 To be administered in Spanish during intake process – a very busy, hectic time

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### Slow Start

 First year <u>2005</u> – questionnaire OK'd Not well explained or introduced by **CNYOHCC**  Needed to be introduced each week to new participants – did not happen Often not completed, or if done ignored by the physicians and students during the H&P process Literally lost in the shuffle

### Pre-season Trainings

CNYOHCC invited student coordinators

 Occupational hazard and health risks among MFWs

 Training also done by Health Department to cover their requirements

Cultural competency training offered

### **CNYOHCC** Role 2006

 2006 season, NP spent most of time with student coordinators at intake • Became more of a familiar face to students, PHNs, outreach workers, returning volunteer physicians Repeatedly explained need to complete questionnaire NP became the gentle enforcer

## During 2006

 More questionnaires completed Much less time for circulating or consultation Observed examiners referring to questionnaires during H&P Continued distributing fact sheets Increasing acceptance into partnership with increasing familiarity Glad to see us coming

## Glad to See Us





### **Questionnaire Elements**

#### Chief complaint

 Musculoskeletal pain – low back, neck, shoulder, arm, wrist, hand, other

 Skin – rash, other problems, where on body?

Eyes – dry, watery, itchy, irritated, injury

#### Questionnaire, cont'd

 Heat related sx – muscle cramps, nausea, weakness, access to water

Respiratory- SOB, cough, wheeze, stuffy nose

 Pesticide/chemical exposure – used/applied, last time, present when chemicals/pesticides being applied

 Symptoms – worse at work, better away from work, anyone with similar symptoms

### 2006 Results

 Data collected by student coordinators (no 2007 data available at this time)

 Some comparison data from OCHD Migrant Health Program 2006 Annual Report

 Because of the field work conditions, numbers may not be precise

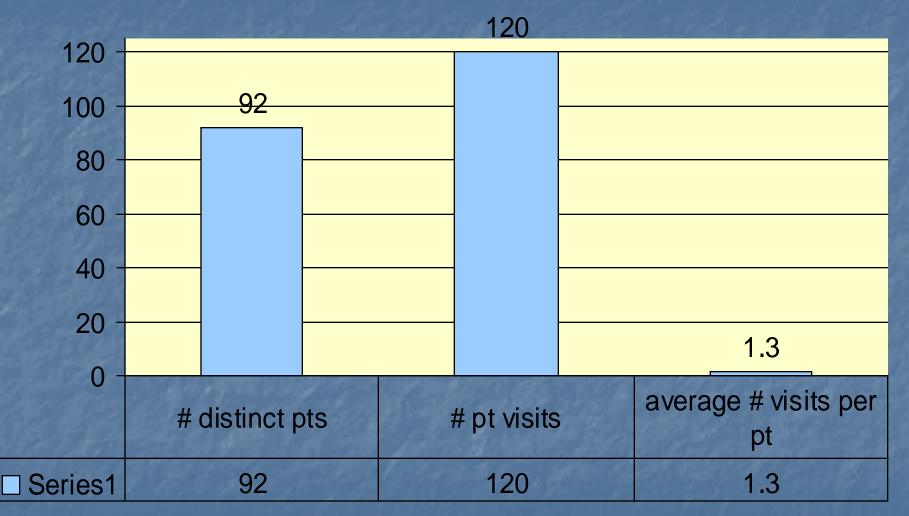
### 2006 Results

 92 MFW received services during approximately 120 pt visits

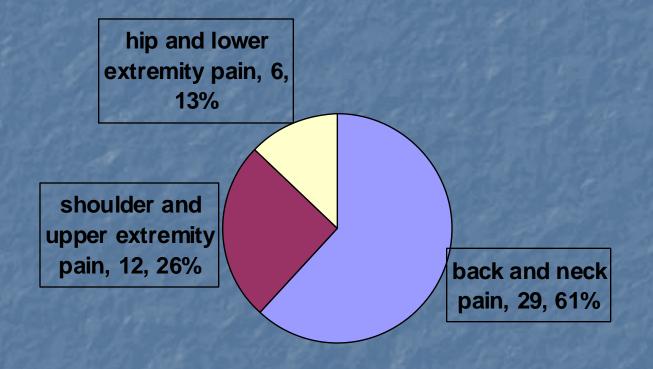
29 pts seen more than once

48/92 completed the questionnaire

#### **2006 MFW Patient Census**

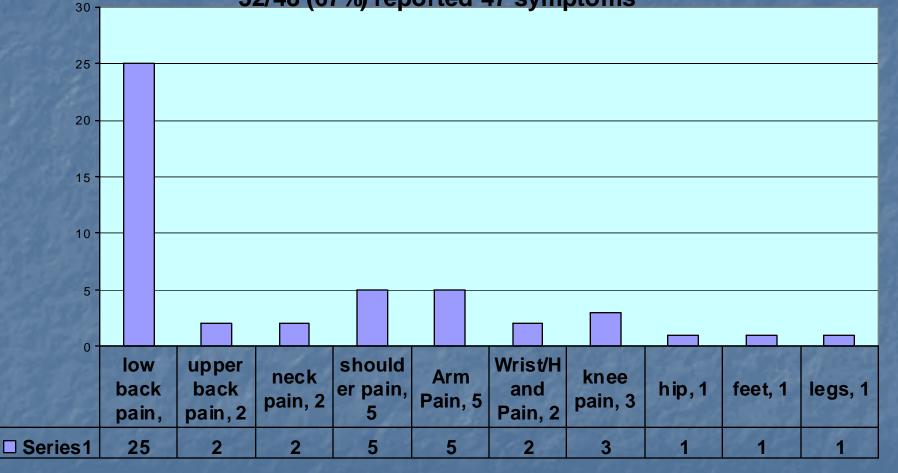


## Musculoskeletal Pain 32/48 (67%) reporting pain

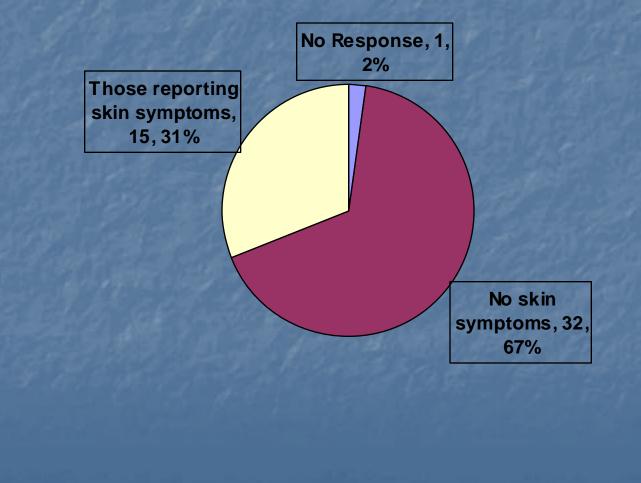


#### Location of Musculoskeletal Pain

32/48 (67%) reported 47 symptoms

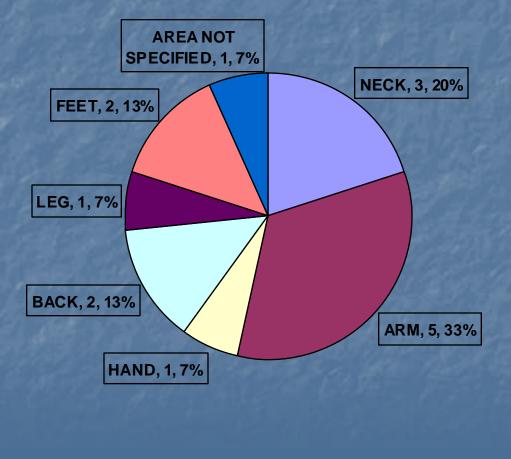


## Skin Symptoms 15/48 (31%) reporting symptoms

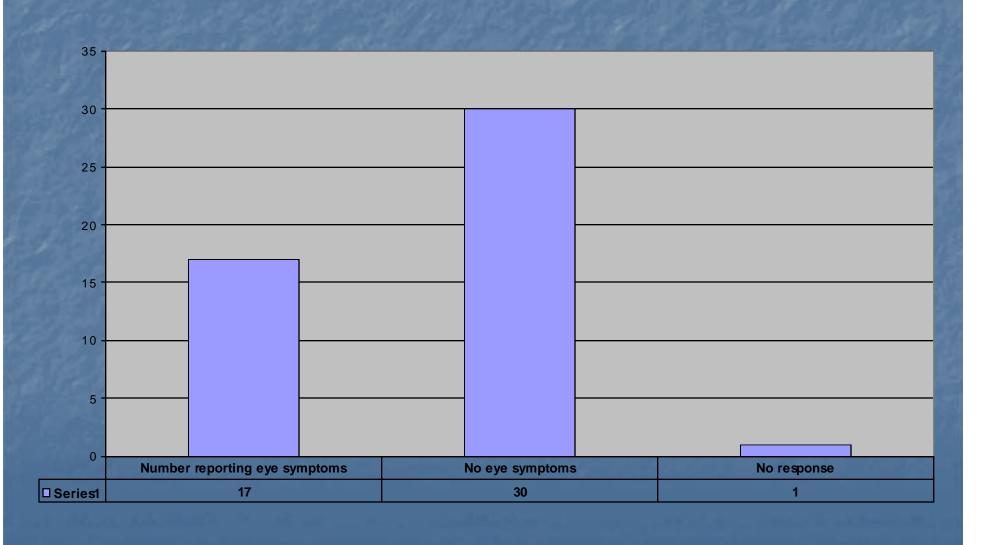


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## Skin Areas Affected 15/48 (31%) reported 16 skin symptoms

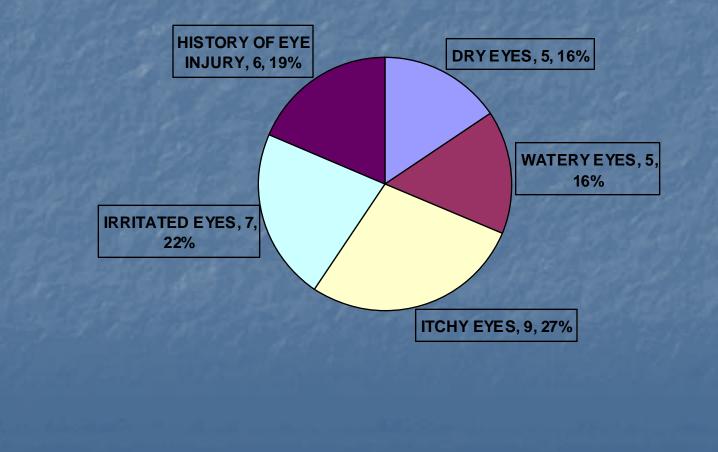


## Eye Symptoms 17/48 (35%) reported

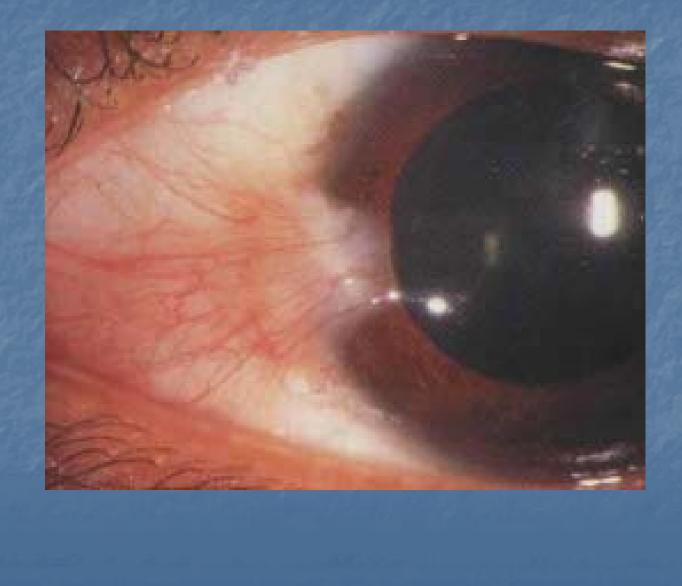


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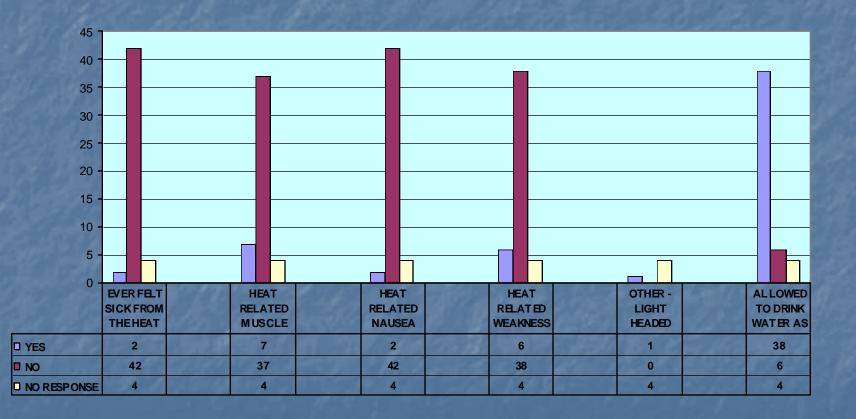
## Types of Eye Problems 17/48 (35%) reporting 32 symptoms



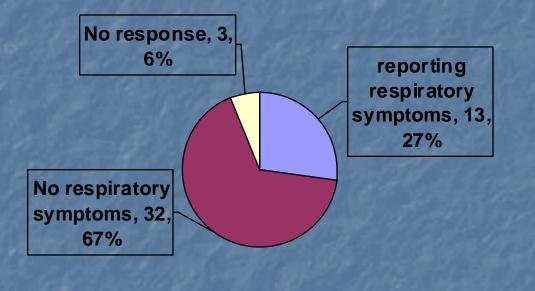
#### Pterygium – frequently seen in previous years



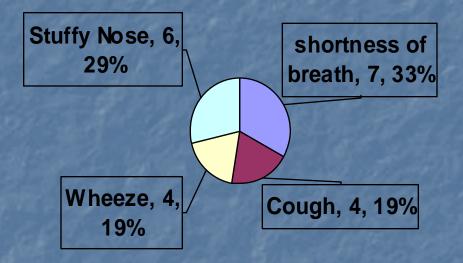
Heat Related Symptoms 2/48 RESPONDED <u>YES</u> but 12/42 <u>NO</u> Responders Reported 15 Symptoms



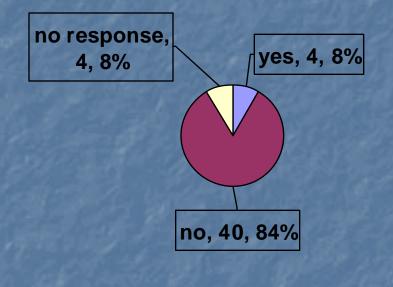
#### Respiratory Symptoms 45/48 reponding



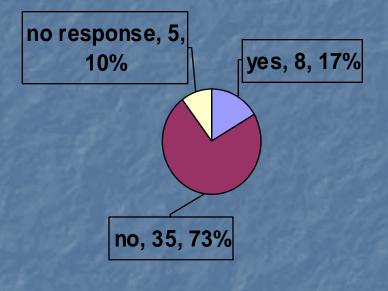
#### Respiratory Symptoms 13/48 (27%) listing 21 symptoms



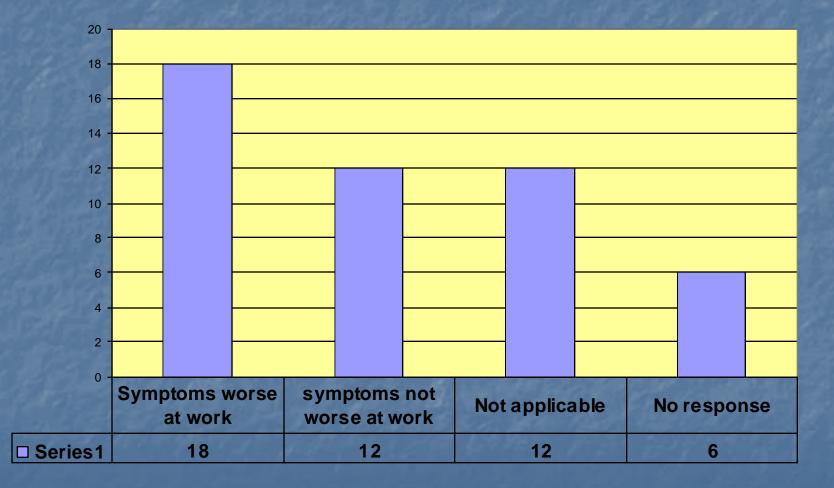
#### Applied Pesticides 4/48 (8%) responded yes, 3/4 within previous 2 years



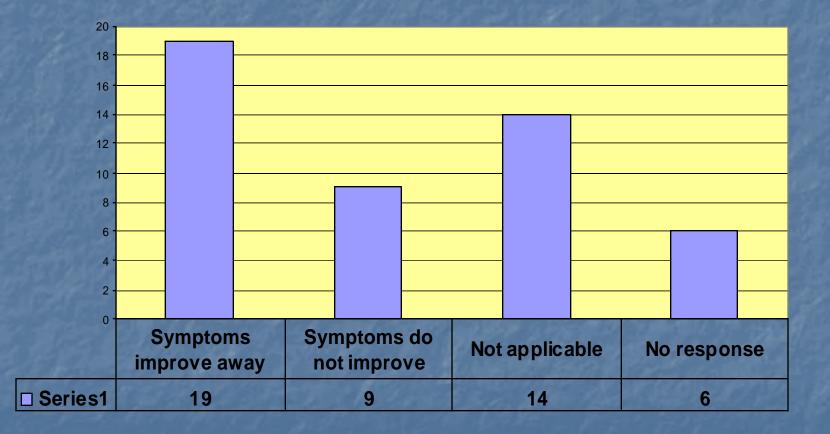
#### Present When Pesticide Applied 8/48 (17%) responded yes



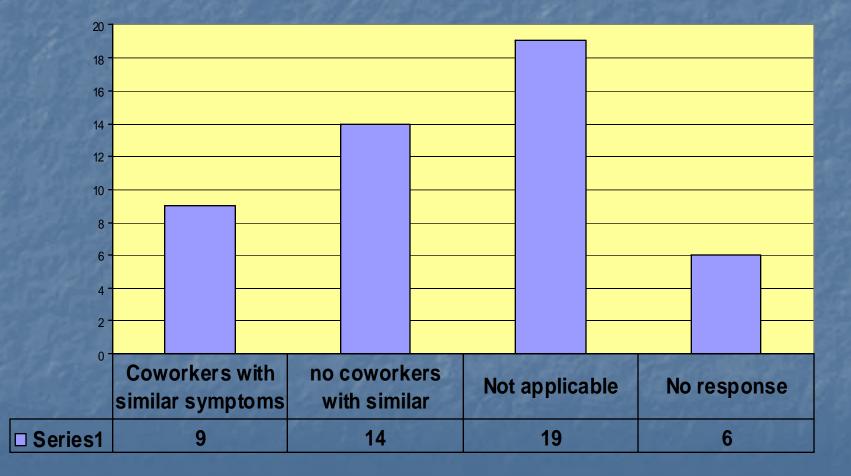
## Temporality of Symptoms 18/48 (38%) responded yes



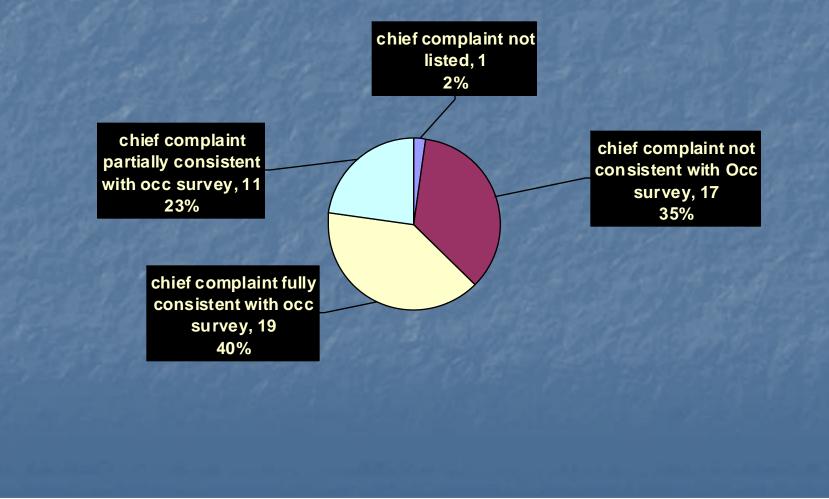
#### Symptoms Improve Away from Work 19/48 (40%) responded yes



#### Coworkers with Similar Symptoms 9/48 (19%) responded yes

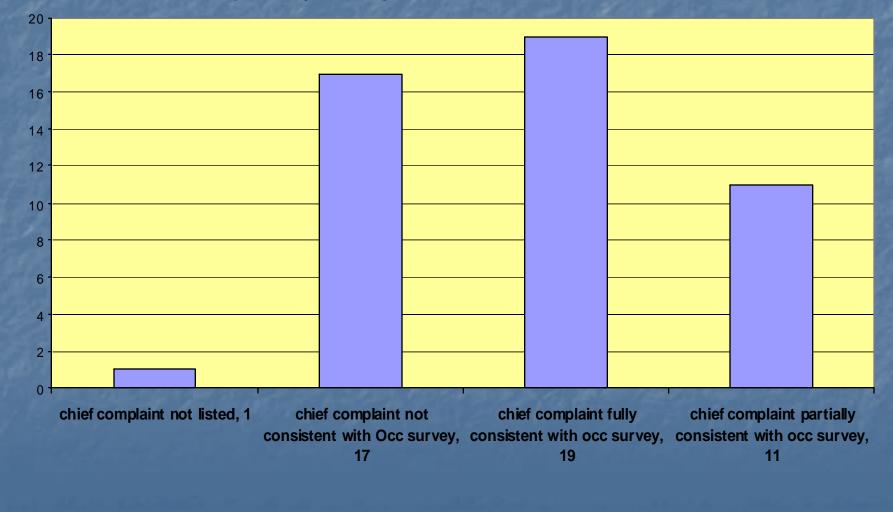


Response Consistency between Chief complaint and Occupational Health Survey 2006 Season (n=48)



### Consistency of Chief Complaint and Questionnaire Responses,

partially or fully consistent 63% of the time



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#### **Barriers to Making Work Related Dx**

- Occupational illness in MFW is not hard to recognize: bend over all day, back hurts
- Circumstances of MFWs in US can inspire a reluctance to make work related diagnosis
- Desire to protect MFW income and status
- Maintain access to other MFW needing health care avoid alienating farmer
- For some, primary care issues paramount
- Unfamiliarity with occupational health
- Uncertainty about eligibility for Workers Comp

# Short Term Outcomes of CNYOHCC Involvement

- Better understanding of all types of health issues experienced by MFW population
- Awareness of occupational health issues is improving among students, volunteer MDs, outreach workers, health department nurses
- NP and MD became familiar and accepted faces – part of team



- Pre-season training utilizing questionnaire data for volunteer physicians, outreach workers
- Integration of occupational medicine into the general health services provided at clinics
- Development of more effective measures to treat and prevent work related injuries and illnesses among migrant farm workers
- Improved awareness of occupational illnesses and injuries/prevention among MFW
- Further evaluation of the complete data set should be undertaken to compare histories and final diagnoses to questionnaire responses

### **Nicest MFW Housing**



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### Questions?

