

This is an official **CDC HEALTH ADVISORY**

Distributed via Health Alert Network
Tuesday, July 06, 2004, 11:51 EDT (11:51 AM EDT)
CDCHAN-00206-2004-07-06-ADV-S

Update on Investigation of Rabies Infections in an Organ Donor and Transplant Recipients

On July 1, 2004, the Centers for Disease Control and Prevention (CDC) reported that rabies had been diagnosed in three recipients of transplanted organs and in their common donor (see MMWR dispatch). The three transplant recipients developed an unexplained illness after transplantation and later died. Health departments in Alabama, Arkansas, Oklahoma, and Texas are conducting investigations to identify contacts of patients among health-care providers or domestic contacts who might need rabies postexposure prophylaxis. This update provides information on expanded criteria for conducting risk assessments as part of these investigations.

Pathologic examination of a transplanted kidney removed from one of the recipients demonstrated extensive presence of rabies virus antigen. The amount of antigen present is substantially more than what has been seen in examination of kidneys of some non-immunosuppressed patients who died of rabies. This new finding indicates that there may be a larger-than-usual viral load in these transplanted organs. Although these pathologic tests only indicate the presence of viral proteins - not intact, infectious virions - CDC believes it is prudent in this situation to expand the risk assessments for exposures to include some additional groups. Specifically, expanded criteria are suggested for risk assessments of certain body fluids and the time when these exposures might have occurred.

It is important to note that these expanded criteria:

1. Are unique to this situation in which infected organs were transplanted into patients who then received immunosuppressive therapies.
2. Are not intended to modify existing guidance on rabies exposures by the Advisory Committee on Immunization Practices (ACIP).
3. Identify people who will need risk assessments for exposures to specific body fluids and substances.

Postexposure prophylaxis is required only in situations in which potentially infectious material comes into direct contact with broken skin or mucous membranes. It is expected that in cases where people were using appropriate protective equipment, there will likely be no risk of exposures.

1. For people (both inside and outside the healthcare setting) exposed to one of the renal transplant recipients, risk assessments for exposures should be done in any person who was exposed to the following substances any time after the transplant occurred:
 - Urine in a Foley drainage bag, nephrostomy drainage bag, or other urine collection device
 - Concentrated urine specimens in a laboratory setting

- Peritoneal dialysis fluid
- Material from surgical drains, if any were present

In accordance with existing ACIP and World Health Organization (WHO) recommendations, exposure to urine that might have spilled on surfaces is not of concern for rabies transmission.

2. For people (both inside and outside the healthcare setting) exposed to the liver transplant recipient, risk assessments for exposures should be done in any person who was exposed to the following substances any time after the transplant occurred:

- Biliary drainage
- Biliary samples in a laboratory setting
- Material from surgical drains, if any were present

3. For people (both inside and outside the healthcare setting) who participated in removal or implantation of the procured organs (lungs, kidneys, liver) or handled the organs during at any time, risk assessments should be performed in any person who had a breach in, or was not wearing, appropriate personal protective equipment.

Additional information about rabies and its prevention is available from CDC, telephone 404-639-1050 or at <http://www.cdc.gov/ncidod/dvrd/rabies>. This website will be updated as new information about the ongoing investigation becomes available.

Further information on measles can be found at http://www.cdc.gov/ncidod/diseases/submenus/sub_measles.htm

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national and international organizations.

DEPARTMENT OF HEALTH AND HUMAN SERVICES