High risk donors (10/26/89)

Date: October 26, 1989

From: Director, Center for Biologics Evaluation and Research

Subject: Guideline for Collection of Blood or Blood Products from Donors with Positive Tests for Infectious Disease Markers ("High Risk" Donors)

To: Blood Establishments preparing products from donors known to have positive tests for infectious disease markers

Please note the enclosed guideline which updates procedures for collection and processing of blood products from high risk donors.

Establishments currently having approval for an exemption under 21 CFR 640.75 should also assure that their procedures conform with this guideline and, if not, that the procedures are appropriately revised and a license amendment reflecting revisions submitted promptly.

Guideline for Collection of Blood or Blood Products From Donors With Positive Tests for Infectious Disease Markers ("High Risk" Donors)

September 1989

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Guideline for Collection of Blood or Blood Products From Donors With Positive Tests for Infectious Disease Markers ("High Risk" Donors)

These procedures replace the March/August 1981 guidelines for collection of Source Plasma from HBsAg reactive donors. The center for Biologics Evaluation and Research has received many requests from licensed blood establishments to approve collection of plasma twice a week from healthy, asymptomatic, HBsAg reactive donors. These requests are currently being approved with the concurrence of the donor's personal physician. The blood or plasma center medical director's approval is acceptable in those cases where he is the donor's personal physician of record.

In addition, there are rare circumstances wherein it is appropriate to collect blood products from donors with other disease markers, e.g., anti-HIV-1 positive plasma for research use. The following information is provided to assist manufacturers in preparing the required license amendment submission when requesting an exemption under 21 CFR 640.?5 to permit collection of plasma for special purposes from donors known to have positive tests for infectious disease markers or known risk factors for HIV-1 infection.

DONOR QUALIFICATIONS

1. Donors should qualify as regular donors except:

   a. for HBsAg programs, they may give a history of hepatitis but are free of symptoms of hepatitis at the times of donation, and

   b. men who have had sex with other men, or persons having other risk factors for HIV-1 infection may be acceptable upon specific CBER approval. Intravenous drug users (past or present) are not generally acceptable for any current program.

2. Donors should receive and document understanding at each donation of specifically designed AIDS educational materials related to the special program involved. Informed consent for each donation should include language consistent with that in the 30 October 1986 memorandum (or subsequent updated recommendations relative to HIV-1 and blood safety), including a final modifying phrase, e.g.,

   "I have reviewed and understand the information provided to me regarding the

spread of the AIDS virus by donated blood and plasma and, if I consider myself " to be a person at risk for spreading the virus known to cause AIDS, I agree not to donate blood or plasma for transfusion to another person or for further manufacture, except for (specifically approved indication."

3. Donor screening and processing should be done with adequate precautions to prevent disease transmission to other donors or to establishment personnel. Biosafety level 2 applies. Consult DHHS Publication No. (CDC) 88-8395 for additional information.

4. Donors should have written permission from their personal physician for the volume and schedule of products to be collected.

5. Laboratory testing of donors should include, in addition to the other requirements of 21 CFR 640.63:

   a. serum protein electrophoresis initially and every two months; continued donation with abnormal results requires the written approval of the donor's personal-physician.

   b. for HBsAg reactive or anti-HB core positive donors, ALT measurements initially and every month. If ALT levels exceed two times the upper limit of normal values, the donor must be deferred until acceptable level occurs and a physician reinstates the donor.

   c. except for known anti-HIV-1 positive donors in special programs, anti-HIV-1 testing is performed in accordance with 21 CFR 610.45.

6. Medical evaluation of donors is performed by a licensed physician every month of donation including a physical examination, review of laboratory reports, and recertification of donor suitability. This responsibility may not be delegated to a physician substitute or to any other person.

FREQUENCY OF PLASMAPHERESIS

Plasmapheresis is limited to once per week except that the frequency of plasmapheresis may be increased to twice per week only with written approval from the donor's personal physician.

MANNER OF COLLECTION

Plasma may be collected manually, by use of membrane filtration automated collection devices, or by other automated collection

devices if these devices are dedicated to use only for the one specific program, provided that the collection is undertaken in as safe a manner as possible and in compliance with CDC/NIH

Biosafety Level 2 Guidelines. Specifically:

1. The collection is done by trained personnel in a physically or temporally isolated manner and all products are handled separately. Staff may not work concurrently with both normal and high risk donors. It is recommended that the number of staff involved be limited as much as is practical.

2. An approved collection system that is functionally closed is used. If manual centrifugation is done, double overwraps are used.

3. Adequate cleaning and disinfection of the area, equipment, etc., both for routine operation and for accidental spills, is documented. Detailed procedures for disinfection must be part of standard operating procedures.

4. Storage and disposal of all collection materials, including laboratory samples upon completion of required testing, is done in a manner consistent with CDC Biosafety Level Z guidelines and etiologic agent packaging requirements if transportation will occur. Autoclaving for 1 hour at 121 Celsius or incineration are the only currently recognized safe procedures for disposal of blood products or other contaminated materials.

5. Plasma collected from donors with infectious disease markers is:

   a. physically isolated from other source plasma during both collection and storage.

   b. adequately labeled and distributed only for purposes known to comply with restrictions on use, with periodic reporting to the CBER in accordance with 21 CFR 610.40(d)(1) and (2).

   c. made available for manufacturing use only if all applicable FDA donor suitability and testing criteria are met. Unsuitable units are destroyed by autoclaving or incineration or used only for research purposes; product disposition is documented. Record keeping and donor deferral procedures are in accordance with all other applicable FDA recommendations and requirements.

6. Laboratory samples are labeled conspicuously with the biohazard symbol. Repeat laboratory testing for known reactive donors is NOT required nor recommended.

7. Packing for shipment of laboratory samples and plasma is in

compliance with biohazard/etiologic agent requirements and conforms to federal recommendations for shipment of etiologic agents. (42 CFR 72 and 49 CFR 173.386/387).

WASTE DISPOSAL

All material contaminated with blood from donors known to have positive tests for disease markers should be handled and disposed of in accordance with all requirements for etiologic agents.

PERSONNEL PROTECTION

1. The SOP includes:

    a. written personnel safety instructions in compliance with current CDC and/or OSHA standards with specific directions regarding handwashing between donors, and safe use and disposal of protective equipment, including gowns, gloves, goggles, and masks.

    b. written procedures for treatment, notification of - management, and documentation of follow-up when inadvertent injury to employees occurs during collection and handling of plasma from these donors.

2. Written records are maintained showing that all personnel have been adequately trained in safety procedures, including retraining as necessary to maintain skills required for current responsibilities.

3. Active immunization is offered to personnel susceptible to possible infection by hepatitis B virus.

4. Safety program plans are periodically reviewed and updated as necessary.

LABELING

1. Labeling conforms to 21 CFR 640.70, or if appropriate 606.121(g), and 610.40, EXCEPT SUBPARTS 640.70(a)(7),(8) and (11) DO NOT APPLY. In addition, CDC labeling requirements for etiologic agents are met.

2. Language acceptable for labeling is either:

    a. "This product is reactive when tested for ..., and may transmit infectious agents," or

    b. "This product was collected from a donor known to be reactive for ..., and may transmit infectious agents".

3. Labeling is submitted to and accepted by CBER prior to use.

Bibliography

American Association of Blood Banks, Technical Manual, Biosafety. lOth Edition. Arlington, Virginia (in press, 1989).

American Blood Resources Association, ABRA BIV infection control guidelines, Annapolis, MD December 1987.

American Red Cross, Loss Control Manual. Washington, D.C. 1988.

AuBuchon JP. A review: occupational safety in blood banking . concepts and conundrums. Immunohematology 1988:23-30.

Centers for Disease Control. ACIP. Update on Hepatitis B prevention. Morbid an Mortal Weekly Rep 1988;4-23-30.

Centers for Disease Control. ACIP. recommendations for protection against viral hepatitis. Morbid an Mortal Weekly Rep 1981;34:22:313-331.

Centers for Disease Control, 1988 Agent summary statement for human immunodeficiency virus and report on laboratory acquired infection with human immunodeficiency virus. Morbid and Mortal Weekly Rep. Supplement
1988:37 IS-22S.

Centers for Disease Control. Recommendations for preventing transmission of infection with human T-lymphotropic virus Type Ill/lymphadenopathy-associated virus during invasive procedures. Morbid an Mortal Weekly Rep 1986;31:14:221-223.

Centers for Disease Control, Recommendations for prevention of HIV
transmission in health-care settings. Morbid and Mortal Weekly Rep. Supplement 1987;36(suppl. 2S):lS-18S.

Centers for Disease Control, Update: Universal precautions for prevention of transmission of human immunodeficiency virus, Hepatitis B virus, and other blood-borne pathogens in health-care settings. Morbid and Mortal Weekly Rep 1988:37:377-386.

Centers for Disease Control and National Institutes of Health. Department Health and Human Services. Biosafety in microbiological and biomedical laboratories, DHHS Publication No. (CDC) 88-8395. 2nd Edition. U.S. Government Printing Office, Washington, D.C. 1988.

Clinical Laboratory Hazardous Waste, National Committee for Clinical Laboratory Standards, Villanova, PA. NCCLS proposed Standard Doc. 6P5-P, Vol. 6, No. 15, September 1986.

Code of federal regulations Title 21, Part 600-699. U. S.

Government Printing Office, Washington, DC 1989.

Code of federal regulations, Title 29, Part 1904.2. D.S. Government Printing Office, Washington, DC 1988.

Code of federal regulations, Title 42, Part 72. U.S. Government Printing Office, Washington, DC, 1988.

Code of federal regulations, Title 49, Parts 171-173. U.S. Government Printing Office, Washington, D.C. 1988.

Environmental Protection Agency. EPA Guide for infectious waste management. May 1986. EPA/530-SW-86-014, (NTIS #PB86-199130) Washington, D.C. 1986.

Environmental Protection Agency. Registered Hospital Disinfectants and Sterilants. Antimicrobial Program Branch, 401 "M" Street, SW, (TS767C), Washington, D.C. 20460.

Environmental Protection Agency. Standards for the Tracking and Management of Medical Waste; Interim final rule and request for comments. Federal Register. Friday, March 24, 1989, Vol. 54, No. 56:12326-95.

Gerberding JL, et al. Risk of transmitting the human immunodeficiency cytomegalovirus and hepatitis B virus to health care workers exposed to patients with AIDS and AIDS related conditions. J Infect Dis 1987:16;:1-7.

Gerberding JL, Henderson DK. Design of rational infection control policies for human immunodeficiency virus infection. J Infect Dis, Vol. 156, No. 6, December 1987:861-864.

Gibbs FL and Kasprisin CA, eds. Environmental safety in the blood bank. Arlington, VA: American Association of Blood Banks, 1987.

Grumet FC, MacPherson JL, Hoppe PA and Smallwood LA. Summary of the biosafety Workshop. Application of biosafety principles in blood establishments. Transfusion 1988;28:502-05.

International Air Transportation Association, Dangerous goods regulations, Montreal, Quebec. January 1, 1988.

International Civil Aviation Organization, Technical instruction for the safe transport of dangerous goods by air, Montreal, Quebec, 1989-1990. Available from American Label Mark, 1;24 N. Pulaski Road, Chicago, IL 60640

Joint Advisory Notice; Department of Labor/Department of Health and Human Services; HBV/HIV; Notice. Federal Register. Friday, October 30, 1987, Vol. 52, No. 210:41818-24.

Kuhls TL, Cherry JD. The management of health care workers' accidental parenteral exposures to biological specimens of HIV

seropositive individuals. Infection Control, Vol. S, No. 5, 1987:211-213.

McEvoy M, Porter K, Mortimer P, Simmons N, Shanson D. Prospective study of clinical, laboratory, and ancillary staff with accidental exposures to blood or body fluids from patients infected with HIV. Brit Med J 294:1595-7, June 20, 1987.

Occupational Safety and Health Act of 1970, Section 5 (a)(l). 0. S. Government Printing Office, Washington, D.C.

Occupational Safety and Health Administration, OSHA, Instruction CPL 2-2.4 August 15, 1988, Enforcement procedures for Occupational exposure to Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV).

Occupational Safety and Health Administration, OSHA, Standard on bloodborne pathogens; Proposed Rule and Notice of Hearing. Federal Register. Tuesday, May 30, 1989, Vol. 54, No.102:23042-139.

Postal Service; Mailability of Etiologic Agents; Final rule. Federal Register. Thursday, August 1;, 1989, Vol. 51, No. 156:33523-25.

Procedures for the domestic handling and transport of diagnostic specimens and etiologic agents. National Committee for Clinical Laboratory Standards, NCCLS Approved Standard, Vol. 5, No. 1, January 1985.

Protection of laboratory workers from infectious disease transmitted by blood and tissue; National Committee for Clinical Laboratory Standards, Villanova, PA. NCCLS Proposed Standard DOC. M29-P 1987.

Public Law 94-580, Section 1004, Resource Conservation and Recovery Act 1976. U.S. Government Printing Office, Washington, D.C.

Publication 52 Acceptance of Hazardous Restricted or Perishable Matter and Domestic Mail Manual Section 124.38, Nonmailable matter-articles and substances; special mailing rules; Disease germs and biological products, U.S. Postal Service, January 1989. U.S. Postal Service, Eastern Area Supply Center, Route 206 VA Supply Center, Summerville, KJ 08877.

Resnick L, Veren K, Salahuddin Z, Tondreau S and Markham PD. Stability and inactivation of HTLV-III/LAV under clinical and laboratory environments. JAMA 1986-255:1877-91.

Richmond JY. Safe practices and procedures for working with human specimens in biomedical research laboratories. J Clin Immunoassay. 1988:11:3, 115-119.

Vesley D, Laurer J. Decontamination, sterilization, disinfection and antisepsis in the microbiology laboratory. Laboratory Safety: Principles and Practice, Miller BM, et al eds. American Society for Microbiology, Washington, D.C. 1986.

Wallbank AM. Disinfectant inactivation of AIDS virus in blood or serum. Lancet. l985 Mar 16;1(8429):642.

APPENDIX
Biosafety Resources

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Department of Agriculture APHIS
Federal Bldg. Rm 810
6505 Bellcrest Road
Hyattsville, MD 20782
Tel. No. 301-436-5453
301-496-3353(Import/Export)

Department of Transportation
Office of Hazardous Materials
Occupational Safety Transportation
Research and Special Programs
Administration
400 7th Street, N.W.
Washington, D.C. 20590
Tel. No. 202-366-4488

Environmental Protector Agency
Infectious Waste Management Program
5E240
401 M Street, S.W.
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202-382-3000

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Note on page 1:

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and replaces

21 CFR 640.75 for "equivalent methods".