MEMORANDUM

TO: All CVUSD Employees
FROM: Jeanne Valentine, Assistant Superintendent, Human Resources
SUBJECT: Guidelines for Preventing the Spread of Infectious Diseases

The District is mandated to notify its employees annually regarding any information relating to AIDS or AIDS-related conditions and Hepatitis B infections.

The basic principle promoted by these guidelines is to use **Universal Precautions**. This means to use appropriate precautions, regardless of your knowledge of which germs are present, when handling the discharges from another person's body. Do not limit hand washing, gloving, and careful disposal of contaminated refuse only to those times when you are dealing with persons you know or suspect may carry specific germs. The precautions recommended in these guidelines are appropriate for preventing the spread of ALL infectious diseases and are most likely to prevent the spread of germs that cause common illnesses in students, teachers, and staff members during the school year.

You are reminded that confidentiality of all medical information is important and must be honored carefully by school personnel, as well as health professionals. For your safety and the safety of the students, please review the attached guidelines.
WHAT ARE UNIVERSAL PRECAUTIONS?

Universal Precautions are precautions used in all situations and not limited to use with individuals known to be carrying a specific virus such as HIV or the virus causing Hepatitis B. In the school setting, those precautions should include: hand washing, using gloves, careful trash disposal, using disinfectants, and modification of cardiopulmonary resuscitation (CPR).

HAND WASHING: Hand washing facilities should include soap and running water at a pleasantly warm temperature. Automatic hand dryers can be considered as an alternative to paper towels. Scented soap allows teachers to determine if elementary students have used the soap. Scheduling time for students to wash hands before eating is suggested to encourage the practice. Classroom instruction about proper handwashing can be integrated into health instruction at all grade levels.

USING GLOVES: All staff members who may be required to administer first aid involving blood or to handle body fluids that may contain blood should have access to latex gloves in the areas where the gloves might be required to be used.

TRASH DISPOSAL: Special containers lined with plastic and marked appropriately are recommended for disposal of trash containing blood or any body spills that may contain blood. If needles, syringes, or lancets are used in the school setting, arrange for a puncture-proof container. Contact your site nurse or the local health department for directions about disposal of contaminated materials. Place intact needles and syringes in the designated container. Do not bend or break needles. Do not recap needles.

FIRST AID INVOLVING BLOOD AND CPR: Individuals with responsibility for administering first aid in school, on the athletic fields, in the cafeterias, on the playgrounds, and on school buses should have current instruction and certification. That instruction can be provided by certificated school nurses employed by the school districts or by local agencies such as the American Red Cross and the American Heart Association. Gloves should be standard components of first-aid supplies in the schools so that they are readily accessible for emergencies and regular care given in school health offices, cafeterias, and athletic training rooms. Devices that prevent backflow of fluids from the mouth of a victim being given CPR also should be readily accessible to those persons most likely to be the rescuers in the school setting. A wide variety of devices are available. Contact your local paramedic teams or hospital emergency room to determine which devices they recommend.

USING DISINFECTANTS: At each school site, appropriate and Environmental Protection Agency (EPA) approved disinfectants should be supplied and used. Regular household chlorine bleach diluted 1:10 and mixed daily (or as needed so that the solution is fresh) is an effective disinfectant for destroying the AIDS and Hepatitis B viruses as well as most other disease-causing organisms.

TRAINING: When providing first-aid training and training in CPR, adherence to current recommendations of the American Red Cross and the American Heart Association about using gloves, using protective devices for artificial breathing, cleaning resuscitation mannequins, and health conditions of students that contraindicate mannequin practice is essential.

Applying the principle of using Universal Precautions removes the problem of needing to know which persons are infected with which germs in the school setting. Routine use of appropriate precautions eliminates much of the fear of not knowing if a student in the classroom has an infection. Sometimes the parents or the students themselves are afraid to share information about infections. Most often, however, the infected students and their parents do not have that information. This is especially true about HIV-infected persons.

WHAT IS AIDS/HIV INFECTION?

AIDS (Acquired Immune Deficiency Syndrome) is the advanced stage of HIV (Human Immunodeficiency Virus) infection. The virus attacks the body's immune system, leaving it vulnerable to life-threatening opportunistic infections and malignancies. The virus also may directly attack the central nervous system. Persons infected with HIV frequently have no apparent symptoms and usually appear to be in good health. More than half of the persons in the United States who have been diagnosed to have AIDS (the advanced stage of HIV infection) have died.

HOW IS HIV INFECTION SPREAD?

Everyone infected with HIV, even a person without apparent symptoms, is capable of transmitting the infection. HIV infection is transmitted by:

1. any sexual activity involving direct contact with semen, blood, or vaginal secretion of someone who is infected;
2. sharing intravenous (IV) needles and/or syringes with someone who is infected;
3. penetrating the skin with needles that have been used to inject an infected person;
4. direct contact on broken skin with infected blood;
5. receiving a blood transfusion or blood products from someone who is infected (a screening test has been used since 1985 that has reduced this risk to 1 in 68,000 in California [AIDS Update, December 1988]); and,
6. being born to an infected mother.
WHAT IS HEPATITIS B?

Hepatitis B is an infection of the liver caused by a virus present in blood and other body fluids of infected persons. Less than 50 percent of persons who become infected show symptoms of illness. The symptoms are like those of Hepatitis A and include fatigue, mild fever, muscle or joint aches, nausea, vomiting, loss of appetite, and abdominal pain. In some patients, the urine turns dark, and the skin becomes yellow. The onset of symptoms may appear 6 weeks to 6 months after becoming infected with the virus. Death is uncommon in Hepatitis B, but 5 to 10 percent of those infected become long-term virus carriers. Up to 25 percent of carriers may develop serious chronic liver disease.

HOW IS HEPATITIS B SPREAD?

An infected person can transmit Hepatitis B as long as the virus remains in the blood. Transmission may occur as early as 4 weeks before any symptoms occur. A small number of people will carry the virus in their blood for years and are known as chronic carriers. Hepatitis B is transmitted by:

1. sexual activity involving semen, blood, or vaginal secretions;
2. sharing with someone who is infected, unsterile instruments used to penetrate the skin such as those used for tattooing, ear piercing, and razors;
3. sharing intravenous (IV) needles and/or syringes with someone who is infected;
4. direct contact of infected blood with the mucous membrane of the eye and mouth;
5. direct contact of infected blood with broken skin (e.g., cuts);
6. accidental needle sticks with needles containing blood from a virus carrier;
7. sharing toothbrushes; and,
8. being born to an infected mother.

HOW CAN HIV AND HEPATITIS B INFECTIONS BE PREVENTED?

A vaccine for Hepatitis B is available from health care providers. The cost of the vaccine may be covered by individual health plan benefits of employers.

The spread of Hepatitis B may occasionally occur in special education settings and classrooms attended by developmentally delayed students who became Hepatitis B carriers while in hospital or residential facilities. The risk of hepatitis transmission in these special education classroom settings can be almost eliminated by good environmental and person hygiene (Universal Precautions). Hepatitis B vaccination of susceptible personnel and students can reduce the risk to virtually zero.

Since sexual intercourse and sharing of intravenous equipment are the major behaviors that transmit the viruses that cause Hepatitis B, and HIV infections, abstinence from these activities eliminates the major risk of exposure for most people. Mutually monogamous sexual relationships between uninfected partners are safe.

Properly used condoms combined with water-based lubricants containing spermicides greatly reduce the risk of transmission during sexual intercourse with an infected person. Intravenous equipment and any equipment used to penetrate the skin should not be shared. For persons who continue to share intravenous equipment, cleaning with a household bleach solution and rinsing with water can also reduce transmission by this route.

HIV infection, Hepatitis B, and several other viruses are transmitted through sexual intercourse, sharing of blood, and from infected women to their babies during pregnancy or at the time of birth. Essentially all risk of these infections is outside of the work and school environments. However, there is some, although very small, risk of blood exposure at work and at school. Carriers of these viruses do not often show outward signs of infection and often are not aware of being infected themselves. Therefore, ALL blood or blood-containing body fluids must be considered potentially infectious.

The only risk of Hepatitis B virus and HIV exposure in the school setting is with direct exposure of infected blood to broken skin or mucous membranes. Unbroken skin is an extremely good barrier to these viruses, and there have been no documented cases of transmission in this manner in schools or daycare centers. In fact, even in the clinical setting, there have been only six cases of HIV infection from direct exposure of infected blood to broken skin. However, to be extremely cautious and because a variety of other infections are likely to be transmitted in this manner, Universal Precautions are recommended.
<table>
<thead>
<tr>
<th>TYPE OF EXPOSURE</th>
<th>VOLUME OF BLOOD</th>
<th>HUMAN IMMUNO-DEFICIENCY VIRUS (HIV)</th>
<th>HEPATITIS B VIRUS (HBV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipt of infected blood by transfusion</td>
<td>500 cc (1 Unit or 1 Pint)</td>
<td>95.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Accidental needle stick contaminated with infected blood in a clinical setting</td>
<td>Minute (Less than 1cc)</td>
<td>0.3%</td>
<td>12 - 35.0%</td>
</tr>
<tr>
<td>Infected blood on broken skin in clinical setting</td>
<td>Minute/Small Volume</td>
<td>Some Risk (6 Reported cases in the USA)</td>
<td>Some Risk</td>
</tr>
<tr>
<td>Infected blood on healthy (unbroken) skin in clinical setting</td>
<td>Minute/Small Volume</td>
<td>No Reported Cases</td>
<td>No Reported Cases*</td>
</tr>
<tr>
<td>Caring for infected persons within household</td>
<td>Minute/Small Volume</td>
<td>No reported cases among family members of thousands of persons with AIDS**</td>
<td>Some Risk***</td>
</tr>
</tbody>
</table>

* Some health care workers have been infected with HBV in the absence of a needle stick. Presumably, those infections were acquired by blood transferred to oral or nasal mucous membranes via hands.

** No family members have contracted HIV infection unless they were themselves at risk because of sexual activity, inoculation with blood or blood products, and perinatal events.

*** Hepatitis B Virus (HBV) transmissions have occurred between infected babies and their family contacts, infected developmentally delayed children and their classmates and caregivers, and in other situations when chronic carriers are present for prolonged periods.