OSHA/INFECTION CONTROL ANNUAL UPDATE TRAINING - 2012
On December 13th the CDC published a call for comments on the “new disease” list to be covered under the notification law.

The list has now been published and is in effect.
THE LIST - PUBLISHED

- Bloodborne
  - HCV
  - HBV
  - HIV
  - Vaccinia virus
  - Cutaneous Anthrax
  - Rabies
  - Viral hemorrhagic fevers

- Airborne
  - Measles (Rubeola)
  - Chickenpox
  - Tuberculosis

Federal Register, 11/2/11
Droplet Transmitted

- N. Meningitis
- Diphtheria
- Mumps
- Pertussis
- Plague
- Rubella
- SARS-CoV
- Novel Influenza A viruses

Federal Register, 11/2/11
Travel history on patient assessment especially with respiratory symptoms
PREVENTION

- Place surgical mask on patient
- If can not, place surgical mask on yourself
  - Good handwashing
  - Use good airflow in vehicle

IOM meeting June 3, 2010/ CDC
“for emergent settings where there is a need for emergency intubation and open suctioning of airways – a combination of measures should be used and that feasibility should be taken into account where timeliness in performing a procedure can be critical to patient outcome.”

CDC, September 23, 2010
<table>
<thead>
<tr>
<th>Year</th>
<th>Disease</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIV Dx.</td>
<td>35,741</td>
<td>35,266</td>
</tr>
<tr>
<td></td>
<td>Hepatitis B</td>
<td>3,068</td>
<td>2,903</td>
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<tr>
<td></td>
<td>Hepatitis C</td>
<td>814</td>
<td>1,229</td>
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<tr>
<td></td>
<td>Syphilis</td>
<td>12,161</td>
<td>13,970</td>
</tr>
<tr>
<td></td>
<td>TB</td>
<td>11,371</td>
<td>10,528</td>
</tr>
</tbody>
</table>

• CDC, MMWR, August 2012
OTHER DISEASES - 2011

- Measles: 212
- Mumps: 370
- Rubella: 4
- Chickenpox: 12,041
- Pertussis (whooping cough): 18,719

CDC, MMWR, 8/16/12
- Hepatitis B vaccine
- Tdap booster x1
- MMR
- Chickenpox
- Flu vaccine

HICPAC and CDC have recommended that secure, preferably computerized, systems should be used to manage vaccination records for HCP so records can be retrieved easily as needed.

Each record should reflect immunity status for indicated vaccine-preventable diseases, as well as vaccinations administered during employment.
OBTAIN YOUR RECORDS

- From –
  - Your schools
    - High school
    - College
  - Training programs
  - Previous employer
MEASLES STATUS UNKNOWN

- No need to titer
- Just vaccinate

CDC, 11/25/12
Unable to document immunity

Just vaccinate

CDC, Nov. 25, 2011
HBV INFECTION RATE - US

- Universal vaccination
  - 2004 = 304 occupational infections

- Healthcare worker infection infrequent

CDC, September, 2009, Dec. 2011
HCV INCREASED

- Due to improper infection control practices
- Outbreaks
  - Ambulatory care clinics
  - Free dental clinic
  - Dialysis centers
AT RISK GROUP

- Military Veterans
  - 64% Vietnam vets
    - Transfusions
    - Medical Contact – medics, surgeons, nurses, helicopter crews
    - Tattoos

2008/2011 CDC
**HCV TESTING**

- **Not** recommended for **non-exposed** healthcare workers
NEW RAPID HCV TEST

- OraQuick ®HCV
  - FDA approved
  - Takes 20 mins.
  - No lab equipment required
  - Very accurate- 99.8%
  - Waiver granted 11/28/11**
  - Screens for multiple genotypes

FDA. June 25, 2010
A positive test for HCV by antibody testing does NOT mean current infection

Source patient to have viral load test for confirmation (HCV-RNA)

CDC, Hep C Symposium Dec., 2011
If you are exposed to a hepatitis C positive patient, you should have a blood test in **2 weeks**

- HCV-RNA (blood test)
  - Cost - $65.00

Am. Assoc. for the Study of Liver Disease, Practice Guidelines, 2009
HEPATITIS C – EARLY TREATMENT

- HCV-RNA positive begin treatment
  - 12 - 24 weeks –
NEW TREATMENT DRUG

Telaprevir

“cured 75% of patients with Genotype 1 HCV in 24 weeks of treatment”

FDA approval granted – April 2011

Boceprevir – Merck

- FDA approved 5/13/11
- Given as cocktail
INFECTED HEALTHCARE WORKERS-
OCCUPATIONAL INFECTION-HIV

1978 – December, 2009
- 57* documented cases
  - 0 in fire/EMS personnel
  - 49 were sharps related exposures

CDC, 2011(CDC), NIOSH
NO NEW CASES SINCE 2001
<table>
<thead>
<tr>
<th>States BROADEN HIV TESTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
</tr>
<tr>
<td>Illinois</td>
</tr>
<tr>
<td>Iowa</td>
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<tr>
<td>Louisiana</td>
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<td>Pennsylvania</td>
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<td>Rhode Island</td>
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<tr>
<td>Virginia</td>
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</tbody>
</table>
Aids “cocktail” drugs = 96% unable to transmit the disease

HIV/AIDS – living 50 years

Dr. Fauci, NIH, May 2011
RAPID HIV TESTS - POST EXPOSURE

Rapid HIV Test - currently available using blood

OraQuick
Reveal
Uni-Gold
Multispot
Clearview

CDC January 2007
REMINDER - TESTING ISSUES - POST EXPOSURE

- If source patient is negative with rapid testing = no further testing of health-care worker

- Use of rapid testing will prevent staff from being placed on toxic drugs for even a short period of time

• CDC, May 1998, CDC June 29, 2001, September 2005
SYphilis cases

Part of post exposure testing

- Post exposure follow up if source is HIV positive or Hepatitis C positive

- More testing under new Sexually transmitted disease (STD) guidelines
HIGHEST STATES FOR CASES - 2011

- California
- Texas
- New York City
- Florida

CDC, MMWR, Jan., 2012
Update plan to eliminate syphilis by 2015
TUBERCULOSIS
TUBERCULOSIS

- 2011 lowest case number since 1953
- 6.4% lower than rate in 2010
- Date to eliminate TB by 2010 – not met
- 2007 – screening applicants for entry to U.S.

CDC, MMWR, 2012;61:181-185
MULTI-DRUG RESISTANT TB

- MDR-TB – 84% in foreign-born persons
  - 109 cases in 2010

- XDR-TB – 2 cases reported in 2007
  - XDR-TB 1993 -2007 = 83 cases reported
    - 2008 = 0
    - 2009 = 0
    - 2011 = 4 cases in foreign-born persons

- Both are treatable!
DECREASE IN TB CASES

- National and global decrease due to -
- Direct Observed Therapy- DOT
Based on number of active-untreated TB patients *transported* in the past year

CDC, 2005
RISK ASSESSMENT - TB

- Low Risk
  - Transported less than 3 TB patients

- Medium Risk
  - Transported more than 3 TB patients

CDC TB Guidelines, 2005, pg. 134
2011 -
NEW VERSION TB BLOOD TEST

- QFT-T (In-tube)
  - FDA approved – October 2007
  - Less time consuming to perform
  - More accurate
  - Cost effective - $33.67
T-SPOT

- Second blood test available for TB testing
- FDA approved
- Cost – approximately $45.59
Must continue annual testing
- ATD Regulations 5199 Cal/OSHA
  - No science to support
  - Not in keeping with CDC
"TB is generally not spread by casual contact, but typically requires relatively prolonged contact in shared air space. The environment on long flights in commercial aircraft, particularly those of 8 or more hours in length, has been previously implicated in TB transmission, especially to passengers seated in close proximity."

“Direct patient care”

All healthcare workers
CDC FLU VACCINE PROGRAM

- Employers must offer
- Employers must pay
- Employees who decline - sign a declination form

CDC, February 24, 2006/- current NFPA 1581
DEPARTMENT FLU VACCINE PARTICIPATION - 2011

Percent =
VACCINE FOR 2012/13

- A- California/7/2009 H1N1
- A- Victoria/361/2011
- B –Wisconsin/1/2010

CDC, Feb. 28, 2012
- Surgical mask and droplet precautions even if H1N1
- CDC reverted to this in 2010
- N95s for hospital use for aerosol-generating procedures

Personal communication, Dr. Uyeki, CDC July 19, 2011
VACCINE – EGG ALLERGY

- New
  - Several recent studies document safe receipt of influenza vaccine in persons with egg allergy
  - Some persons may receive influenza vaccine who have egg allergy (IM only)
New antibody identified inhibits many strains of influenza

- CH65
Restrict ill workers from the workplace

- use sick time
  - protect co-workers
  - protect patients
USA TODAY Snapshots®

When I see colleagues come into work sick, I’m ...

- Worried about being exposed to their illness: 34%
- Concerned about their welfare: 31%
- Impressed by their dedication: 8%
- No opinion, don’t know: 27%

Source: Accountemps survey of 437 workers

By Jae Yang and Alejandro Gonzalez, USA TODAY
MDRO’S – UPDATE
ISSUES
Infectious Disease Society of America (IDSA)

- Publishes MRSA guidelines for treatment of children and adults
GUIDELINES

- For skin & soft tissue infection –
  - Incision & drainage primary treatment
  - Antibiotics ONLY if severe or extensive disease
  - Education of patient on proper wound care and personal/environmental hygiene
MRSA EXPOSURE

- There is NO recommended follow up or treatment needed for exposure to MRSA

CDC, 2010
Is now monitoring the use and prescribing of antibiotics

CDC is also tracking electronically
Remember –

“Snort. Sniffle. Sneeze. No antibiotics, please!”
COMPLIANCE MONITORING

Check for compliance
Injection Safety Campaign

One Needle, One Syringe, Only One Time.

Safe Injection Practices Coalition
www.ONEandONLYecampaign.org

Some things should not be reused

Safe Injection Practices Coalition
www.ONEandONLYecampaign.org
INSULIN PENS

- Single patient use only

CDC, January 5, 2010
There is no disease that requires airing of a vehicle or putting a vehicle out of service

Focus high touch items!
- Non-critical items

Clean and go!
Cleaning with 1:100 bleach/water solution is adequate (1/4 cup bleach to one gallon water)

- **C-diff requires a chlorine based cleaner**
- **Norovirus requires a chlorine based cleaner**

- Good for 24 hours after being mixed
Soap and water for handwashing when caring for a patient with C-diff is more effective than using alcohol hand sanitizers.

PRE-MIXED CLEANING WIPES

- Only need a **1 min.** contact time
  - Very effective

HANDWASHING

![Image of person washing hands at a sink]

- Wash hands for at least 20 seconds with soap and water.
- Use hand sanitizer if soap and water are not available.
- Dry hands thoroughly with a clean towel.

Maintaining proper hand hygiene is crucial for preventing the spread of germs and keeping public spaces clean.
HANDWASHING -

- No antibacterials
  - Use hand sanitizers!

CDC
HAND HYGIENE AGENTS

- Soap & water – removes dirt from hands; associated with skin irritation after repeated use

- Alcohol based solutions: active against gram- and gram + bacteria, but not against spores

- Quaternary Ammonium Compounds: weak activity against gram- bacteria- not recommended in healthcare

- Triclosan: broad range of activity but relatively non – effective against gram- bacteria- not recommended in healthcare
OSHA MOST COMMON BBP CITATIONS - 2011

- Not having conducted exposure determination
- No annual plan update
- No initial or annual training offered to staff and at no cost to staff
- No effective engineering controls due to lack of training
- Not offering Hepatitis B vaccine and titers to non-protected staff
- Not maintaining a sharps injury log
- Not having declination forms
- No employee input to selection of needlesafe devices
- No documentation of evaluation or implementation of safer medical devices
- Failure to offer post exposure medical evaluation and follow up

OSHA Jan., 2012
REMINDER -

**Program Goal**

- Protect the patient
- Protect the care provider
- Accomplish in a cost effective manner whenever possible

- APIC.org