

# Healthcare Worker Ability and Willingness to Work During Pandemic Flu

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**Risk perception and attitudes**  
*(intended audience: managers)*

# Acknowledgements

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# Lessons Learned from SARS

- Transmission of SARS to healthcare workers was associated with:
  - lack of infection control precautions
  - inconsistent use of PPE
  - having <2 hours of infection control training
  - procedures → aerosolized particles without required use of fit-tested N-95 equivalent
  - job as non-medical support staff

Lau JTF et al. *Emerging Infectious Diseases*. August 2004; 10 (8): 1399-1404.

Seto WH et al. *The Lancet*. May 3, 2003; 361: 1519-20.

# Readiness Training Is Essential

- Infection control training
  - Facts
  - Procedures
  - Protocols
  - Practice
- Essential to include all healthcare personnel
  - Tailored to occupational group
  - Knowledge of preventive measures should not be assumed in any group

# Nurses: Conflicted

- Highest score in knowledge of preventive measures
- Highest “avoidance of patient”
  - “I shouldn’t be caring for patients with SARS”
  - Higher in younger nurses than in older nurses
- Highest level of fear (~61%)
- Job change/resignation considered in 34%

Imai T, Takahashi K, Hoshuyama T et al. SARS risk perceptions in healthcare workers, Japan. *Emerging Infectious Diseases*. March, 2005; 11 (3): 404-10.

“The most frequently cited reason for employees’ unwillingness to report to duty during a disaster was fear and concern for the safety of their families and themselves.”

Qureshi K, Gershon RRM, Sherman MF et al. Health care workers’ ability and willingness to report to duty during catastrophic disasters. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*. 2005; 82 (3): 378-88.

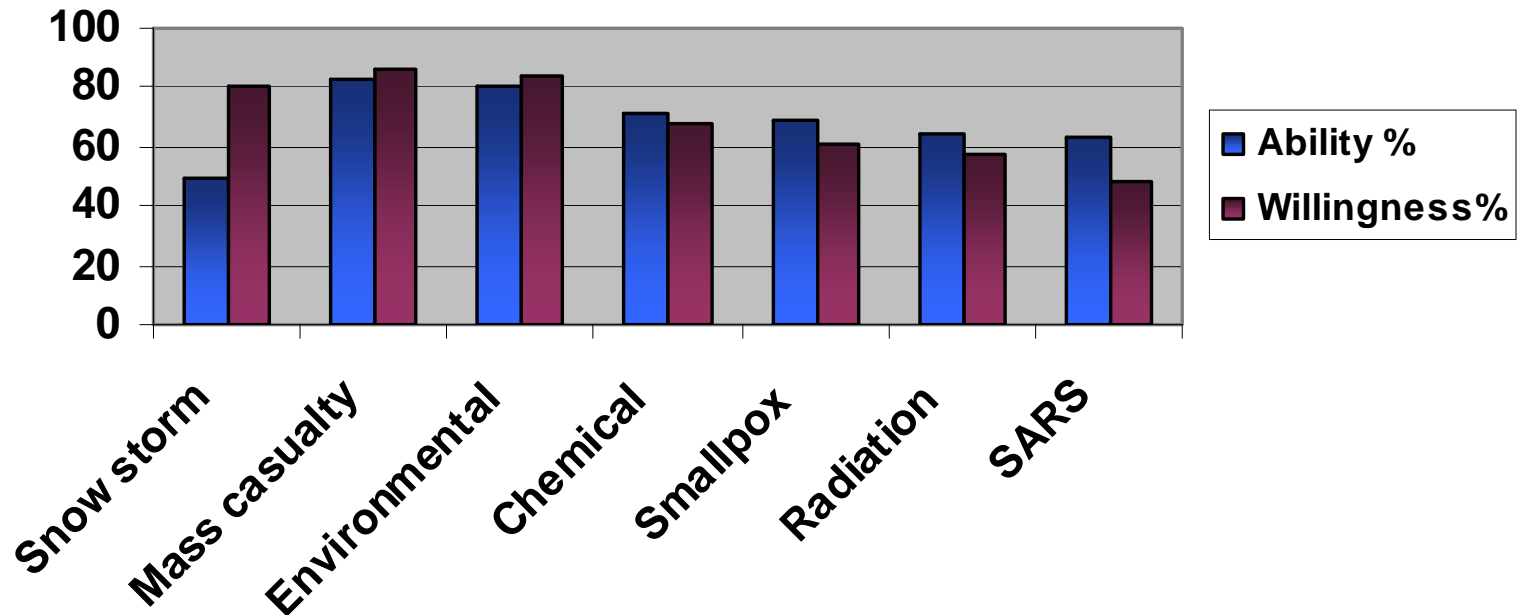
# Concern for Personal or Family Health

- Factors associated with **increased** level
  - Perception of greater risk of death from SARS
  - Living with children
  - Lifestyle affected by the SARS outbreak
  - Being treated differently because a HCW
- Factors associated with **decreased** level
  - Management or supervisory position
  - Belief in precautionary measures of workplace
  - Age 50 years or older

Nickell LA, Crighton EJ, Tracy C.S. et al. Psychosocial effects of SARS on hospital staff: survey of a large tertiary care institution. *Canadian Medical Association Journal*. 2004; 170 (5): 793-98.

# Ability versus Willingness

**Ability vs. willingness to report to work**  
(n=6428)

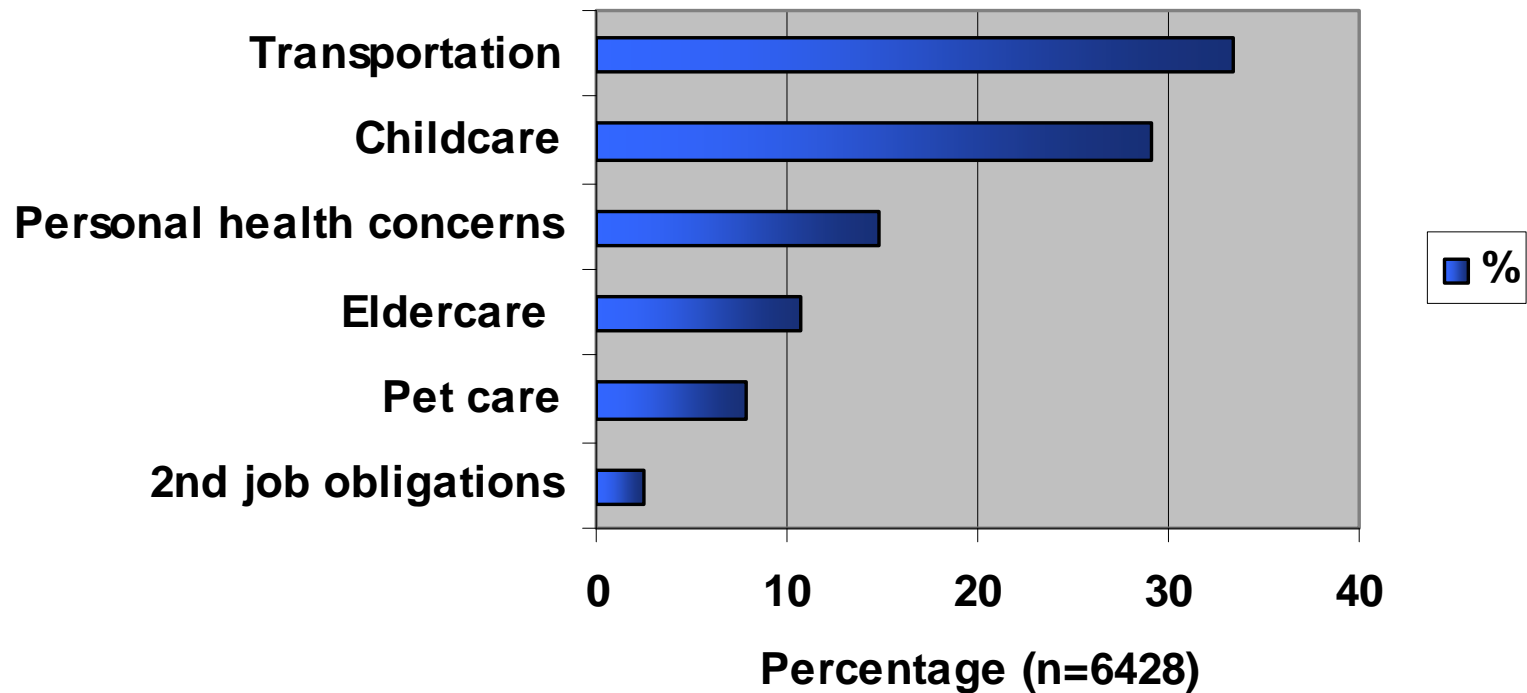


Qureshi K, Gershon RRM, Sherman MF et al.

November 2006

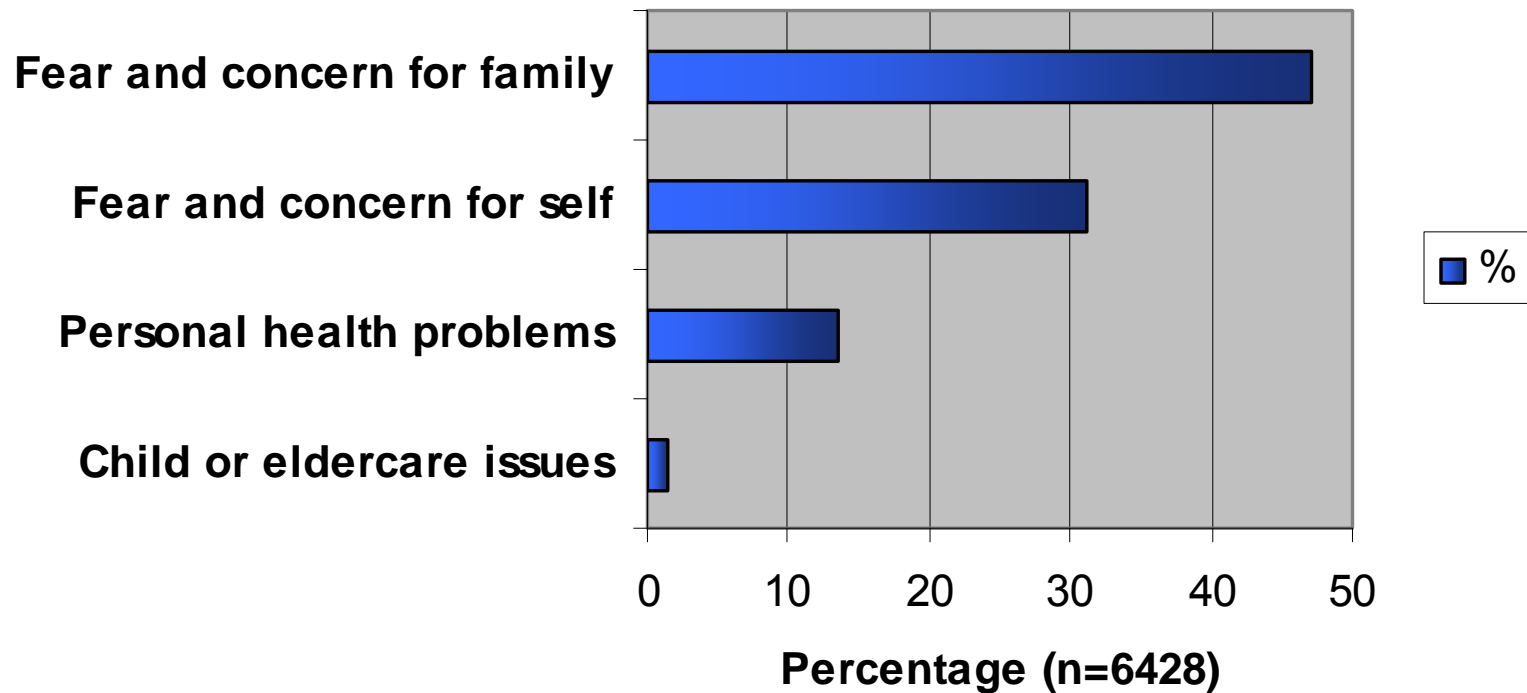
# Barriers to Ability

## Barriers to ability to report to work



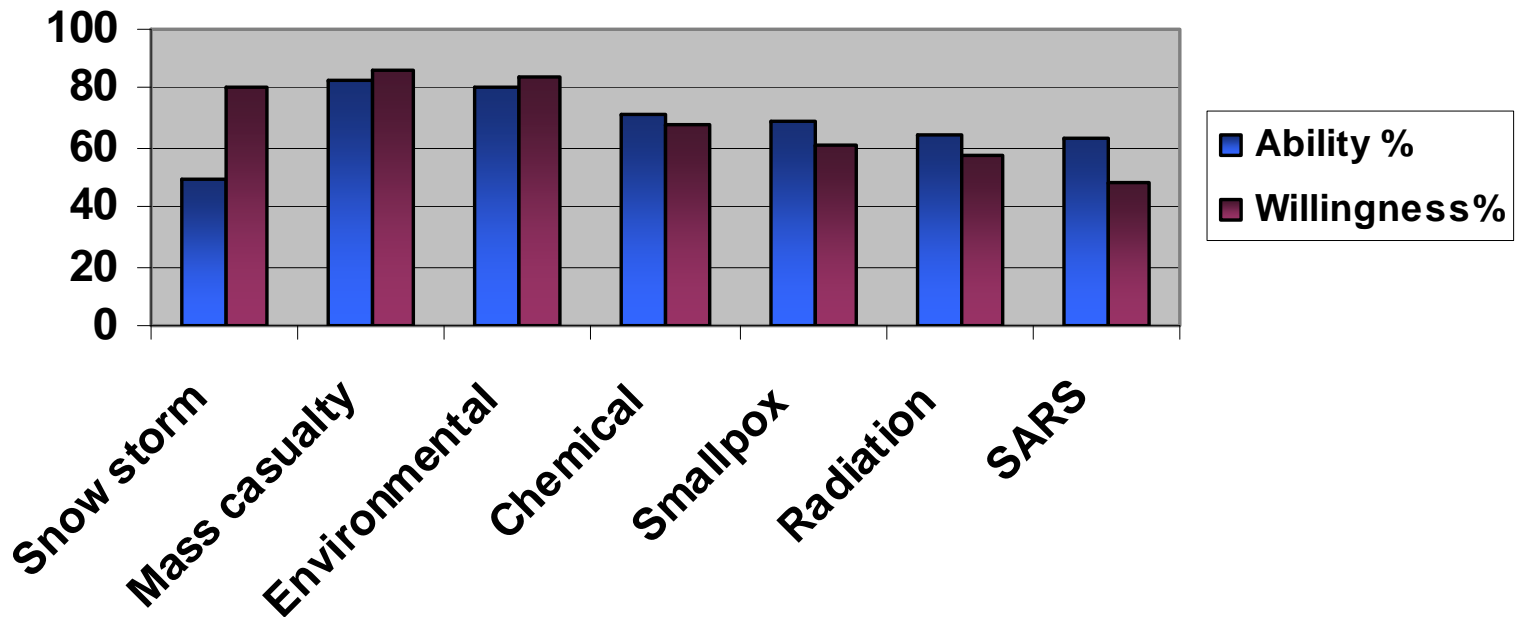
# Barriers to Willingness

## Barriers to willingness to report to work

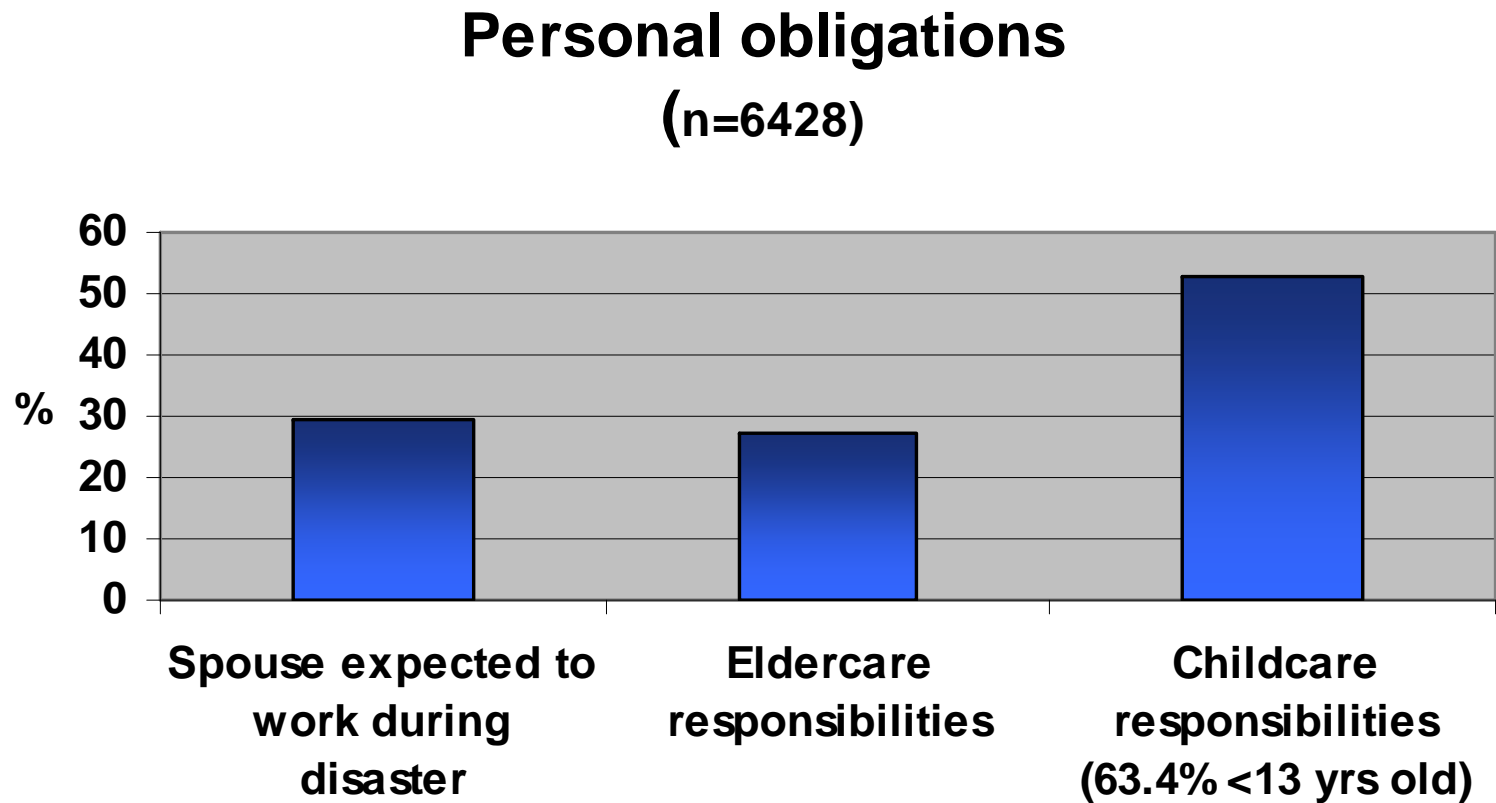


# Associated Degree of Concern

**Ability vs. willingness to report to work**  
(n=6428)



# Personal Obligations



# Availability for Extra Shifts



“Readiness training for public health workers should also address their risk perceptions toward emergencies, not just the factual or procedural elements of their response roles.”

Barnett DJ, Balicer RD, Blodgett DW et al. Applying risk perception theory to public health workforce preparedness training. *Journal of Public Health Management Practice*. 2005; November (Suppl): S33-S37

# Risk Perception

- Interplay between affective and analytic processes
  - emotion vs. logic
- Constraints: resource-related
  - e.g., transportation, childcare
- Risk perception barriers: concerns about events/consequences linked to feelings

Barnett DJ, Balicer RD, Blodgett DW et al.

# Risk Perception Barriers

- Safety of family members and self
- Safety of working environment
- Insufficient emphasis on stress management techniques
- Unclear expectations of role-specific emergency response requirements
  - ↓ sense of control; ↑ sense of vulnerability
- Inadequate emphasis on critical value of each employee to agency response

Barnett DJ, Balicer RD, Blodgett DW et al.

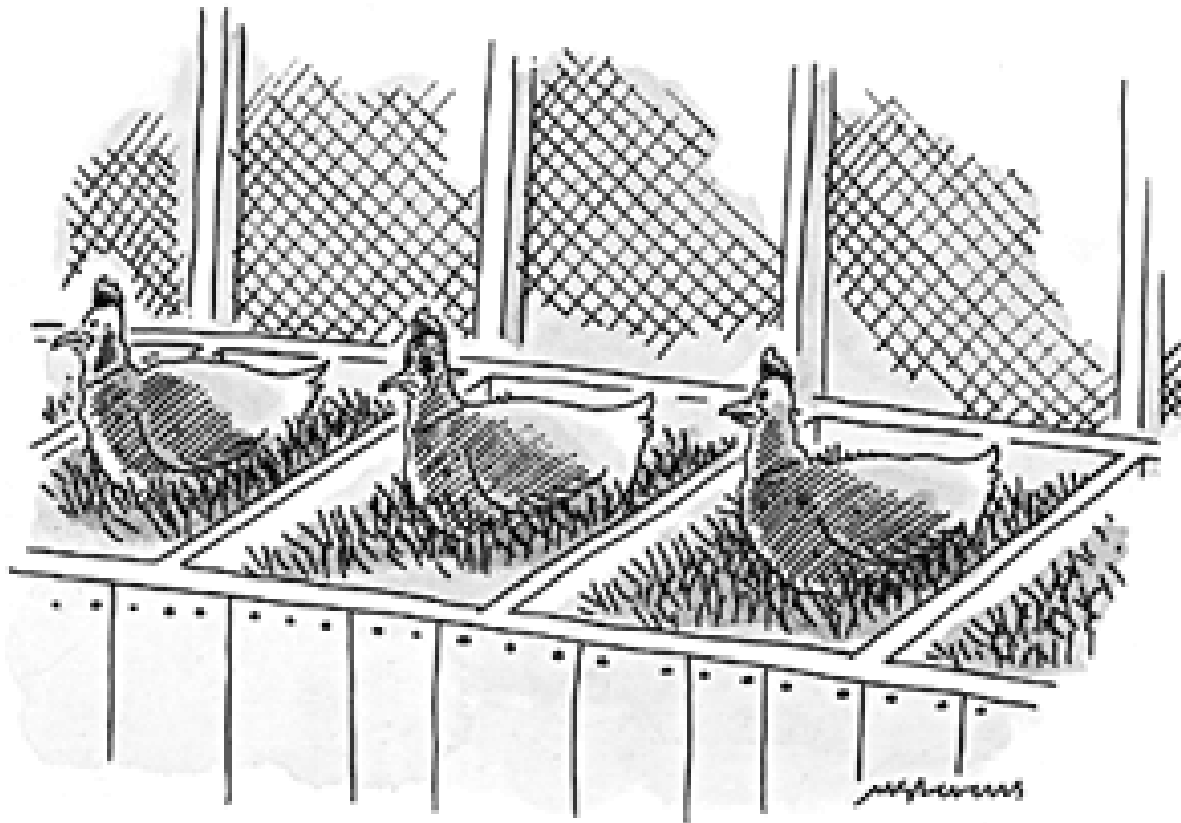
“...the single most influential construct associated with willingness to report to duty – the perception of the importance of one’s role in the agency’s overall response.”

Balicer RD, Omer SB, Barnett DJ, Everly, Jr., GS. Local public health workers’ perceptions toward responding to an influenza pandemic. *BMC Public Health*.

2006; 6: 99. Available at: <http://www.biomedcentral.com/1471-2458/6/99> .

# Confronting Fear

- Fear is associated with unwillingness to report to duty during a disaster
  - Personal safety
  - Safety of loved ones
- Effective methods to allay fears include:
  - Education of healthcare workers
  - Provision of appropriate PPE
  - Assurance of environmental controls



*“Don’t worry about it. It’s probably just a head cold.”*

# Training Can Increase Willingness

- Competency-based emergency preparedness training for nurses
  - 40-item immediate pre- and post-test
  - Pretest: **96%** (n=48) **felt responsibility** for reporting to work in emergencies
  - 70%** (n=35) **intended** to report
  - Post-test: 12% increase in intention to report

Qureshi KA, Merrill JA, Gershon RRM, Calero-Breckheimer A. Emergency preparedness training for public health nurses: a pilot study. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*. 2002; 79 (3): 413-16.

# Concept of “Institutional Measures”

- Institutional measures (facility plan)
  - Clear policies and protocols
  - Specialist available for problems with PPE
  - Adequate training in use of masks
  - Protective measures at work are effective
- Positive predictor of acceptance of risk
- Negative predictor of “avoidance of patient”

# Readiness Training Must Address Risk Perception

- Consider a survey assessment
  - Opportunity to address barriers amenable to change
  - To enhance ability and willingness to report
- Examples of creative solutions:
  - Transportation
    - Facilitate formation of carpools
    - Arrange emergency transport of essential personnel

# Confronting Resource Barriers

## – Personal health

- Encourage emergency supply of meds at work
- Keep list of meds for chronic illness in employee's health file

## – Child and/or elder care

- Create emergency care centers on- or off-site
- Facilitate formation of co-ops among employees
- Make shift accommodations for employees with partners who also must report for work

## – Pets

- Co-ops; enlist veterinarians or Humane Society

# Confronting Perception Barriers

- Provide family preparedness training
- Advise where to obtain info & updates
- Provide genuine assurances that personal safety measures are available
- Communicate clear expectations re: the employee's role in a response
- Emphasize relevance of employee's role
- Coach on “caring for the caregiver”

# Clear Expectations: Protocols

- Donning and removing PPE
- Safe handling of contaminated PPE
- Managing unprotected staff areas
- Monitoring staff health
- Quarantine of staff
- Transport of patients
- High-risk use of respiratory equipment
- Visiting policies
- Cleaning/disinfecting equipment & environment
- *(Other)*

# Clear Expectations: Policies

- Absenteeism policies
- Leave policies
- Compensation policies
- Employment policies
- Employee support services

*Healthcare workers need this  
information before a pandemic*

# Absenteeism Policies

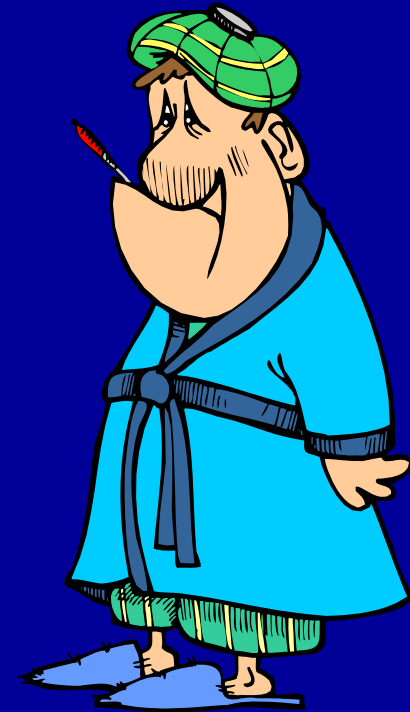
- Not showing up/not calling in
- Refusing to work
- Not completing shift (unrelated to illness)
- Coming to work late
- Knowingly coming to work ill



*Concern about lost wages is the largest deterrent to self-isolation or quarantine.*

# Leave Policies

- Personal illness
- Family member illness
- School closure
- Extended medical leave
- Bereavement leave
- Closure of your facility
- Hospital-imposed quarantine
- Social distancing as non-essential personnel



# Compensation Policies



- Compensation tied to absenteeism and leave policies
- Overtime pay
- Extended shift lengths
- *(Other)*

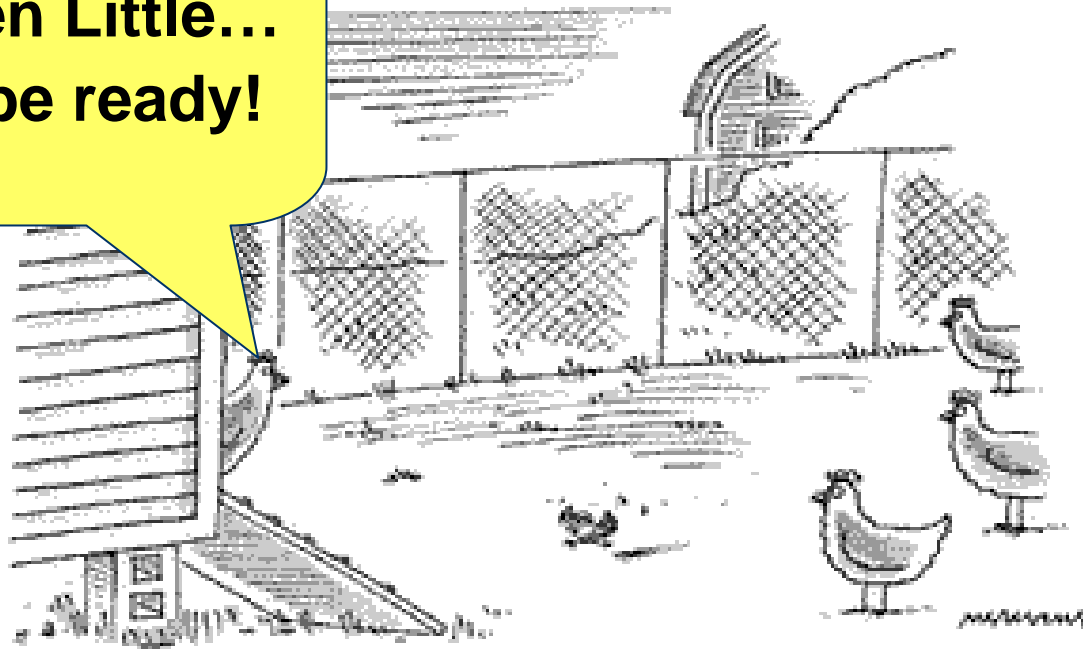
# Employment Policies

- Cancellation of vacations
- Approval of overtime
- Redeployment of staff
- Use of part-time or retired staff
- Contracting out
- Temporary staff
- Work assignments for healthcare workers at high risk for complication of flu

# Employee Services

- Mental health, stress counseling, social services for staff and family
  - *(Provide list of resources)*
- Educational materials in different languages, as needed
- Emergency Assistance Program (EAP)
- Plans *(if any)* to house essential staff
- *(Other)*

**Don't worry,  
Chicken Little...  
We'll be ready!**



***The flu is coming! The flu is coming!***