

Employee Health: The Program & Recommended Vaccinations

By
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Employee Health: The Program & Recommended Vaccinations

Objectives:

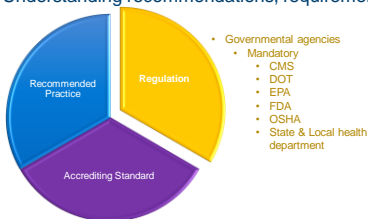
The learner will be able to:

- Describe components of an employee health program
- Discuss CDC recommended vaccinations for employees



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Understanding recommendations, requirements, and regulations



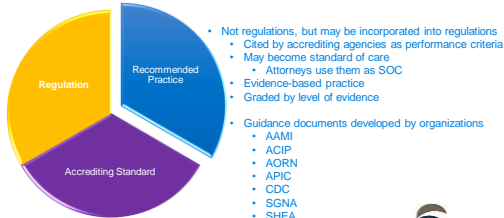
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Infection Prevention Program

CMS: all health care facilities required to have IP&C program

- Qualified professional with IC training
- Nationally recognized IC guidelines
- QAPI
- Plan to prevent, identify, manage
 - Goals:
 - Protect
 - Promote & Prevent
 - Uphold



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Employee Health

- | | | |
|---|---|---|
| <p>Onboarding</p> <ul style="list-style-type: none"> ✓ New hire <ul style="list-style-type: none"> • Medical clearance • Health assessment • Physical exam • Screening • Education | <p>Annual</p> <ul style="list-style-type: none"> ✓ All staff <ul style="list-style-type: none"> • Education • Immunization • Fit testing | <p>Post Exposure</p> <ul style="list-style-type: none"> ✓ All staff, contracted <ul style="list-style-type: none"> • PE assessment • PE testing • PEP • Treatment/ counseling • International travel |
|---|---|---|



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Pre-employment Health Assessment

- No federal law; state requirements
- Assess fit to perform essential functions of job
- Establish free from communicable disease
- Extent variable based on facility P&P



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Health History Components

- ✓ Immunization status
- ✓ Vaccine preventable disease screening
- ✓ Communicable disease history
- ✓ Immunodeficiency conditions
- ✓ Presence of infection
- ✓ TB skin testing



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Immunization & infectious disease history

- ✓ Knowledge of individual state laws
- ✓ History of disease
- ✓ Proof of immunity
- ✓ Proof of immunization

- ✓ Hepatitis A
- ✓ Hepatitis B
- ✓ Hepatitis C
- ✓ Measles
- ✓ Mumps
- ✓ Pertussis
- ✓ Rubella
- ✓ Varicella
- ✓ Tuberculosis



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Measles

- Acute respiratory illness
 - Fever
 - Cough
 - Conjunctivitis
 - Coryza
 - Rash
- Contagious
- Immunocompromised patients



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Measles

Vaccination:

- 2 doses of MMR:
- Adults born during/after 1957: without evidence of immunity

Post exposure prophylaxis (PEP):

- Those without evidence of immunity:
 - Give MMR within 72 hours of exposure or
 - Immunoglobulin (IG) within 6 days of exposure
 - Excuse from work from day 5 to day 21 regardless of PEP



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Tetanus, diphtheria and pertussis

- Tetanus
- Diphtheria
- Pertussis

Vaccination:

- Tdap x 1 dose age 11-12; or asap if never received
- Pregnant woman get dose during EVERY pregnancy
- Td booster every 10 years or after severe cut or burn



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Varicella

- Varicella-zoster virus
- Person to person; direct contact, inhalation of aerosols from vesicular fluid of skin lesions, or infected respiratory tract secretions
- Incubation 14-16 days after exposure to rash
- Contagious 1-2 days before rash onset until all lesions are crusted; approx. 4-7 days



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Varicella

Vaccination:

- Those without evidence of immunity:
 - 2 doses 4-8 weeks apart
 - Vaccine-related rash after vaccination should avoid contact with persons w/o evidence of immunity
- Immunity
 - Written documentation of vaccination
 - Laboratory evidence
 - Verification of history varicella disease or herpes zoster by a HCP
- Post exposure prophylaxis
 - Vaccinated: monitor days 8-21 for fever, skin lesions and symptoms
 - Symptoms appear: Furlough from work
 - Unvaccinated: furlough from work days 8-21 after exposure
 - PEP vaccination immediately



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TABLE 5. Advisory Committee on Immunization Practices work restrictions for health-care personnel* (HCP) exposed to or infected with certain vaccine-preventable diseases and conditions

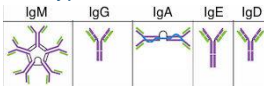
Disease/Condition	Work restriction	Duration
Pertussis		
Active	Exclude from duty	beginning of catarrhal stage through third week after onset of paroxysms or until 5 days after start of effective antimicrobial therapy
Postexposure		
Symptomatic personnel	Exclude from duty	5 days after start of effective antimicrobial therapy
Asymptomatic personnel – MCP likely to expose a patient at risk for severe pertussis [†]	No restriction from duty; on antimicrobial prophylactic therapy	
Asymptomatic personnel – other MCP	No restriction from duty; call relative postexposure prophylaxis or be quarantined for 21 days after pertussis exposure and treated at the onset of signs and symptoms of pertussis	

<https://www.cdc.gov/mmwr/preview/mmwrhtml/r6007a1.htm>



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Types of Antibodies



- IgM - Current disease: first at site of initial exposure
- IgG – First with subsequent exposure; memory
- IgA – Secreted on mucous membranes
- IgE – Allergic reactions
- IgD – Secreted in small amounts by surface of B-lymphocytes to signal other cells to become active



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Why does the type of antibody matter?

An employee with a temperature of 40-C, a rash, and no history of measles immunization has the following lab results on a blood specimen collected 4 days after onset of rash:

- IgM positive and IgG negative

Is this rash likely to be measles?



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Why does the type of antibody matter?

An employee with a temperature of 40-C, a rash, and no history of measles immunization has the following lab results on a blood specimen collected 4 days after onset of rash:

- IgM positive and IgG negative

Is this rash likely to be measles?

- IgM= positive if current disease
- IgG= positive if history of disease



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Why does the type of antibody matter?

HB_sAG = Hepatitis B surface antigen

- Positive in blood means the person is acutely ill or is a carrier
 - Source of infection

HB_sAB = Hepatitis B surface antibody

- Positive = immunity to Hepatitis B

HB_cAB = Hepatitis B core antibody

- Positive = past or current Hepatitis B infection
 - Can only be fully understood if have results of first two



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Tuberculosis Skin Test (TST)

BOX 1. Indications for two-step tuberculin skin tests (TSTs)

Situation	Recommended testing
No previous TST result	Two-step baseline TSTs
Previous negative TST result (documented or not)	Two-step baseline TSTs
>12 months before new employment	
Previous documented negative TST result <12 months before new employment	Single TST needed for baseline testing; this test will be the second-step
24 previous documented negative TSTs but most recent TST >12 months before new employment	Single TST (two-step testing is not necessary (results would have already boosted)
Previous documented positive TST result	No TST
Previous undocumented positive TST result*	Two-step baseline TST(s)
Previous BCG [†] vaccination	Two-step baseline TST(s)
Programs that use serial RAST [‡] including QFT [§] (or the previous version QFT)	See Supplement, Use of QFT-G [¶] for Diagnosing <i>M. tuberculosis</i> Infections in Health-Care Workers (HCWs)

* For newly hired health-care workers and other persons who will be tested on a routine basis (e.g., residents or staff of correctional or long-term-care facilities), a positive TST is not a contraindication to a subsequent TST, unless the test was associated with severe reactions, a granulomatous rash, which are uncommonly observed adverse events. If the person having TSTs is not documented, additional reporting of TSTs or other RAST, SOURCEV, Acute Foreign, Tuberculin, purified protein derivative (Tuberculin), Purified Protein Derivative (PPD), Diagnostic and Reference Center, Ontario, Canada; Acute Foreign, Tuberculin, Purified Protein Derivative (Tuberculin purified protein derivative, all-in-one, all-in-one (adjuvanted solution)). Diagnostic centers for intradermal injection only: Richardson, M.J. Public Health Pharmacists, 2003; Canfield, P., Public Health, All-in-one, immediate hypersensitivity reactions after use of tuberculin skin testing. Clin Infect Dis. 2002;34:1113-5.

† Bacille Calmette-Guérin

‡ Rapid tests for *Mycobacterium tuberculosis*

§ QuantiFERON-TB test

¶ QuantiFERON-TB Gold test



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141] For Missouri requirements, see Mo. Code Regs. Ann. tit. 19, § 20-20.092 (relating to all public employees), incorporating the requirements of 29 CFR § 1910.1030. 29 CFR § 1910.1030 requires employers to make available the hepatitis B vaccine and vaccine series to all employees who have occupational exposure. The employer shall ensure that the hepatitis B vaccine and vaccination series and follow-up is made available at no cost to the employee. Additional time, place and manner requirements apply to vaccine administration. The employer shall not make participation in a pre-screening program a prerequisite for receiving hepatitis B vaccination. If the employee initially declines vaccination but changes their mind while still covered under the standard, the employer shall make the hepatitis B vaccine available. If a routine booster dose(s) is recommended by the U.S. Public Health Service, the dose(s) shall be made available to the employee free of charge.



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- 243] For South Carolina requirements, see S.C. Code Regs. 61-108, relating to "freestanding or mobile technology," and S.C. Code Regs. 61-91, relating to "ambulatory surgical facilities." S.C. Code Regs. 61-108 and S.C. Code Regs. 61-91 provide that all direct care staff who perform tasks involving contact with blood, blood-contaminated body fluids, other body fluids, or sharps shall have the hepatitis B vaccination series unless the vaccine is contraindicated or an individual is offered the series and declines. Also, all direct care staff shall have an annual influenza vaccination unless contraindicated or offered and declined, and all direct care staff shall have been vaccinated or have evidence of immunity for measles, rubella, and varicella prior to patient contact unless contraindicated or offered and declined. This chart interprets S.C. Code Regs. 61-108 and S.C. Code Regs. 61-91 as "ensure" requirements because exemptions to administration requirements are provided for, indicating that immunization is mandatory except under specified circumstances.

[244] For South Carolina, for exemptions to the immunization administration requirements of S.C. Code Regs. 61-108, relating to "freestanding or mobile technology," and S.C. Code Regs. 61-91, relating to "ambulatory surgical facilities," see S.C. Code Regs. 61-108 and S.C. Code Regs. 61-91, providing that hepatitis B immunization, influenza immunization, and measles, rubella, and varicella immunization administration requirements are inapplicable where medically contraindicated.



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Influenza Vaccination

- Education: staff and LIP
 - Vaccine
 - Control and prevention measures
 - Transmission impact
 - Declination
 - Vaccination rates



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DOCUMENTATION

- EH records
 - Maintained separate from HR
 - Duration of employment + 30 years
 - Cannot be disclosed without written consent
- Training
 - Dates
 - Names/ qualifications of persons conducting training
 - Names/ titles of all persons attending
 - Summary
 - Maintained for 3 years from date training occurred



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DOCUMENTATION

- Sharps injury log
 - Percutaneous injuries from contaminated sharps
 - Protect confidentiality of injured employee
 - Type/ brand of device
 - Dept. / work area
 - Explanation of occurrence



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References:

- Centers for Disease Control and Prevention. (2005). Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings, 2005. Retrieved from <https://www.cdc.gov/mmwr/pdf/mmwr5117.pdf> accessed 5/4/2017
- Centers for Disease Control and Prevention. (1998). Guideline for Infection Control in Health Care Personnel, 1998. Retrieved from <http://www.cdc.gov/hicpac/pdf/infectcontrol98.pdf>. Accessed 5/2/2017
- Centers for Disease Control and Prevention. Mantoux Skin Test Facilitator Guide. Retrieved from <http://www.cdc.gov/tb/educators/mantoux/guide.htm>. Accessed 5/3/2017
- Centers for Disease Control and Prevention. Recommended Immunizations for Healthcare Workers. Retrieved from <http://www.cdc.gov/ncez/ncid/dhqp/hhc-ipc-hcw.htm>. Accessed 4/16/2017
- OSHA Blood Borne Pathogen: http://www.ecfr.gov/cgi-bin/text-idx?SID=9a3de1b8d16998cbb43abc5f6095c56&mc=true&node=se29.6.1910_110308.rgn:div8, accessed 5/1/2017
- OSHA FAQ: https://www.osha.gov/OSHA_FAQs.html. Accessed 5/4/2017
- State immunization laws: Retrieved from <http://www2a.cdc.gov/vaccines/statevaccsApp/default.asp>. Accessed 4/16/2017





Questions?

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