

EXERCISE 10: BLOOD DONOR INTERVIEW AND PHYSICAL

Textbook: Chapter 12

Skills: 20 points

- Objectives:
1. To determine if an individual is eligible to donate blood by proper performance of the donor interview.
 2. Identify the conditions which would cause deferral of a potential blood donor and the length of time of deferral.
 3. Perform the physical examination, and based on the results, determine if the donor is eligible for blood donation.

Introduction

Careful donor selection plays a major role in determining whether or not a unit of donor blood will be therapeutically effective and free of transmissible disease. There are two parts in the selection of eligible blood donors. The first part involves obtaining a brief oral medical history. The interview must be conducted by qualified personnel in a manner that assures auditory (visual privacy is also recommended), that allays apprehension, and allows time for any necessary discussion or explanation.

Medical History

Prospective donors are asked a series of questions related to their medical history. Answers to the questions must be recorded as "yes" or "no" with details added as indicated. Some very specific questions will be necessary but a great deal of pertinent information can be obtained by asking some general or leading questions in simple language that the donor can understand. Usually, blood donation centers have the questions listed on a card, form or on computer.

Based on the answers to specific questions the interviewer must determine whether or not the potential donor is eligible to donate blood. The questions asked serve *two purposes*. The first is to ensure that the donation of blood or blood components will not compromise the health of the potential donor. The second is to make sure that a potential donor's blood will not transmit a disease state to the potential recipient. The donor's past and present health status will aid in making this determination. Based on the answers to the questions in the medical history a donor will be accepted, temporarily deferred or permanently deferred.

If a potential donor passes the oral medical history interview they must then undergo a very limited physical exam to ensure that the donation of blood will not harm them.

While the donor is in the waiting area they are given educational materials which they must read informing them of activities that may place them at high risk for HIV infection. Persons at risk for HIV infection must refrain from donating blood. Donor screening must include questions relating to the signs and symptoms of AIDS, including evidence of HIV infection, AIDS-related complex (ARC), and Kaposi's sarcoma.

Many facilities provide information sheets for blood donors, which emphasize that blood should not be donated by persons wanting to ensure that they do not have AIDS (ie, a person should not donate blood to receive a "free" AIDS test). Donors who may be at risk for AIDS may confidentially self-exclude their blood from the general blood supply. The following is an example of a blood donor information sheet to educate

potential blood donors of conditions which would defer them as a blood donor and inform them of how they will be notified about positive test results.

The donor's responses to the questions asked are recorded, and the card is signed by the donor to verify the information provided. Donors may be deferred temporarily or permanently, based on their medical history. The following chart lists conditions that may cause a donor to be deferred.

AABB has simplified and standardized this process by providing a "**Uniform Medical History Questionnaire for Whole Blood Donors**".

Permanent deferral:

1. Men and women who have engaged in sex for drugs or money since 1977.
2. Men who have had sex with another male, even one time, since 1977.
3. People who have used IV drugs (even once).
4. Taking clotting factors for a bleeding disorder such as hemophilia.
5. People with clinical or laboratory evidence of HIV infection.
6. Hepatitis after age 11.
7. Cancer: Leukemia and lymphoma, individuals who had treatment and have been disease free for 5 years may be acceptable after evaluation by a qualified physician.
8. Cruetzfeldt Jakob disease (CJD): The following individuals are permanently deferred:
 - a) Received pituitary growth hormone of human origin
 - b) Received a transplant of brain covering (dura mater)
 - c) Family member with CJD
9. Individuals who have ever had the following parasitic blood diseases: Chagas Disease or Babesiosis
10. People who have ever had a positive test for one or more of the following:
 - a) HBsAg
 - b) Hepatitis C
 - c) HTLV I/II
 - d) HIV
11. Donor who donated only unit of blood given to a patient who then developed post transfusion hepatitis, or has been involved in 2 or more cases of post transfusion hepatitis.

Defer for 12 months

1. Recipient of blood, blood components or had tissue or organ transplant.
2. High risk behaviors:
 - a) Women who have had sex with men who have had sex with another man, even one time, since 1977.
 - b) Has had sex with someone who was given drugs or money for sex.
 - c) Has had sex with any person who is a past or present IV drug user.
 - d) History of syphilis or gonorrhea.
 - e) Had sex with someone who has taken clotting factors on regular basis.
 - f) Sexual partner of someone who is HIV positive.
3. Received an injection of hepatitis immune globulin (HBIG).
4. Acupuncture, tattooing, or ear piercing done under questionable circumstances.
5. Accidental needle exposure or non-sterile skin penetration with instruments contaminated with blood or body fluids.

6. Rabies vaccine given following the bite of a rabid animal.
7. Recent inmate of a prison or mental institution.
8. Close contact with AIDS or hepatitis patient which is defined as donors who share living quarters or are a sexual partner of a person with viral hepatitis or AIDS.
9. Traveled to a malarial endemic area, components free of RBCs are exempt.
10. Intra nasal use of cocaine

Temporary deferral

1. Immunizations
 - a) Measles (rubeola), mumps, yellow fever, oral polio, typhoid - 2 weeks
 - b) German measles (rubella), Varicella zoster (chicken pox) - 4 weeks
 - c) Rabies, HBIG - 1 year
 - d) NOTE: There is no deferral for toxoids or killed vaccines (including Hepatitis B vaccine).
 - e) Flu vaccine - 48 hours
2. Medications
 - a) Aspirin, piroxicam (Feldene) - defer platelet donors for 3 days.
 - b) Isotretinoin (Accutane) or - 1 month
 - c) Finasteride (Proscar) (Propecia) - 1 month
 - d) Acitretin (Soriatane) - 3 years
 - e) Etretnate (Tegison) - permanent
3. Existing pregnancy or pregnancy in last 6 weeks is cause for deferral except under extremely unusual circumstances.
4. Malaria - 3 years, Malarial endemic country and/or anti-malarial drugs - 1 year

Other illnesses or medications are evaluated on an individual basis.

CONDITIONS THAT MAY TEMPORARILY DEFER A DONOR

Condition	Length of Deferral
Active allergies	Until free of symptoms
Acute cough, sore throat, cold	Until free of symptoms
Age	Persons must be 17 years of age or older to donate blood
Antibiotics (oral)	None if for dermatology, otherwise depends on condition
Asthma	6 months after last attack
Blood Transfusion	1 year after transfusion
Close contact with a hepatitis patient	1 year
Drug therapy, including antibiotics, anticoagulants, digitalis, insulin, anticonvulsant, vasodilators, antiarrhythmics	Clinical condition for such treatment may defer a donor
Ear piercing/tattooing/acupuncture	1 year
Former inmates of penal institution	1 year
German measles (rubella) vaccine	4 weeks
History of malaria or a history of antimalarial prophylaxis or residents of countries endemic for malaria	3 years after becoming asymptomatic or discontinuing therapy
Inoculation with attenuated virus, including polio (oral), measles (rubeola), mumps, yellow fever	2 weeks
Major surgery/illness	If fully recovered and no blood was given, no deferral
Malarial area (no medication)	12 months
Mononucleosis	6 months after becoming asymptomatic
Pregnancy	Duration of pregnancy and 6 weeks following conclusion of the pregnancy

OTHER DEFERRALS

Condition	Length of Deferral
Rabies vaccine	No deferral, unless the episode followed the bite of a rabid animal, in which case the prospective donor is deferred for 12 months.
Recent blood donation	8 weeks for whole blood donation (there must be an 8 week interval between blood donations)
Skin cancer	1 month
Tooth extraction	72 hours if not on antibiotics
Unexplained weight loss of 10 lbs or more	Until physician has evaluated the potential donor and approved participation as a blood donor
Vaccinations: inoculation with toxoids and killed virus, bacterial and rickettsial vaccines, including hepatitis B, diphtheria, pertussis, typhoid, paratyphoid, cholera, typhus, Rocky Mountain spotted fever, polio (injection), plague	No deferral if prospective donor is symptom free and afebrile

Physical Examination

To ensure that the donation of blood will not harm the potential donor a brief physical is done. The potential donor must weigh over 110 lbs. The pulse, temperature and blood pressure are taken. The pulse must be between 50 - 100 beats per minute and regular. The oral temperature must not exceed 99.5 F. The diastolic blood pressure must not exceed 100 mm of mercury and the systolic must not exceed 180 mm of mercury. A fingerstick is performed on the donor for hemoglobin or hematocrit determination. Many donor centers use a copper sulfate solution to screen for hemoglobin. A drop of blood is added to the copper sulfate solution, if the hemoglobin is 12.5 g/dL or more the drop of blood will sink within 15 seconds. If the hemoglobin level is less than 12.5 g/dL the drop will remain suspended or float to the top. If a hematocrit is done it must be at least 38% or more. **Warning:** do NOT stick the donor's finger while the glass thermometer is in their mouth !

Procedure: Donor Interview

Materials:

1. Donor Interview Sheet
2. Pen

Instructions:

1. On the donor form on the next page fill in the donor's personal history, including name, address and DOB.
2. Determine the donor's medical history by posing the questions listed on the donor record card to the donor.
3. If the donor answers "yes" to any of the questions asked, the interviewer must investigate further to determine the donor's eligibility. The donor's eligibility is based on the criteria presented in the discussion section of this lab. If the interviewer is unsure about a donor's eligibility, the interviewer should consult the blood bank supervisor and/or medical director. Results of the additional investigation must appear as a note on the donor interview sheet. For example, if the donor is asked, "Have you ever gotten a tattoo?" and the donor responds positively, the date the tattoo was obtained must be determined to evaluate the donor's eligibility.
4. The date of the donor's last donation must be recorded.
5. The date of the interview, the interviewer's initials, and the donor's signature must also be completed on the donor interview sheet.
6. After the interview perform the brief physical.

Interviewer Name _____

Donor Name _____

Address _____

Date of Birth _____ Social Security Number _____

When did you eat last? _____

Do you weigh over 110 lbs? YES NO

MEDICAL HISTORY QUESTIONNAIRE		Yes	No
Are you:			
1.	Feeling well and health today?		
2.	Currently taking an antibiotic?		
3.	Currently taking any other medication for an infection?		
Please read the Medication Deferral List			
4.	Have you ever taken any medications on the Medication Deferral List?		
In the past 48 hours			
5.	Have you taken aspirin or anything that has aspirin in it?		
In the past 4 weeks			
6.	Have you had any vaccinations or any other kind of shot?		
In the past 6 weeks			
7.	Female donors: Have you been pregnant or are you pregnant now? (Males: check No)		
In the past 8 weeks			
8.	Have you donated blood, platelets or plasma?		
In the past 16 weeks			
9.	Have you donated a double unit of red cells using an apheresis device?		
In the past 12 months have you			
10.	Had a blood transfusion?		
11.	Had a transplant such as organ, tissue, or bone marrow?		
12.	Had a graft such as bone or skin?		
13.	Come into contact with someone else's blood?		

MEDICAL HISTORY QUESTIONNAIRE		Yes	No
14.	Had an accidental needlestick injury?		
15.	Had sexual contact with anyone who has HIV/AIDS or has had a positive test for the HIV/AIDS virus?		
16.	Had sexual contact with a prostitute or anyone else who takes money or drugs or other payment for sex?		
17.	Had sexual contact with anyone who has ever used needles to take drugs or steroids, or anything NOT prescribed by their doctor?		
18.	Had sexual contact with anyone who has hemophilia or has used clotting factor concentrates?		
19.	Female donors: had sexual contact with a male who has ever had sexual contact with another male? (Males: check No)		
20.	Come into contact with saliva (including kissing) from a person who has hepatitis?		
21.	Come into contact with blood from a person who has hepatitis?		
22.	Had sexual contact with a person who has hepatitis?		
23.	Had a tattoo applied?		
24.	Had ear or body piercing?		
25.	Had acupuncture?		
26.	Had or been treated for syphilis or gonorrhea?		
27.	Been in juvenile detention, lockup, jail, or prison for more than 72 hours?		
In the past 3 years have you			
28.	Been outside the US or Canada?		
From 1980 through 1996,			
29.	Did you spend time that adds up to three (3) years or more in Europe? (Review list of countries in Europe)		
30.	Were you a member of the US military, a civilian military employee, or a dependent of the US military?		
From 1980 to the present, did you			
31.	Spend time that adds up to five (5) years or more in Europe?		
32.	Receive a blood transfusion in the United Kingdom?		
From 1977 to present, have you			
33.	Received money, drugs, or other payment for sex?		

MEDICAL HISTORY QUESTIONNAIRE		Yes	No
34.	Male donors: had sexual contact with another male, even once? (Females: check No)		
Have you EVER			
35.	Had a positive test for the HIV/AIDS virus?		
36.	Used needles to take drugs, steroids, or anything NOT prescribed by your doctor?		
37.	Received clotting factor concentrates?		
38.	Had hepatitis?		
39.	Had malaria?		
40.	Had Chagas' disease?		
41.	Had babesiosis?		
42.	Received a dura mater (or brain covering) graft?		
43.	had any type of cancer, including leukemia?		
44.	Had any problems with your heart or lungs?		
45.	Had a bleeding condition or a blood disease?		
46.	Had sexual contact with anyone who was born in or lived in Africa?		
47.	Been in Africa?		
48.	Have any of your relatives had Creutzfeldt-Jacob disease?		

Please indicate in the space below the numbers (if any) of questions answered inappropriately **AND** what type of deferral, if any, this would cause. ***THIS IS NOT OPTIONAL!*** List the question number followed by the deferral time.

MEDICATION DEFERRAL LIST

Please tell us if you have **EVER** taken one or more of these medications:

- **PROSCAR** (FINASTERIDE) - for prostate gland enlargement
 - **PROPECIA** (FINASTERIDE) - for baldness
 - **ACUTANE** (ISOTRETINOIN) - for severe acne
 - **SORIATANE** (ACITRETIN) – for severe psoriasis
 - **TEGISON** (ETRETINATE) – also for severe psoriasis
 - **GROWTH HORMONE FROM HUMAN PITUITARY GLANDS** - was prescribed until 1985 for children with delayed growth
 - **INSULIN FROM COWS (BOVINE, OR BEEF, INSULIN)** - used to treat diabetes
 - **HEPATITIS B IMMUNE GLOBULIN** – given AFTER an exposure to hepatitis B.
NOTE: This is DIFFERENT from the hepatitis B vaccine which is used to prevent future infection with hepatitis B.
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IF YOU WOULD LIKE TO KNOW WHY WE NEED TO DEFER YOU FOR TAKING THESE MEDICINES, PLEASE KEEP READING:

- If you have taken or are taking **Proscar, Propecia, Accutane, Soriatane, or Tegison**, your donated blood could contain significant levels of these medicines and possibly cause birth defects in fetuses. Once the medication has been cleared from your blood, you may donate again. Deferral period is one month for Proscar, Propecia and Accutane, and three years for Soriatane. Tegison is a permanent deferral.
- **Growth hormone from human pituitary glands** was prescribed until 1985 for children with delayed growth. The hormone was obtained from human pituitary glands, which are found in the brain. Later, a few people who took this hormone developed a rare nervous system condition called Creutzfeldt-Jakob Disease (CJD, for short). CJD has not been associated with growth hormone preparations available since 1985.
- **Insulin from cows (Bovine, or beef, insulin)** is an injected material used to treat diabetes. If this insulin was imported into the US from countries in which “Mad Cow Disease” has been found, there is a rare chance it could contain material from infected cattle. (Bovine insulin has not been known to transmit “Mad Cow Disease.”)
- **Hepatitis B Immune Globulin (HBIG)** is an injected material used to prevent infection AFTER an exposure to hepatitis B. HBIG does not prevent hepatitis B infection in every case, so persons who have received HBIG are deferred from donating blood for 12 months.

INFORMED CONSENT

I, the undersigned, have reviewed and understand the donor eligibility information and the blood donation process. I agree NOT to donate blood or plasma for transfusion to another person or for further manufacture if I have AIDS, a positive HIV antibody test, or if any of the activities or signs and symptoms associated with AIDS apply to me. I understand that my blood will be tested for laboratory evidence of infectious agents capable of transmission through blood transfusion including, but not limited to, the AIDS virus, hepatitis B, and other viruses. I understand that I will be notified of test results that are important to my health and may affect my eligibility to be a blood donor. If my HIV, hepatitis, or other test results are confirmed positive my blood will not be transfused and my name will become part of a list of permanently deferred blood donors. I understand that test results and medical history information will not be released without my written consent, except as required by state law. I have truthfully answered all medical questions. I am voluntarily donating my blood to be used as determined by Austin Community College, and I, at my own risk, for good consideration, hereby release Austin Community College, and its staff from all claims and demands incidental to or relative to the donation of this blood.

Donor Signature _____ Date _____

Donor Printed Name _____

Interviewer Signature _____ Date _____

Interviewer Printed Name _____

Is this individual eligible to donate blood based on the information given? YES NO

Procedure: Physical

Materials:

1. Fingerstick supplies
2. Two capillary tubes
3. Copper sulfate solution OR Microhematocrit centrifuge

Procedure:

1. Ask the donor if their weight exceeds 110 lbs and note it on the form.
2. Take the donor's pulse, temperature and blood pressure and record and record below.
3. Properly perform the fingerstick procedure and collect 2 capillary tubes (refer to Laboratory Exercise 4).
4. Hold one of the capillary tubes over the copper sulfate solution and allow 1 drop to fall in the solution.
5. Observe for 15 seconds, record results.

Pulse _____

Temperature _____

Blood Pressure _____

Copper Sulfate (circle one): ACCEPTABLE UNACCEPTABLE

Hematocrit: _____

Based on the physical exam circle one of the following: ACCEPTED REJECTED

EXERCISE 10: BLOOD DONOR INTERVIEW AND PHYSICAL EXAM

Name _____ Date _____

Points: 15

The following questions are worth .5 point each unless otherwise indicated.

1. How often may an individual donate a unit of blood (1 point)?
2. State the acceptable values for each of the following:
weight:
temperature:
pulse:
blood pressure:
Hematocrit:

For each of the following situations state the appropriate deferral time (if any). Refer to the charts in your laboratory exercise.

3. Recently had major surgery and received 2 units of blood.
4. Had leukemia but has been in remission for 10 years.
5. Had hepatitis at age 9.
6. Release from prison after 3 years.
7. Traveled to a malarial endemic country and took antimalarial drugs within the past 6 months.
8. Received a tattoo 5 months ago.
9. Has recently gotten a ring inserted into his/her belly button.

10. Admits to having used IV drugs once back in 1974.
11. Recently had a baby.
12. Received money for sex back in 1981.
13. Was recently diagnosed with syphilis (THINKING QUESTION: Discuss the reason for your answer).
14. Received the rabies vaccine after being bit by a stray dog.

List the deferral times for the following immunizations:

15. Measles (rubeola)
16. Hepatitis Immune Serum Globulin (HBIG)
17. Hepatitis B vaccine
18. German measles (rubella)
19. Mumps
20. Oral polio
21. Yellow fever

22. The medical history is obtained by asking the individual specific questions. These questions serve two purposes, what are they (2 points).