Bloodborne Pathogens

San Diego Unified School District Nursing & Wellness Program
August 2013
Why Another In-service??

Cal/OSHA mandates that employees with occupational exposure are informed at the time of initial assignment and – At Least Annually thereafter – about bloodborne Pathogens and what measures can be taken to prevent exposure.
SDUSD Exposure Control Plan

- Written by the school district to satisfy Cal/OSHA guidelines
- Available on the district website
  - Safety Office
  - Cal/OSHA Programs
- Purpose is to ensure employees are aware of potential hazards related to bloodborne pathogens and how to avoid them
Objectives

- Identify 2 bloodborne pathogens
- Identify how bloodborne pathogens are and are not transmitted
- Identify the number one method of controlling communicable disease
- Identify the best way to protect yourself from Hepatitis B
Definitions

**Bloodborne** = found in blood

**Pathogen** = disease producing microorganism

May be present in:

- Blood,
- Body fluids – semen, vaginal secretions, broken skin, saliva & vomitus (when visibly contaminated with blood)
Bloodborne Pathogens

May cause infection by entering your body via:

- Open cuts and nicks
- Skin abrasions
- Dermatitis – when skin is broken
- Mucous membranes – mouth, eyes, nose or vagina
**Hepatitis: Inflammation of the Liver**

<table>
<thead>
<tr>
<th>Common types of Hepatitis in the US</th>
<th>Mode of Transmission</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Fecal-Oral</td>
</tr>
<tr>
<td>B</td>
<td>Bloodborne</td>
</tr>
<tr>
<td>C</td>
<td>Bloodborne</td>
</tr>
<tr>
<td>D</td>
<td>Bloodborne</td>
</tr>
</tbody>
</table>
What Your Liver Does

- Stores vitamin & minerals
- Makes bile to digest food
- Detoxifies poisonous chemicals (alcohol, drugs)
- Stores energy
- Manufactures proteins
- Removes inhaled poisons
- Makes clotting factors
- Helps defend body from germs
Signs & Symptoms of Hepatitis

- Nausea and vomiting
- Fatigue
- Loss of appetite
- Abdominal pain
- Diarrhea
- Yellowing of eyes and skin
- Dark colored urine
- Light colored stools
Hepatitis A

- Not a bloodborne pathogen
- Contracted by eating food or drinking liquids contaminated with human feces
- Hand washing after using bathroom and diaper changing
- Rates have declined 92% since the vaccine became available in 1995
- Vaccine consists of two doses given 6 months apart
Hepatitis B

- Serious and sometimes fatal disease
- Virus can live on a dry surface for 7 days
- There are 500 million Hepatitis B virus particles in a single teaspoon of blood
- Contracting Hepatitis B increases chance of developing cirrhosis & liver cancer
- Vaccine is free to Category 1 and other SDUSD employees working with blood and/or body fluids on a regular basis
Hepatitis B

- Transmitted through blood or sexual contact
  - Can be spread via toothbrushes and razors
- 100 times more infectious than HIV
- Estimated one million people in the United States have chronic Hepatitis B infection, with 350 million people affected worldwide
**SDUSD Hepatitis B Vaccine Program**

- Hepatitis B vaccine offers your best chance to be protected from Hepatitis B. It consists of a series of 3 doses administered usually over a six-month period.

- Category I employees new to the district or who have not completed a consent/declination form for Hepatitis B vaccine should complete form (Instructions on form).

- Clinic schedule on Nursing website in the forms section and from your school nurse.

- Contact Eileen Griffiths 858.636.4380 or egriffiths@sandi.net for a clinic appointment.
District Category 1 Employees

- School Nurse & Health Office staff
- School Police
- Speech Pathologists
- Special Education staff
- School site secretaries/clerks who assist in the Health Office
- Infant Center (SEEC) and Home Health Staff
- Coaches, Athletic Program & Physical Education staff
- Custodial staff
- R.O.P. and Community Education Program staff
- Bus Transportation staff
Hepatitis C

- Primarily transmitted through blood-to-blood contact, though also associated with use of intranasal cocaine
- 4 times more prevalent than HIV
- 10 times more infectious than HIV
- 75% of people have no early symptoms
- Increases risk of cirrhosis, liver cancer & liver failure
- No vaccine available
- #1 reason for liver transplants in the US
HIV (Human Immunodeficiency Virus)

- Transmitted through blood-to-blood contact, unprotected sexual contact or mother to baby
- Requires direct exposure of infected blood to broken skin, mucous membranes or into the bloodstream
- No reported cases of transmission in the school setting
- No vaccine available
How HIV is **NOT** Transmitted

- Shaking hands
- Insect bites
- Eating utensils
- Toilets
- Furniture
- Hugging
- Sneezing/coughing
- Other casual contact that does not permit exchange of body fluids
**HIV Testing**

<table>
<thead>
<tr>
<th>Anonymous</th>
<th>Confidential</th>
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</thead>
<tbody>
<tr>
<td>No name, no record, no fee</td>
<td>Results go in your medical chart</td>
</tr>
<tr>
<td>County of San Diego: (619)296-2120 for more information</td>
<td>Through your private physician/provider</td>
</tr>
</tbody>
</table>
HIV Testing and the Law

- Results cannot be used to determine employability or insurability
- You cannot be forced to be tested
- It is a misdemeanor to disclose positive results without the WRITTEN consent of the individual. Consent available from school nurse (on Nursing eTeams)
Communication of HIV Status in the Schools

- Parent and student may choose not to disclose HIV status to anyone.
- If they tell the school nurse, but choose not to consent to disclosure to anyone else, no one else will know.
- If they authorize disclosure, authorized people will be notified on a need-to-know basis once the diagnosis has been confirmed.
Universal Precautions

- Precautions/guidelines appropriate for preventing the spread of ALL infectious disease
- Treat ALL blood and body fluids as infectious
Universal Precautions

- Hand washing is the number one method in controlling communicable disease.
- Use gloves and other protective equipment when there is risk of exposure to blood or body fluids, regardless of whether you think a person is infected or not.
- Contaminated trash is to be disposed of in a properly labeled, plastic lined container.
- All needles, lancets and syringes are to be disposed of in a "sharps" container.
Personal Protective Equipment (PPE) - Gloves

- Wear non-latex disposable gloves
- Wear gloves when rendering first aid and exposed to blood/body fluids other than your own
- Wear only once
- Replace if torn/punctured
- Dispose of in properly marked container
- Wash hands after removing
Personal Protective Equipment (PPE) – Eye Protection

Eye Protection shall be worn whenever splashes, spray or spatter may be generated; and eye, nose or mouth contamination can be reasonably anticipated.
Handwashing

- For 15-30 seconds with soap and running water
- Before eating, drinking, or cooking
- After toileting/diapering, contact with body fluids, or removing gloves
Disinfectant

- Household chlorine bleach – a solution of 10 parts water to one part bleach
- Mix ¼ cup bleach in bottle filled to 1 gallon
- Mix fresh daily
- Effective against HIV, Hepatitis B & most other disease causing organisms
If you are exposed to blood on...

<table>
<thead>
<tr>
<th>Part</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin</td>
<td>Wash with non-abrasive soap &amp; water</td>
</tr>
<tr>
<td>Eyes</td>
<td>Flush with running water for at least 15 seconds</td>
</tr>
<tr>
<td>Mucous Membranes</td>
<td>Flush with water</td>
</tr>
</tbody>
</table>
Post Exposure Protocol

- Complete a First Aid Incident Report (Appendix C - district’s Exposure Control Plan) & submit it to the school secretary before the end of the day
- Log entry in Sharps Injury log, if applicable
- Within 24 hours, obtain medical evaluation and treatment at one of the district’s contracted occupational health sites
Resources


- [http://www.cdc.gov/hiv/](http://www.cdc.gov/hiv/)

- [http://www.sandi.net/204510610113232207/site/default.asp](http://www.sandi.net/204510610113232207/site/default.asp)

- [http://www.sdcounty.ca.gov/hhsa/programs/phs/hiv_std_hepatitis_branch/hiv_counseling_and_testing_services.html](http://www.sdcounty.ca.gov/hhsa/programs/phs/hiv_std_hepatitis_branch/hiv_counseling_and_testing_services.html)
In closing

Please contact your school nurse with any questions about the topics covered in this in-service.