

Occupational Exposure to Infectious Disease: *Examining Current and Proposed Standards*



NYCOSH Forum New York City September 24, 2015









Mark Catlin Occupational Health and Safety Director Service Employees International Union (SEIU)



Healthcare Members of the Service Employees International Union

1,000,000 members in hospitals, long-term care and homecare

- 40,000 physicians
- 80,000 nurses
- 280,000 other hospital workers
- 200,000 long-term care workers
- 400,000 home care workers





Success of Bloodborne Pathogen Control in Healthcare

 Risk of healthcare workers hepatitis B infection has diminished by >90% since the introduction of standard precautions and a vaccine in late 1980s

 OSHA's 1991 BBP Standard role in changing and maintaining reduced risk – OSHA lookback review out soon.



SEIU and other unions led the state and national campaigns for OSHA's Bloodborne Pathogen Regulation (1991) and Safer Needle legislation (2001)



Occupational Health and Infectious Disease History, 1990s

First NIOSH Recommended Guidelines for Personal Respiratory Protection of Workers in Health-Care facilities Potentially Exposed to Tuberculosis (PAPRs and Supplied-air Respirators) NIOSH approves disposable particulate respirator (N95) use at Health-Care facilities for Tuberculosis

1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999

OSHA issues Bloodborne Pathogens standard

Healthcare Unions petitioned OSHA in 1986 for standard Coalition to Fight TB in the Workplace (14 Unions) petitions OSHA for standard.

OSHA initiates TB rulemaking in January 1994 OSHA issues proposed rule on Occupational Exposure to Tuberculosis for public comments and hearings

OSHA exempts TB from updated respiratory protection standard



Occupational Health and Infectious Disease History, 2000s



OSHA request for information on occupational exposure to infectious agents in healthcare settings



Occupational Health and Infectious Disease History, 2010s & Beyond

Whooping Cough outbreaks Measles outbreaks MERS concerns Contact diseases concerns (MRSA, VRE, others)

Ebola outbreak

- Enforceable worker protections (scope beyond healthcare)
- Site-specific detail plan
- Precautionary removal

2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

OSHA requests information on occupational exposure to infectious agents in healthcare settings

OSHA holds informal stakeholder meetings concerning occupational exposure to infectious diseases. OSHA convened Small Business Advocacy Review Panel (SBAR Panel) OSHA issues proposed infectious disease standard for public comment and hearings?



Association for Professionals in Infection Control and Epidemiology (APIC) Ebola Readiness Poll October 24, 2014 -

How prepared is your facility to receive a patient with the Ebola virus?

(From 1 not prepared to 5 well-prepared)

Response	Count	Percentage
1 (Not prepared)	53	5.11%
2	174	16.78%
3	413	39.83%
4	330	31.82%
5 (Well-prepared)	67	6.46%
Grand Total	1037	



 October 24 survey by Association for Professionals in Infection Control & Epidemiology (APIC) found:

... just 6 percent of infection control specialists said their hospitals are well-prepared to receive a patient with Ebola.

Nearly 20 percent of respondents said:
 ... they hadn't started training their staff on Ebola response.

http://www.apic.org/Resource_/TinyMceFileManager/Topicspecific/Ebola_Readiness_Poll_Results_FINAL.pdf

Comparison of Healthcare Worker Experience from Three Pandemic Flu Surveys

Survey		Multi-Union ¹	SEIU Nurse	SEIU Nurse Alliance/
			Alliance of CA ²	of CA /HCW ³
Group Surveyed		Local union	Registered	Healthcare
		leaders	nurses	workers
Location		14 states (inc CA)	California	California
Survey Size		104 Facilities	16 Facilities	129 Workers
Survey date		Sept 2008	May 2009	Oct 2009
Facility have PanFlu /H1N1	Yes	66%	0%	61%
infection control plan?	No	34%	81% 19%	39%
			DK	
Facility provide worker H&S	Yes	43%	6%	30%
training on PanFluH1N1?	No	57%	44% 50%	70%
			DK	
Will/are respirators readily	Yes	82%	53%	67%
available?	No	18%	20% 27%	33%
			DK	
Have you been properly fit	Yes	22%	55%	37%
tested to wear a respirator ?	No	78%	45%	63%

¹Healthcare Workers In Peril: A Union Survey Report, AFL-CIO, April 16, 2009

² California Nurses Report Inadequate Health and Safety Protection: A Report from the SEIU Nurse Alliance, May 18, 2009 ³ Protecting Healthcare Workers From H1N1: A Survey of SEIU HCW Experience,, October 2009



Differing Paradigms: Occupational Health /Infection Prevention

Occupational Health

Mission to protect workers

- Regulatory enforcement mechanism - OSHA
- Employers have primary legal responsibility for safe workplaces – identify and control hazards
- Workers have a right to safe and healthy workplace
 / Union role and rights

Infection Prevention

- Mission is to prevention infections
- Usually relies on guidelines
- Focus often on workers and worker behavior

 Often unfamiliar with worker and union rights



2012 Joint Commission Monograph

http://www.jointcommission.org/improving_Patient_Worker_Safety/

Improving Patient and Worker Safety

Opportunities for Synergy, Collaboration and Innovation



- Safe Patient Handling
- ♦ Slips, Trips and Falls
- Sharps Injuries
- Preventing Transmission of Infectious Disease
- Hazardous Substances
- Radiation
- Workplace Violence
- Staffing, fatigue and support for health-care induced emotional distress

The New York Times nytimes.com

October 25, 2006 OP-ED: Face Facts

Writing about preparing for Pandemic Influenza, the author suggested for healthcare workers:

"Wearing nylon hosiery over a surgical mask essentially eliminates the face leakage, making this combination a practical, albeit macabre, alternative."

The New York Times nytimes.com

October 25, 2006 OP-ED: Face Facts

"The less comfortable N95 respirators would probably result in lower compliance."

Transmission Confusion

Airborne transmission or not (droplets and droplet nuclei)?

Learning from the past

COMMENTARY: Protecting health workers from airborne MERS-CoV—learning from SARS

Dr Brosseau. and Dr Jones , School of Public Health, Division of Environmental and Occupational Health Sciences, at the University of Illinois at Chicago.

COMMENTARY: Protecting health workers from airborne MERS-CoV—learning from SARS

f Share

Filed Under: MERS-CoV: SARS Lisa M Brosseau, ScD, and Rachael Jones, PhD | May 19, 2014

Print & PDF

Editor's Note: Today's commentary was submitted to CIDRAP by the authors. Dr Brosseau is a Professor and Dr Jones an Assistant Professor in the School of Public Health, Division of Environmental and Occupational Health Sciences, at the University of Illinois at Chicago.

Although US and European officials recommend airborne precautions for the routine care of MERS-CoV (Middle East respiratory syndrome coronavirus)

> http://www.cidrap.umn.edu/newsperspective/2014/05/commentaryprotecting-health-workersrne-mers-cov-learning-sars

huasui / iStockphoto

New paradigm: Aerosol Transmission

COMMENTARY: Ebola virus transmission via contact and aerosol — a new paradigm

http://www.cidrap.umn.edu/news-perspective/2014/11/commentaryebola-virus-transmission-contact-and-aerosol-new-paradigmAerosol Transmission

Mask Confusion

Surgical/procedure mask or N95 respirator

IOM report April 2006

Medical masks are unfitted devices intended to reduce transfer of potentially infectious bodily fluids between individuals and are designed to be disposable.

In contrast, a respirator is a fitted device that protects the wearer against inhaling harmful contamination: that is, it protects the wearer from others who are or might be infected.

State Health Department Guidance for Protecting Healthcare Workers Caring for H1N1 Patients, May 11, 2009

Congressman Wicker's restriction to OSHA's budget from 2005 until 2008:

"[t]hat none of the funds appropriated under this paragraph shall be obligated or expended to administer or enforce the provisions of 29 CFR 1910.134(f)(2)...to the extent that such provisions require the annual fit testing (after the initial fit testing) of respirators for occupational exposure to tuberculosis."

APIC and AHA lobbied for this and "won"

SEIU, other unions and occupational health groups opposed it.

Experience of SEIU Members at Healthcare Facilities

Many facilities have trouble caring for a known or suspected Tb patient:

- Respirators not readily available
- Fit testing not current
- Lack of training few facilities do required annual respirator training
- Workers discouraged by managers from wearing N95s
- Poor isolation policies

Experience of SEIU Members at Healthcare Facilities

Hospital managers/ infection prevention staff:

- Say that surgical/procedure mask provide the same protection as N95 respirators. Often told that N95 are too expensive
- Say no airborne transmission of H1N1 (refer to their local/state health department with no mention of controversy)
- Have workers use their N95s for Tb, H1N1 with no clear limit on when to replace them.

Experience of SEIU Members at Healthcare Facilities

Hospital managers/ infection prevention staff:

- Before H1N1, told our union leaders that their pandemic flu plan was to run out of N95s and then use surgical masks
- Some hospitals and hospital systems focused on mandatory flu vaccination of healthcare workers while they used surgical masks for H1N1 (even in California with ATD standard)

Workers Don't Like to Wear PPE

It is hot

It makes work harder

It fails

Hierarchy of controls for occupational safety and health

	Substitution	Eliminate the source	> Vaccine	
T	Engineering Controls	Modifying the workplace	 Negative pressure rooms Respiratory etiquette 	Usually, a combination of control
+	Work Practices	How work is done	 Training Hand washing Scheduling 	methods are needed, if substitution
-	Personal Protective Equipment	What is worn	 > Gloves > Gown > Eye protection > Procedure masks > Respirators 	not 100% effective

Infectious Diseases

Tuberculosis ✤ SARS ✤ MRSA ✤ C. Diff Bird Flu ✤ H1N1 ✤ Pertussis ✤ MERS Ebola

OSHA Currently Working on a National Infectious Disease Standard to Protect Healthcare Workers

→ C 🔒	https://www.osha.gov/dsg/id/index.html	1 No.
Apps 🥥 Web	o Slice Gallery 🗋 download 🚦 Inbox 🛅 Research OurRecord 🚺 Suggested Sites 🧰 APHA 🧰 Imported From IE	🗋 Other bo
	UNITED STATES DEPARTMENT OF LABOR	Search No Z Index En Español Contact Us FAQs About OSHA
OSHA	🖸 SHARE 🖪 🛩 🖾) 💿 SHA QuickTakes N	Iewsletter RSS Feeds RSS Feeds * Was this page helpful?
OSHA Occupa	C SHARE CYCL OSHA QuickTakes National Safety & Health Administration We Can Help	Iewsletter

Infectious Diseases Rulemaking

Introduction

The healthcare and social assistance sector is among the largest of the industrial sectors in the U.S. As of 2007, there were 16.5 million employees in this sector, 11 million of those are classified as healthcare workers (HCWs). HCWs work in a great variety of settings. A large proportion of these HCWs provide direct patient care (i.e., they provide healthcare services with face-to-face or hands-on contact with patients) and have occupational exposure to infectious agents during the performance of their duties. Depending on the workplace setting and the job tasks, workers performing ancillary tasks (e.g., laboratorians, medical examiners, medical waste handlers) also have occupational exposure to infectious agents.

Employees in health care and other high-risk environments face long-standing infectious disease hazards such as TB, influenza and MRSA, as well as new and emerging infectious disease threats. OSHA is considering the need for a standard to ensure that

https://www.osha.gov/dsg/id/index.html

Small Organizations Interested in Participating in SBREFA

Small organizations include small businesses as defined by SBA, not-for-profit organizations that are not dominant in their field, and local government organizations serving a population of less than 50,000.

- If you have questions contact:
 - At OSHA, contact Lajuane Paige at:
 - Paige.Lajuane@dol.gov or by phone at: (202) 693

25

Federal OSHA Infectious Disease Rulemaking

- Aim to prevent healthcare worker exposure and disease
- Cover all infectious disease
 hazards beyond the current
 Bloodborne Pathogen Standard
- Existing CDC infection control guidance would become mandatory and enforceable by OSHA

Introduction

The healthcare and social assistance sector is among the largest of the industrial sectors in the U.S. As of 2007, there were 16.5 million employees in this sector, 11 million of those are classified as healthcare workers (HCWS). HCWs work in a great variety of settings. A large proportion of these HCWs provide direct patient care (i.e., they provide healthcare services with face-ch-face or hands-on contact with patients) and have occupational exposure to infectious agents during the performance of their duties. Depending on the workplace setting and the job tasks, workers performing ancillary tasks (e.g., laboratorians, medical examiners, medical waste handlers) also have occupational exposure to infectious agents.

Employees in health care and other high-risk environments face long-standing infectious disease hazards such as TB, influenza and MRSA, as well as new and emerging infectious disease threats. OSHA is considering the need for a standard to ensure that employers establish a comprehensive infection control program and control measures to protect employees establish as obmergensive form exposures to infectious agents that can cause significant disease. Although the <u>Bloodborne Pathogens standard</u> has been very effective in protecting workers, it does not address infectious diseases transmitted by other routes (e.g., contact, droplet and airborne). In addition, OSHA believes that a standard is needed because transmission-based infection control guidelines, though readily available, are not consistently followed.

Scope:

Occupational exposure to infectious agents during provision of direct patient care. Doctors, nurses, aides, emergency responders, etc.

Other covered tasks with occupational exposure to infectious agents.

- On-site (e.g., housekeeping)
- Off-site (e.g., laundering healthcare linens
- Laboratory procedures

"Other covered tasks means job duties that do not involve direct patient care but still involve occupational exposure to patients, contaminated materials originating from settings where direct patient care is provided, or human remains. Other covered tasks also include handling contaminated materials and human remains in clinical, biomedical research, and production laboratory settings."

Section 3: Worker Infection Control Plan (WICP)

WICP is a written plan that contains at least the following elements:

- Designated plan administrator responsible for implementation and oversight of the WICP;
- Name of person(s) responsible for daily management of the WICP;
- Exposure determination;
- Standard operating procedures (SOPs) for infection control measures.
- Make a copy of the WICP accessible to workers and unions.
- Review/update the WICP at least annually, and when changes occur;
- During development and reviews of the WICP solicit input from nonmanagerial workers with occupational exposure;
- Ensure that contractors, vendors, and licensed independent practitioners with privileges adhere to infection control practices consistent with, or more protective than, the host employer's WICP

Section 4: Standard Operating Procedures Development & Implementation

- Communicating hazard evaluation results to responsible person(s);
- Hand hygiene;
- Restricting some activities (e.g., eating and drinking) where occupational exposure could occur;
- Using engineering, administrative and work practice controls, and personal protective equipment (PPE); Ensure controls are used in accordance with recognized and generally accepted good infection control practices;
- Note: OSHA would permit the required hierarchy of controls to be modified in accordance with recognized and generally accepted good infection control practices.
- Decontamination;
- Occupational health services, including vaccinations, post-exposure treatment, and medical removal protection;
- Investigating exposure incidents;
- Using appropriate signage and labels

Additional SOPs for direct patient care settings:

- Patient scheduling and intake/admittance;
- Standard precautions; Contact precautions; Droplet precautions; Airborne precautions,
- use of temporary isolation and inter-facility transfer of infectious individuals; If the employer has an AIIR, ensuring proper AIIR operation;
- Respiratory protection.
- Patient transport;
- Medical surge procedures;
- Any other worker protection precautions necessary to address specific circumstances.

Additional SOPs for other covered tasks:

- Handling and intake of contaminated materials;
- Implementing control measures to prevent or minimize transmission of infectious agents;
- In diagnostic, research, and production facilities, implementing standard microbiological practices and any special practices for handling infectious agents Measures necessary to address uncontrolled releases of infectious agents.
- Any other worker protection precautions necessary to address specific circumstances.

Additional SOPs in laboratories:

 In laboratories, standard microbiological practices and any special practices based upon the current recommendations for handling infectious agent(s) of a specific biosafety level to prevent or minimize occupational exposure.

(1) Engineering controls, such as biosafety cabinets, laboratory hoods, and other laboratory design and containment measures must be appropriately constructed, operated, and maintained (e.g., proper air flow, exhaust air filtration, double access doors, special design requirements for Biosafety Level 3 and 4 facilities); and

(2) Measures necessary to address uncontrolled releases of infectious agents. These procedures shall include effective means of reporting such incidents to the proper Federal, State, and local authorities, as appropriate;

 In developing and updating SOPs for other covered tasks, employers shall consider applicable regulations and current guidelines issued by CDC and/or NIH

Section 5: Medical surveillance and vaccination

- Make available medical screening, surveillance and vaccinations to workers with occupational exposure, and post-exposure evaluation and follow-up for each employee who has had an exposure incident.
- Ensure all medical evaluations and procedures are performed by or under supervision of a physician or other licensed healthcare professional
- Make available all appropriate vaccinations consistent with recognized and generally accepted good infection control practices;
- Ensure worker signs declination statement if vaccination(s) declined, and make vaccination available later if worker decides to accept it;
- Establish and maintain exposure incident records
- Medical removal protection. pay employee's total normal earnings and maintain employee's seniority and other rights and benefits (except generally in cases of the common cold or influenza).
- Maintain medical records for worker with occupational exposure.
- Ensure the confidentiality of employee medical records.

Section 6: Training

- Prior to initial assignment; at least annually thereafter and whenever deemed necessary to address deficiencies or changes.
- Training program: conducted by knowledgeable person; material appropriate for worker's education level and language; opportunity for interactive worker questions.
- Initial training program: contains a copy of the standard; explanation of its contents; and appropriate explanation of WICP, SOPs, control measures, PPE, and vaccines.

Section 7: Recordkeeping

- Maintain medical records for duration of employment + 30 years;
- Maintain exposure incident records for duration of employment + 30 years;
- Maintain WICP review records for 3 years.
- Make exposure incident records, the WICP, and WICP review records available to workers or their representatives;
- Make medical records available to the worker or anyone having written consent of the worker;
- Make all records available to the Assistant Secretary upon request.

Section 8: Cost and Availability

- Costs incurred by employee(s) would be compensable and that any activities that would be required of employees be conducted at a reasonable time and place.
- Implement the provisions of the regulatory framework at no cost to the employee; any time spent by employees to comply is considered compensable time.
- Make medical evaluations and procedures and training available at reasonable times and places.

Appendix A. Common Infectious Diseases/Conditions/Agents and Their Modes of Transmission in Healthcare Settings (non-mandatory)

Appendix B. Vaccine Declination (mandatory)

The OSHA Rulemaking Process:

1. Pre-rulemaking Activities (12 - 36 months)

Request for Information and Stakeholder Meetings

2. Developing the Proposed Rule (12 – 36 months)

Developing preliminary analysis and Small Business Review

- 3. Publish the Proposed Rule (2 3 months)
- 4. Develop and Analyze the Public Record (6 24 months)

Written Comments and Hearing Testimony, Post-hearing comments, Post-hearing briefs

- 5. Develop the Final Rule (18 36 months)
- 6. Publish the Final Rule (2 3 months)
- Post-Promulgation Activities (4 12 months)
 Rollout, Guidance, Lawsuits

Glad to Continue this Discussion

Mark Catlin Occupational Health and Safety Director SEIU 1800 Massachusetts Avenue Washington, DC 20036 (202) 730-7290 mark.catlin@seiu.org