

# OSHA/INFECTION CONTROL ANNUAL UPDATE TRAINING - 2012



# **RYAN WHITE NOTIFICATION -UPDATE**

- On December 13<sup>th</sup> 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

# LIST PUBLISHED

## Droplet Transmitted

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

# PREVENTION

- 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



# CDC GUIDELINES – CURRENT – N95S

- “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

# DISEASE NUMBERS 2010-2011

## ■ 2010

- HIV Dx. – 35,741
- Hepatitis B – 3,068
- Hepatitis C – 814
- Syphilis – 12,161
- TB – 11,371

## ■ 2011

- HIV Dx. – 35,266
- HBV – 2,903
- HCV – 1,229
- Syphilis – 13,970
- TB – 10,528

•CDC, MMWR, August 2012

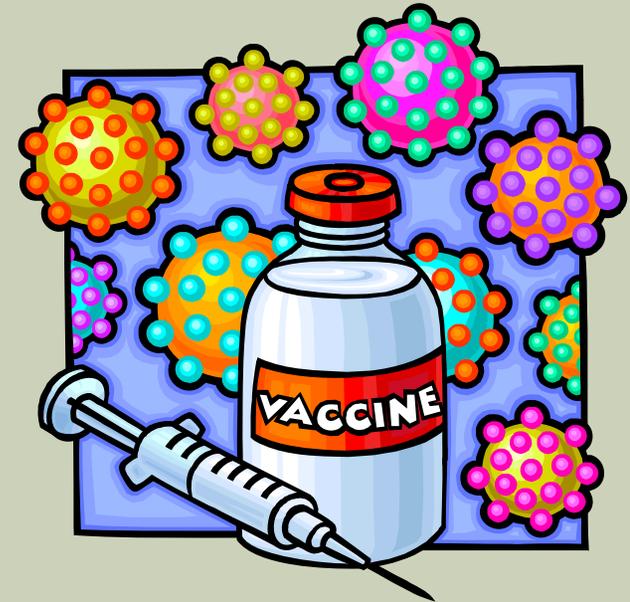
## OTHER DISEASES - 2011

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

CDC, MMWR, 8/16/12

# IMMUNIZATIONS/VACCINATIONS

- Hepatitis B vaccine
- Tdap booster x1
- MMR
- Chickenpox
- Flu vaccine



# CDC STATEMENT ON RECORDS

- 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

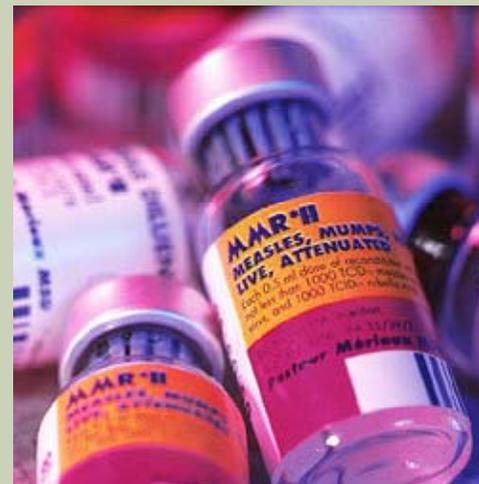
# OBTAIN YOUR RECORDS

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



# MEASLES STATUS UNKNOWN

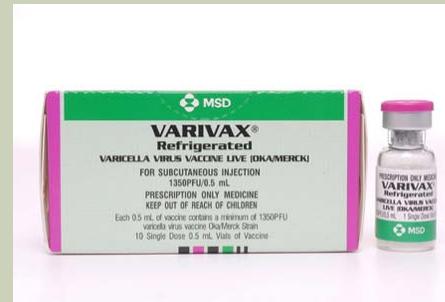
- No need to titer
- Just vaccinate



CDC, 11/25/12

# CHICKENPOX VACCINE

- 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



# 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

# REMEMBER

A positive test for HCV by antibody testing does NOT mean current infection

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

# REMINDER -

- 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

# HEPATITIS C – EARLY TREATMENT

- HCV-RNA positive begin treatment
  - 12 -24 weeks –



# NEW TREATMENT DRUG

## Telaprevir

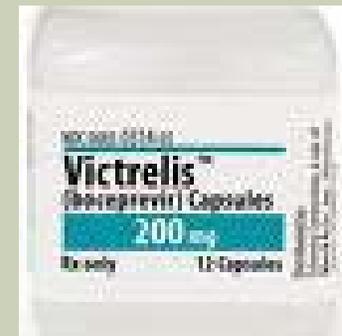
“cured 75% of patients with Genotype 1 HCV in 24 weeks of treatment”

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**

# STATES BROADEN HIV TESTING

- California
- Illinois
- Iowa
- Louisiana
- Maine
- Maryland
- New Hampshire
- New Mexico
- North Carolina
- North Dakota
- New York
- Pennsylvania
- Rhode Island
- Virginia

# UPDATE - 2011

- 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

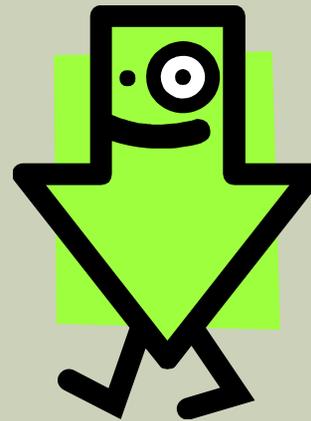
- If source patient is negative with rapid testing = no further testing of health-care worker
- Use of rapid testing will prevent staff from being placed on toxic drugs for even a short period of time

•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

# CDC - PLAN

- 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.

# 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



# RISK ASSESSMENT - CDC

- Based on number of active-untreated TB patients transported in the past year



# RISK ASSESSMENT - TB

## ■ Low Risk

- Transported less than 3 TB patients

## ■ Medium Risk

- Transported more than 3 TB patients



# DEPARTMENT TB RISK ASSESSMENT

- 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



# CALIFORNIA

- **Must continue annual testing**
  - **ATD Regulations 5199 Cal/OSHA**
    - **No science to support**
    - **Not in keeping with CDC**

# REMINDER -TRANSMISSION - PLANE

- “ 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”

Dr. Cetron, US Public Health, July,2007

# FLU VACCINE - ANNUAL

“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

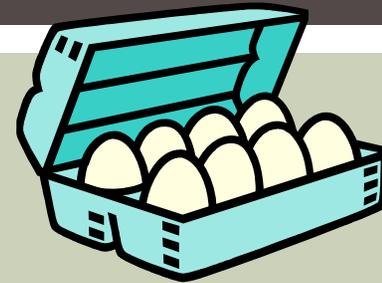
# MASKS & INFLUENZA

- 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)

# UNIVERSAL VACCINE?

- New antibody identified inhibits many strains of influenza
  - CH65



# WORK RESTRICTION

- Restrict ill workers from the workplace
  - use sick time
    - protect co-workers
    - protect patients





Stock market reporter Matt Krantz's column, Ask Matt, appears weekdays at [money.usatoday.com](http://money.usatoday.com)

## USA TODAY Snapshots®

### When I see colleagues come into work sick, I'm ...



Source: Accountemps survey of 437 workers

By Jae Yang and Alejandro Gonzalez, USA TODAY

# Ma

By Wenc  
USA TO

To sta  
major b  
homes  
zero ut

On E  
gin off  
produ  
home:  
\$160,  
Arizon  
Texas  
alread  
consu  
could  
"It'

# **MDRO'S – UPDATE ISSUES**

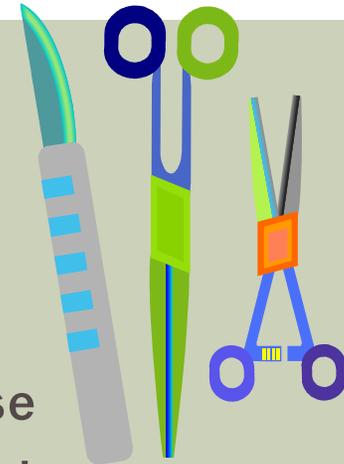
# MRSA – UPDATE

- 
- **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

# CENTER FOR MEDICARE & MEDICAID SERVICES (CMS)

- Is now monitoring the use and prescribing of antibiotics
- CDC is also tracking electronically

# CDC ON ANTIBIOTICS

- Remember –
  - “Snort. Sniffle. Sneeze. No antibiotics, please!”



# COMPLIANCE MONITORING



Check for  
compliance

# CDC – ONE & ONLY CAMPAIGN

**AHRQ**  
Advancing Excellence in Health Care

## Injection Safety Campaign

**1 ONE NEEDLE,  
ONE SYRINGE,  
ONLY ONE TIME.**

Safe Injection Practices Coalition  
[www.ONEandONLYcampaign.org](http://www.ONEandONLYcampaign.org)

**CDC**  
Centers for Disease Control and Prevention

**Some things should not be reused**

<b>NEEDLES</b> Do not reuse needles. Discard used needles in a sharps container.	<b>SYRINGES</b> Do not reuse syringes. Discard used syringes in a sharps container.	<b>GLASS VIALS</b> Do not reuse glass vials. Discard used glass vials in a sharps container.
<b>SPRAYS</b> Do not reuse sprays. Discard used sprays in a sharps container.	<b>SCALPES</b> Do not reuse scalpels. Discard used scalpels in a sharps container.	<b>SCISSORS</b> Do not reuse scissors. Discard used scissors in a sharps container.

Safe Injection Practices Coalition

**1 ONE AND ONLY**

# INSULIN PENS

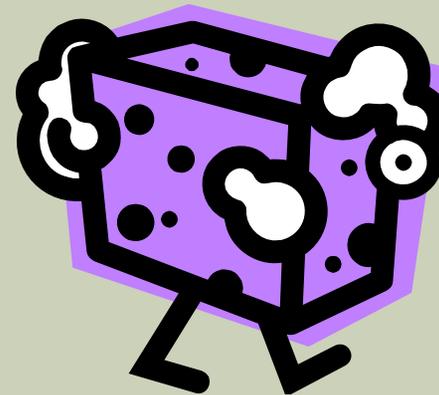
- Single patient use only



CDC, January 5, 2010

# CLEANING ISSUES

- 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!



# REMEMBER

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**



# NEW INFORMATION – C-DIFF

- Soap and water for handwashing when caring for a patient with C-diff is more effective than using alcohol hand sanitizers



Infect. Control Hosp. Epidemiol. 2010, June 31 (6):571-3

# PRE-MIXED CLEANING WIPES

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



CDC, 2010 COCA Conference/ CDC Guidelines for Disinfection and Sterilization, 2008

# HANDWASHING



# HANDWASHING -

- No antibacterials
  - Use hand sanitizers !



# 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

# QUESTIONS & ANSWERS