

EXHIBIT 56

Armed Services Blood Program Medical Conditions List

Armed Services Blood Program Medical Conditions List

NOTICE: The Department of Defense (DoD) assumes no risk for the use of this information by non-DoD personnel, blood programs, or individual medical institutions. The use of this information by DoD entities is strictly for blood donor operations and must adhere to the current Service-specific (Army, Navy, and Air Force) Standard Operating Procedures for screening blood donors.

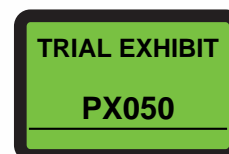
Any deviation from this information must be done according to current Service-specific and/or local Standard Operating Procedures for screening blood donors and must have received prior approval by the site Medical Director with documented justification.

When Medical Director approval is required, the Medical Director will determine the frequency of approval for each donor. Documentation of Medical Director approval is to remain on file for each donor evaluated. The donor will be evaluated by the Medical Director at least annually unless the medical condition has changed. Donor center personnel will evaluate donor at each donation to determine if medical condition has changed. If there has been a change, the medical director will re-evaluate the donor.

Note: If not stated in the comments the following dating periods apply for documenting deferrals in the computer system:

24 hours = one day	48 hours = 2 days	72 hours = 3 days	7 days = 1 week
14 days = two weeks	21 days = 3 weeks	28 days = 4 weeks	31days = one month

Medical Condition	Comment
Abdominoplasty	Accept if healed and has resumed regular activity.
Abortion	Deferral - 6 weeks Accept if greater than 6 weeks
Abscesses	Defer if suspect for anthrax or still on antibiotic. Accept if healed and off antibiotics for 72 hours.
Acne	Accept.
Acid Reflux	Accept.
Acromegaly	Accept.
Actinic Keratosis	Accept.
Actinomycosis	Defer 1 week after stopping medication and condition is resolved. Accept if greater than 1 week since stopping medication and condition is resolved.
Acupuncture	Defer 12 months if conditions below are not satisfied. Accept if the following conditions are met: 1) Performed by a licensed provider 2) Underlying condition is not cause for deferral 3) Procedure is done with single - use equipment and under aseptic conditions
Acute Renal Failure	Defer until resolved and renal function is normal for at least one week...
Acute Tubular Necrosis	Defer until recovered and renal function is normal. Accept if recovered and renal function is normal.
Addison's Disease	Permanent deferral. Note: These donors are susceptible to postural hypotension.
Adenofibroma	Accept.
Adenomas	Accept if donor knows it is benign. Refer to Medical Director to resolve any questions.



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Medical Condition	Comment
Adenovirus	Defer until asymptomatic for 3 days. Accept if asymptomatic for 3 days.
Adrenal Glands Absent	Permanent deferral.
Agammaglobulinemia	Defer if received IVIG in the last 12 months. Refer to Medical Director otherwise.
AIDS	Permanent deferral.
Alcoholic Cirrhosis	Indefinite deferral. Consult Medical Director to reevaluate eligibility if donor has
Alcoholism	Defer if under the influence. Accept if there are no signs of being under the influence.
Allergies	Accept if donor has no sinus or respiratory infections. If a rash is present, ensure it is not in the antecubital area.
Allergy Shot	Defer one day. Accept if greater than one day since the injections.
Alpha-1-Antitrypsin Deficiency	Permanent deferral if donor has emphysema or if receiving treatment (i.e. Alpha-1-proteinase inhibitor). Accept for whole blood donation only.
Alzheimer's Disease	Refer to Medical Director. Note: Need to establish medical competency.
Amoebic Dysentery	Defer 1-week after cessation of therapy and recovery. Accept if greater than one week since therapy and recovered.
Amyotrophic Lateral Sclerosis (Lou Gehrig's Disease)	Permanent deferral; cause unknown.
Anemia	Accept, if all other screening criteria are acceptable.
Aneurysms	Refer to Medical Director for approval.
Angina Pectoris	Defer if symptoms are present within the last 6 months. Advise prospective donors to obtain approval from their physician regarding blood donation. Accept if the following conditions are met: 1) Greater than 6 months since the procedure 2) No symptoms or limitation of activities in the last 6 months 3) Donor has their physician's written approval 4) Donor has medical director approval.
Angioplasty (Coronary)	Defer 6 months after procedure. Advise prospective donors to obtain approval from their physician regarding blood donation. Accept if the following conditions are met: 1) Greater than 6 months since the procedure 2) No symptoms or limitation of activities in the last 6 months 3) Donor has their physician's written approval 4) Donor has medical director approval.

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Animal Bites	<p>Domestic pets - Defer until healed. Other animals - Defer 2 months from time of bite and wound must be healed at time of donation. If Rabies vaccine needed - Defer 1 year after injection.</p> <p>Accept if:</p> <ol style="list-style-type: none"> 1) Bite was from a domestic animal and is healed 2) Greater than 2 months if bite was from other animals 3) Greater than 1 year if received rabies vaccine
Ankylosing Spondylitis	<p>Defer if motion limitation and on immunosuppressive medication.</p> <p>Accept if the following conditions are met:</p> <ol style="list-style-type: none"> 1) Donor has no limitation of motion (can sit in donor chairs)
Anthrax	<p>Defer until completion of the full course of treatment/prophylaxis, the condition is resolved, and the deferral period for the antibiotic has been met.</p> <p>Accept if the donor is off antibiotic and full course of treatment/ prophylaxis, the condition is resolved. No deferral for "possible" anthrax exposure unless on antibiotics.</p>
Aortic Stenosis	<p>Defer 12 months if donor received allogeneic or autologous blood or blood product transfusion(s) and/or tissue graft.</p> <p>Defer indefinitely if donor received a transfusion of blood or blood products collected in the United Kingdom or France since 1980.</p> <p>Accept if the following conditions are met:</p> <ol style="list-style-type: none"> 1) Surgically corrected 2) Symptom - free and no restrictions 3) Greater than 12 months since last transfusion 4) No transfusion in the UK or France. 5) Donor has letter from their provider approving blood donation
Aphthous Ulcers	<p>Defer if active/open. Accept if healed.</p>
Appendectomy	<p>Defer if not healed. Accept if healed.</p>
Arrhythmias	<p>Defer for 6 months after event.</p> <p>Accept if the following conditions are met:</p> <ol style="list-style-type: none"> 1) Greater than 6 months since the procedure (consult medical director if no procedure was performed) 2) No symptoms or limitation of activities 3) Donor has written physician approval for donation 4) Donor has medical director approval.

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Medical Condition	Comment
Arteriovenous (AV) Malformation	<p>Defer until they have resumed regular activities.</p> <p>Defer 12 months if received blood transfusion. Defer indefinitely if donor received a transfusion of blood or blood products collected in the United Kingdom or France since 1980.</p> <p>If not surgically corrected – donors needs to obtain approval from their physician regarding blood donation</p> <p>Accept if : 1) Surgically corrected and asymptomatic and has resumed normal activity 2) If not surgically corrected – donor has approval from their physician regarding blood donation 3) Donor has medical director approval</p>
Arthritis	<p>Rheumatoid arthritis - Permanent deferral.</p> <p>Accept if Osteoarthritis (degenerative joint disease) Psoriatic arthritis – Requires Medical Director evaluation.</p>
Asbestosis	<p>Permanent deferral if causing chronic lung disease. Accept if not causing chronic lung disease.</p>
Asthma	<p>Defer if symptomatic or has required oral steroids for management in the last 6 months.</p> <p>Accept if symptom-free and no oral steroids use in the last 6 months.</p>
Attention Deficit (Hyperactivity) Disorder (ADD/ADHD)	Accept
Babesiosis	Permanent deferral.
Bacterial Infections	<p>Defer 72 hours after antibiotic course completion.</p> <p>Accept if the following conditions are met: 1) Greater than 72 hours since completion of antibiotic therapy 2) Donor is feeling well and symptom-free</p> <p>Defer one week if antibiotic administered IM or IV.</p> <p>Accept if the following conditions are met: 1) Donor is feeling well and symptom-free 2) Greater than one week since the completion of IV or IM antibiotics treatment.</p>
Bee Sting	<p>Defer for one day (Computer documentation) Accept if greater than 6 hours since bee sting.</p>
Bell's Palsy	Accept.

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Medical Condition	Comment
Benign Prostatic Hypertrophy or Hyperplasia (BPH)	<p>Defer until asymptomatic</p> <p>Accept if the following conditions are met:</p> <ol style="list-style-type: none"> 1) Asymptomatic 2) Not treated with Proscar or Avodart. <p>Defer until 1 month after last dose of Proscar medication.</p> <p>Accept if:</p> <ol style="list-style-type: none"> 1) No treatment with Proscar 2) Greater than 1 month since treatment with Proscar <p>Defer until 6 months after last dose of Avodart medication.</p> <p>Accept if:</p> <ol style="list-style-type: none"> 1) No treated with Avodart. 2) Greater than 6 months if treated with Avodart
Berger's Disease	Refer to Medical Director.
Bipolar	Accept if not currently manic.
Black Lung Disease (Pneumoconiosis)	Permanent deferral.
Bladder Infection	<p>Defer until 72 hours after completing antibiotic therapy.</p> <p>Accept if the following conditions are met:</p> <ol style="list-style-type: none"> 1) Greater than 72 hours after completing antibiotic therapy 2) Donor is symptom-free.
Blood Donation	<p>Defer 8 weeks for Whole Blood donation.</p> <p>Accept if greater than 8 weeks since the whole blood donation</p> <p>Defer 16 weeks for double red cell donation.</p> <p>Accept if greater than 16 weeks since double red cell donation</p> <p>For apheresis platelet and plasma donations - See Platelet / Plasma Donation</p>
Blood Transfusion	<p>Defer 12 months if donor received allogeneic or autologous blood or blood product transfusion(s).</p> <p>Defer indefinitely if donor received a transfusion of blood or blood products collected in the United Kingdom or France since 1980.</p> <p>Accept if greater than 12 months since the transfusion and no transfusion in the UK or France.</p>
Body Alterations	<p>Defer 12 months.</p> <p>Accept if greater than 12 months since last alteration.</p>
Body Piercing or Ear	<p>Defer 12 months if not performed using single use equipment and under aseptic conditions.</p> <p>Accept if done with single use equipment and under aseptic conditions.</p>
Boils	<p>Defer until well healed. Defer if suspect for anthrax.</p> <p>Accept if healed and anthrax is not suspected.</p>
Bone Graft	<p>Defer 12 months if donor received allogeneic bone graft(s).</p> <p>Defer indefinitely if bovine.</p>

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Medical Condition	Comment
Bone Marrow Donor	Defer for 8 weeks after donation Accept 8 weeks after donation and no lingering complications
Bowen's	Accept (is carcinoma-in-situ).
BPH (Benign Prostatic Hypertrophy or Hyperplasia)	Defer until 1 month after last dose of Proscar medication. Accept if: 1) No treatment with Proscar 2) Greater than 1 month since treatment with Proscar Defer until 6 months after last dose of Avodart medication. Accept if: 1) No treated with Avodart. 2) Greater than 6 months if treated with Avodart
Brain Injury	Refer to Medical Director
Brain Surgery	Defer for CJD risk if dura mater transplant. Refer to Medical Director if for malignancy. Defer if donor had seizure (s) in the last 12 months. Accept if seizure-free in last 12 months and no malignancy.
Brain Tumor	Defer permanently if malignant. Accept if benign.
Branding	Defer 12 months for skin branding. Accept if after 12 months and completely healed with no complications.
Breastfeeding	Accept.
Bronchitis	Defer until symptom-free and off antibiotics or medications to relieve symptoms for 72 hours. Accept if the following conditions are met: 1) Off antibiotics or medications to relieve symptoms for 72 hours. 2) Asymptomatic for 72 hours.
Bursitis	Accept if resolved.
Cancer	Defer: Permanently for leukemia, lymphoma, including Hodgkin's Disease and other cancers of the blood, malignant melanoma, multiple myeloma, myelodysplastic syndrome, or polycythemia vera. Accept if: 1. Localized skin cancer (basal cell carcinoma or squamous cell carcinoma) and is completely excised and healed; Or 2. Carcinoma-in-situ of the cervix; Or 3. The donor has been cancer-free, symptom- free, treatment-free with no reoccurrence for at least 12 months, meets all other eligibility guidelines and has medical director approval to donate.
Candida Infection (Candidiasis)	Defer 1-week after cessation of medication and well, if related to antibiotic therapy or steroid therapy. Refer to Medical Director, if there is a question of immunodeficiency. Accept if greater than one week after cessation of medication (antibiotic or steroid therapy) and symptom -free.

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Medical Condition	Comment
Canker Sore	Defer if active/open. Accept if healed.
Carcinoma-In-Situ	Accept.
Cardiac Arrest- (Not the same as Heart attack)	Defer for 6 months after event. Accept if the following conditions are met: 1) Greater than 6 month and no symptoms and no limitation of activities. 2) Has a letter from their physician approving blood donation 3) Donation is approved by the medical director
Cardiac Catheterization	Defer until significant coronary artery disease is corrected. If donor has stints, consult the medical director for approval criteria. Accept if the following conditions are met: 1) Results are negative. 2) Has a letter from their physician approving blood donation 3) Donation is approved by the medical director
Cardiac Defects	Defer until donor has resumed regular activities. Defer 12 months if received blood transfusion. Defer indefinitely if donor received a transfusion of blood or blood products collected in the United Kingdom or France since 1980. Accept if: 1) Surgically corrected, symptom- free and has resumed regular activities 2) If not surgically corrected – donor has a letter from their physician approving the blood donation and approval from the medical director.
Cardiomyopathy	Defer indefinitely. Consult Medical Director to re-evaluate eligibility if donor has received a heart transplant
Carotid Bruit	Refer to Medical Director.
Carpal Tunnel Syndrome	Accept.
Casts	Defer if there was any type of surgery and until the cast is removed and all wounds are healed. Accept only if there was a simple fracture/break and cast is removed and all wounds are completely healed.
Cataplexy	Accept.
Cat-Scratch Disease	Defer until 1-week after cessation of therapy and feels well. Accept if greater than one week since completion of therapy and donor feels well.
Cauterization	Defer until healed and has resumed regular duty. Accept if healed and has resumed regular activity
Celiac disease	Defer if symptomatic. Accept if symptom-free.
Cellulitis	Consult Medical Director.
Cerebral Palsy	Accept with Medical Director evaluation. Be certain that donor safety can be ensured during phlebotomy.

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Cerebrovascular Accident	Defer for 6 months after the stroke. Advise prospective donors to obtain approval from their physician regarding blood donation Accept if: 1) Greater than 6 months and no symptoms and no limitation of activities. 2) Donor has a letter from their physician approving blood donation. 3) Donor has medical director approval
Cervical Dysplasia	Defer 6 weeks from time of biopsy and/or definitive treatment. Refer to Medical Director if carcinoma present. Accept if greater than 6 weeks since biopsy and or definitive treatment with no malignancy.
CFS (Chronic Fatigue Syndrome)	Defer indefinitely if prospective donor has been told by a doctor they have CFS.
Chagas' Disease	Permanent deferral.
Chancre	Defer until 12 months after cessation of therapy. This is a primary syphilitic lesion.
Chemotherapy	Defer during treatment period and until 6 months after treatment completed (if not for cancer). Accept if : 1) Greater than six month since completion of treatment (if not for cancer). 2) Donor has Medical Director Approval.
Chest Pain	Defer if due to heart disease – See angina pectoris. Accept if evaluated by doctor and not due to heart disease.
Chicken Pox	Defer 21 days after exposure. (3 weeks) Accept if greater than 21 days after exposure. (3 weeks) Defer for one week after lesions are completely healed. Accept if greater than one week after lesions are completely healed. Defer one year if injected with VZIG (varicella zoster immune globulin) post- exposure. Accept if greater than one year since injection with VZIG.
Chlamydia	Defer 12 months after treatment is completed. Accept if greater than 12 since treatment completion.
Cholecystectomy (Gall Bladder Removal)	Defer for 1-week after surgery. Accept if: 1) Greater than 1 week since surgery. 2) Healed, asymptomatic and has resumed regular activity.
Cholecystitis (Gall Bladder Inflammation)	Defer for 1-week after surgery. Defer for 72 hours after completion of therapy if corrected medically corrected Accept if: 1) Greater than 1 week after surgery or 72 hours after completion of medical treatment. 2) Healed, symptom-free, and resumed regular activity.

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Medical Condition	Comment
Cholelithiasis (Gall Stones)	Defer for 1-week after surgery if surgically corrected. Accept if Donor is symptom-free, no surgery and has resumed regular activity. Accept if greater than one week after surgery and donor is healed, symptom free and resumed regular activity.
Chronic Bronchitis	Defer if on antibiotic. See Medication list
Chronic Fatigue Syndrome (CFS)	Defer indefinitely if prospective donor has been told by a doctor they have CFS.
Chronic Granulomatosis Disease	Requires Medical Director evaluation.
Chronic Renal Failure	Defer if chronic renal disease. Accept if condition resolved and kidney functions normal.
Cirrhosis	Indefinite deferral. Reevaluate if donor has received a liver transplant.
CJD (Creutzfeldt-Jacob Disease)	Permanent deferral.
Cluster Headaches	Defer if symptomatic Accept if donor feels well and symptom- free.
Coagulation Factor Deficiencies (Congenital)	Permanent deferral.
Coccidiomycosis	Defer until after treatment. Accept if donor is symptom -free, feels well and off all antifungal therapy for 1-month.
Cold Sores	Defer if active/open. Accept if healed.
Colds	Defer 72 hours if taking antibiotics or cold medications 72 hours. Accept if the following conditions are met: 1) Off antibiotics, or cold medications for 72 hours. 2) Donor is asymptomatic for 72 hours.
Colitis, Non-Specific	Defer if donor has diarrhea and or Crohn's disease or ulcerative colitis. Accept if the following conditions are met: 1) No diarrhea for the past 7 days. 2) And donor does not have Crohn's disease or ulcerative colitis.
Collagen Implant (injection)	Defer 12 months unless cell culture derived. Consult physician to determine type of injection. Accept if cell culture derived or if 12 months since implant.
Colonoscopy	Defer 72 hours post procedure, if no biopsy. Defer until results available, if biopsy was performed. If results are available, ask donor if physician told them whether additional testing needed or if any abnormalities were found. Consult Medical Director to resolve any questions. Accept if 72 hours post procedure and biopsy was normal.
Compartmental Syndrome	Defer until well healed and has resumed regular activity. Accept if well healed and has resumed regular activity.
Concussion	Defer until off medication or asymptomatic or symptomatic. Accept if well and recovered and underlying condition is not a cause for deferral.
Congenital Heart Defect	Refer to medical director for approval.

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Medical Condition	Comment
Congestive Heart Failure	Refer to medical director for approval.
Conization	Refer to medical director for approval.
Conjunctivitis	Defer until resolved and asymptomatic. Accept if donor is asymptomatic and condition has been resolved.
Convulsions	Defer if seizures in the last 6 months. Accept if: 1) Seizures are well controlled, with or without medication. 2) No seizures in the last 6 months.
COPD (Chronic Obstructive Pulmonary Disease)	Requires Medical Director evaluation.
Coronary Artery Bypass Surgery	Defer 6 months after procedure. Defer 12 months if received blood or blood product transfusion. Defer indefinitely if donor received a transfusion of blood or blood products collected in the United Kingdom or France since 1980. Accept if: 1) Greater than 6 months since the procedure 2) Greater than 12 months from the blood transfusion and no transfusion in the UK or France 3) Donor has letter from their physician approving blood donation 4) Donor is asymptomatic and no limitation of activities. 5) Donor has medical director approval.
Costochondriti	Accept.
Coxsackie Virus	Defer 2 weeks after recovery. Accept if greater than 2 weeks since recovery and donor feels well.
Crest	Permanent deferral.
Creutzfeldt-Jacob Disease (CJD)	Permanent deferral.
Crohn's	Permanent deferral.
Cryosurgery	Defer 72 hours. Determine and evaluate underlying condition for possible need to defer an additional period. Accept if greater than 72 hours and underlying condition is no reason for deferral.
Cryptococcosis	Defer until off antifungal therapy for one month. Accept if well and asymptomatic and off all antifungal therapy for 1- month.
Cryptosporidiosis	Defer until treated and no diarrheas for seven days. Accept if treated and no diarrhea for the past 7 days.
Cushing's Disease	Defer if untreated. Accept if treated.
Cutaneous Larva Migrans	Defer for 1-week after cessation of therapy and feels well. Accept if greater than 1 week since the cessation of therapy
Cyst Removal	Defer for 6 weeks post excision. Accept if greater than 6 months since removal.
Cystic Fibrosis	Permanent deferral.
Cystitis	Defer until 72 hours after completing antibiotic therapy and resolved. Accept if greater than 72 hours since completion of antibiotic therapy and condition is resolved.

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Medical Condition	Comment
Cytomegalovirus (CMV)	Defer if symptomatic. Refer to Medical Director for recent diagnosis of infection. Accept if antibody positive but symptom free.
Dementia	Refer to Medical Director. Note: Need to establish medical competency.
Dengue Fever	Defer minimum 120 days from resolution of symptoms. Requires Medical Director evaluation.
Dental Procedures/Surgery	Defer 24 hours for cleanings or fillings. Defer 72 hours for root canal, oral surgery, or tooth extraction (including wisdom tooth). Defer 12 months for periodontal bone graft (bovine-derived that is FDA/CDRH approved). Defer indefinitely if graft source unknown. Accept if: 1) Greater than 24 hours for cleaning or fillings 2) Greater than 72 hours for root canal, oral surgery, or tooth extraction (including wisdom tooth). 3) Greater than 12 months if bone graft was performed
Depression	Accept.
Dermatitis	Defer only if lesions in area of venipuncture. Accept if no lesion ins area of the venipuncture.
Dermatitis Herpetiformis	Defer if symptomatic. Accept if asymptomatic.
Dermatomyositis	Permanent deferral.
Diabetes (High Blood Sugar)	Defer indefinitely for vCJD if bovine (beef) insulin was injected at any time since 1980. Diabetes Insipidus – Requires Medical Director evaluation. Accept if: Diabetes Mellitus and donor is on oral hypoglycemic, or insulin and dosage is controlled and stable.
Dialysis	Defer 12 months after last dialysis. Accept if greater than 12 months since last dialysis procedure.
Diarrhea	Defer if donor has diarrhea. Accept if greater than 7 days since last episode of diarrhea.
Dilation and Curettage	Defer seven days post-procedure unless associated with pregnancy or malignancy. Requires Medical Director evaluation for malignancy. Accept if: 1) Greater than 7 days since procedure if no pregnancy or malignancy. 2) Greater than 6 weeks if associated with pregnancy. 3) Greater than six weeks and has medical director approval if associated with malignancy.
Diverticular Disease	Defer if active disease or donor is febrile. Accept if no active disease and/or afebrile.
Down's Syndrome	Defer if donor does not understand the procedure or is mentally incompetent. Accept if mentally competent and understands procedure.
Dressler's Syndrome	Defer if symptomatic and unresolved. Defer 12 months if received blood or blood component transfusion. Accept after resolved and asymptomatic.

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Medical Condition	Comment
Ear Infection (Otitis Media)	Defer until 72 hours after cessation of therapy and feels well. Accept if greater than 72 hours after completion of treatment and donor feels well.
Ear or Body Piercing	Defer 12 months, if not performed using single -use equipment and under aseptic conditions. Accept only if done with single-use equipment and under aseptic conditions.
Ectopic Pregnancy	Defer 6 weeks. Accept if greater than 6 weeks.
Eczema	Defer if lesions are in the venipuncture area. Accept if lesions not in area of venipuncture.
Ehlers Danlos Syndrome	Permanent deferral.
Embolism	Defer 6 months after event and if not on anticoagulation. Accept if greater than 6 months and not taking anticoagulants.
Emphysema	Requires Medical Director evaluation. Defer if donor is symptomatic. Accept if donor has medical director approval and is asymptomatic.
Encephalitis	Refer to Medical Director if donor had this diagnosis or treatment in the past 12 months. Accept if more than 12 months ago and no serious complications or disabling encephalopathy, cognitive or motor dysfunction interfering with occupation or activities of daily living, progressing over weeks to months in the absence of an explanation.
Endocarditis	Defer if symptomatic. Accept if not currently having symptoms and not on continuous antibiotic prophylaxis.
Endometriosis	Accept.
Endometritis	Defer 1 week after recovery and donor is afebrile. Accept if greater than 1 week since recovery and donor is afebrile and feels well.
Endoscopy	Defer if biopsy was performed until results are available. If results are available, ask donor if physician told him whether additional testing was needed or if any abnormalities were found. Consult Medical Director to resolve any questions. Accept if 72 hours post procedure if no biopsy was performed.
Eosinophilic Granuloma Histocytosis	Permanent deferral
Epilepsy	Defer if seizure in the past six months. Accept as long as well controlled, and no seizures in the last 6 months.
Epistaxis	Defer if donor has a bleeding disorder. Accept if donor does not have bleeding disorder.
Epstein Barr Virus	Refer to Medical Director for recent diagnosis of infection. Accept if donor is antibody positive but symptom free.
Erythema Nodosum	Defer until recovered. Accept if recovered and asymptomatic.
Erythrocytosis	Requires Medical Director evaluation of underlying cause. Accept if not related to polycythemia vera, chronic disease, or myeloproliferative disorder.
Esophagitis	Accept if not from infectious etiology

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Medical Condition	Comment
Eye Conditions	1) Conjunctivitis (pink eye) -Defer 72 hours after completion of antibiotic treatment and donor feels well. Accept if treatment is complete and donor feels well. 2) Glaucoma – Accept 3) Styes - Defer until treatment complete. Accept if treatment is complete. 4) Chalazion - Accept.
Fainting	Requires Medical Director evaluation. Permanently ineligible if frequent and recurring.
Fatty Tumors	Defer if malignant. Accept if donor knows it is benign. Refer to Medical Director to resolve any questions.
Fever Blisters	Defer if active/open. Accept if healed
Fibrocystic Disease Of Breast	Accept.
Fibroids	Accept
Fibromyalgia	Accept
Fifth's Disease	Defer until donor afebrile and free of major symptoms. Exposure requires a 21-day deferral from time of exposure. (3 weeks) Accept if greater than 21 days (3 weeks) since time of exposure and donor is afebrile and asymptomatic.
Flu	Defer donors with active symptoms of the flu until symptom-free and off medications for 72 hours. Accept if off medications and symptom free for 72 hours.
Food Poisoning	Defer 7 days and until feeling well and asymptomatic. Accept if greater than 7 days since incident and donor is asymptomatic.
Fractures	Defer if there was any type of surgery and until the cast is removed and all wounds are completely healed. Accept only if there was a simple fracture/break and donor is not on crutches.
Fungal Infection	Defer until off antifungal therapy for 1 month. Accept if involving only skin or nails and away from venipuncture site. Accept if other tissues involved and donor is well and asymptomatic and off all antifungal therapy for 1 month.
G6PD Deficiency	Defer for allogeneic RBC donations. Accept for platelet donation and plasmapheresis.
Gall Bladder Inflammation (Cholecystitis)	Defer for 1-week after surgery. Defer for 72 hours after completion of therapy if corrected medically corrected Accept if: 1) Greater than 1 week after surgery or 72 hours after completion of medical treatment. 2) Healed, symptom free and resumed regular activity.
Gall Bladder Removal (Cholecystectomy)	Defer for 1-week after surgery. Accept if: 1) Greater than 1 week since surgery. 2) Healed, asymptomatic and has resumed regular activity.

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Gall Stones (Cholelithiasis)	Defer for 1-week after surgery if surgically corrected. Accept if: 1) Greater than one week after surgery and donor is symptom free. 2) Donor is symptom free and no surgery. 3) Must be healed, symptom free and resumed regular activity.
Ganglion Cyst	Accept.
Gastric Bypass	Defer 6 weeks after discharge. Accept if: 1) Greater than 6 weeks post procedure. 2) The incision is must be healed, donor has returned to normal activities 3) The donor has approval from their physician for blood donation.
Gastritis	Defer until symptom free. Accept if pain-free.
Gastroesophageal Reflux Disease (GERD)	Accept.
Genital Herpes	Defer while active lesions present and for 1 week afterwards. Accept if greater than 1 week and when lesions are inactive.
Genital Warts (Human Papilloma Virus)	Defer until healed if recently removed. Accept if healed.
GERD (Gastroesophageal Reflux Disease)	Accept.
Giardiasis	Defer 1 week after cessation of therapy and feels well. Accept if greater than 1 week since completion of therapy and donor feels well.
Glaucoma	Accept.
Glomerulonephritis	Defer if chronic renal disease. Accept if condition resolved and kidney functions normal.
Glomerulosclerosis	Defer if chronic renal disease. Accept if condition resolved and kidney functions normal.
Gonorrhea	Defer 12 months after treatment completed. Accept is greater than 12 months since treatment completion.
Gout	Defer until inactive. Accept if controlled or on medication (refer to Medication List).
Grafts	Defer 12 months for donors who have received allogeneic Defer indefinitely if bovine. Defer autologous graft for 1 day if not healed Accept if greater than 12 months post procedure and graft was not bovine. Accept autologous graft if healed
Granuloma Annulare	Defer if antecubital area is involved. Accept as long as antecubital area not involved.
Grave's Disease	Defer if patient has abnormal thyroid test results at last doctor's visit. Accept if patient reports normal thyroid tests at last visit to MD and feels well.
Growth Hormone	Permanent deferral if donor received human pituitary-derived growth hormone. Accept if donor received only recombinant growth hormone. (Recombinant growth hormone became commercially available in 1985.)

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Medical Condition	Comment
Guillain-Barre Syndrome	Defer until recovered and symptom free. Accept if recovered and asymptomatic
Hairy Cell Leukemia	Permanent deferral.
Hand, Foot and Mouth Disease	Defer 72 hours after treatment Accept the following criteria is met: 1) Donor has been treated and symptom-free. 2) Greater than 72 hours since treatment.
Hashimoto's Thyroiditis	Defer if patient has abnormal thyroid test results on last doctor's visit. Accept if patient reports normal thyroid tests results at last visit to MD and feels well.
Hay Fever	Accept.
Head Injury	Defer if injury resulted in permanent neurological damage. Accept if injury did not result in permanent neurological damage. Otherwise requires Medical Director evaluation.
Headache	Defer until resolved and donor feels well for cluster, migraine, tension headaches. Accept if headache is resolved and donor feels well.
Heart Attack	Defer for one year. Accept if: all conditions below are met. 1) Greater than 1 year this event. 2) Donor is asymptomatic and has no limitation of activities. 3) Donor is not on any cardiac medication except anti-platelet agents. 4) Donor's physician has given written approval regarding blood donation. 5) Donor has medical director approval.
Heart Murmurs	Defer until donor is symptom free with no activity limitation, and no cardiac medications Accept if the following conditions are met: 1) Donor is asymptomatic. 2) Donor has no activity limitations. 3) Donor is not on any cardiac medications.
Heart Surgery	Defer for 1 year. Accept if the following conditions have been met. 1) One year since cardiac bypass surgery or other cardiac surgery. 2) Donor is not on any cardiac medications (excluding anti-platelet drugs, i.e., A.S.A.) 3) Donor has resumed normal activities. 4) Donor is asymptomatic. 5) Donor has physician approval for donation. 6) Donor has medical director approval.
Heartburn	Accept.
Heat Injuries	Defer 6 months if treatment obtained in an emergency room or if donor was hospitalized. Accept if the following conditions are met. 1) Minor heat exhaustion/dehydration with no hospitalization. 2) Greater than 6 months since hospitalization and donor has returned to normal activities.
Helicobacter Pylori	Accept.

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Hematuria	Defer until evaluated by doctor, then reevaluate with diagnosis. Accept if underlying condition has been resolved and the condition is no cause for deferral.
Hemochromatosis	Indefinite deferral.
Hemodialysis	Defer 12 months after last dialysis. Accept if greater than 12 months since last dialysis.
Hemolytic Anemias	Refer to Medical Director.
Hemophilia	Permanent deferral.
Hemorrhoids	Defer until healing is complete if post-operative. Accept if no bleeding and therapy or treatment is complete.
Henoch-Schönlein Purpura	Defer until disease completely inactive. Defer if chronic renal failure is present. Accept if condition is resolved and kidney functions normal.
Hepatitis	Defer 1 year from the date of last contact if sexual contact or living with a person who has HBV or HCV infection. Defer if the type of Hepatitis is unknown. Defer if donor is confirmed positive for Hepatitis B or C. Accept if: 1) Non-viral hepatitis 2) Greater than 1 year since contact was with someone who was asymptomatic for Hepatitis C.
Hereditary Angioedema	Defer permanently if symptomatic. Accept for RBC donation only if asymptomatic.
Hereditary Spherocytosis	Defer permanently if for RBC donations. Accept for plasma or platelet donations only.
Hernia	Accept.
Herniated Disc	Accept.
Herpangina	Defer for 2 weeks (infection in the mouth caused by Coxsackie A virus). Accept if greater than 2 weeks and donor is symptom free.
Herpes Simplex	Defer if active/open. Accept if healed.
Hidradenitis [inflammation of sweat gland(s)]	Defer until antibiotic therapy is complete. Accept if completed antibiotic therapy.
High Blood Pressure	Defer if blood pressure is outside acceptable limits. Accept if controlled with medications (check Medication List) and blood pressure is acceptable at the time of donation.
Hirschsprung's Disease	Defer if symptomatic. Accept if recovered and asymptomatic
Histoplasmosis	Permanent deferral if donor has systemic or active disease. Accept if disease diagnosed by chest x-ray findings as inactive disease.
HIV Test Confirmed Positive	Permanent deferral.
HIV Test-Not Confirmed	Permanent deferral.
Hodgkin's Disease	Permanent deferral.
HPV (Human Papilloma Virus)	Accept

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Human Bite	Defer 12 months. Accept if greater than 12 months and site is healed.
Human T-Cell Lymphotropic Viruses, types	Permanent Deferral.
Huntington's Disease	Permanent deferral. Accept family members if they meet donor criteria. The disease is inheritable, not contagious.
Hydrocele	Defer until incision is healed. Accept if : 1) Donor has been released from physician's care, feels well, and returned to duty. 2) If surgery is involved less than one day hospitalization, without allogeneic or autologous blood or blood product transfusion(s), organ or tissue transplants. Otherwise refer to Medical Director.
Hydrocephalus	Defer if active history, mentally incompetent or has an infection. Accept if mentally competent, no infection, no active seizure in the past six months.
Hyperlipidemia	Acceptable.
Hyperparathyroidism	Requires Medical Director evaluation of underlying cause.
Hypertension	Defer if blood pressure is outside acceptable limits. Accept if controlled with medications (check Medication List) and blood pressure is acceptable at the time of donation.
Hyperthyroidism	Defer if donor thyroid test results were abnormal on their last doctor's visit. Accept if donor reports normal thyroid tests results at last visit to medical provider and feels well.
Hypoglycemia	Defer if donor has not eaten before coming to donate or cannot eat before starting the donation. Accept if donor has eaten before presentation. Encourage eating before donation.
Hypoparathyroidism	Evaluate underlying cause; refer to Medical Director if necessary.
Hypothyroidism	Defer if donor thyroid test results were abnormal on their last doctor's visit. Accept if donor reports normal thyroid tests results at last visit to MD and feels well.
Hysterectomy	Defer 12 months if received blood transfusion. Defer indefinitely if donor received a transfusion of blood or blood products collected in the United Kingdom or France since 1980. Defer until released from doctor's care, donor feels well and has resumed full activity. Accept if: 1) Released from doctor's care, feels well, and full activity has been resumed. 2) Greater than 12 months since transfusion and no transfusions in the UK or France.
Idiopathic Thrombocytopenic Purpura (ITP)	Permanent deferral if adult form of ITP. Accept if donor had childhood ITP (up to age 13) and now well.
Immunizations	See specific vaccines.
Infections	See Bacterial Infections
Infectious Mononucleosis	Defer until symptom free. Permanent deferral if infectious mononucleosis- associated hepatitis. Accept if symptom free and infectious mononucleosis was not associated with hepatitis.
Injuries	See specific entity.

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Insect Bites	Defer if bite-site is infected or in area of venipuncture. Accept if there is no infection and bite is not in area of the venipuncture.
Insecticide Exposure	Evaluate on individual basis; find out through public agencies the chemical nature of the agent; determine if this would alter red cell storage or prove dangerous to a patient. Consult the medical director for acceptance.
Irritable Bowel Syndrome	Defer until symptom free and no longer taking any medications that would cause a deferral. Accept if symptom free and not taking deferring medications.
Isosporiasis	Permanent deferral if chronic intestinal infection (> 1 month duration of diarrhea). Accept if intestinal infection was less than one month and donor is symptom free.
Itching	Defer until asymptomatic. Accept if donor is symptom free and underlying cause is not a reason for deferral.
ITP (Idiopathic Thrombocytopenic Purpura)	Permanent deferral if adult form of ITP. Accept if donor had childhood ITP (up to age 13) and now well.
Jaundice	Evaluate cause, consult medical director.
Kaposi's Sarcoma	Permanent deferral
Keratoconjunctivitis	Defer until resolved and well. Accept if condition is resolved and donor feels well.
Kidney Stones	Accept.
Kidney Transplantation	Permanent deferral.
Langerhans Cell Histiocytosis	Permanent deferral.
Laparoscopy	Defer 72 hours if for tubal ligation. Accept if greater than 72 hours and donor had tubal ligation Defer 1 month, needs medical director approval based on reason for the procedures. Accept if greater than one month for all other procedures and donor has medical director approval.
Laparotomy	Defer until incision is healed (minimum of 6 weeks) and released from physician's care. Document reason for laparotomy. Accept if the following conditions are met: 1) Greater than 6 weeks and incision is healed. 2) The reason for the procedure is not a cause for deferral.
LEEP (Loop Electrosurgical Excision Procedure)	Used to treat cervical dysplasia. Defer 6 weeks. Accept if the following conditions are met: 1) Greater than 6 weeks since procedure. 2) Donor has resumed normal activity. 3) Donor has medical director approval.
Left Bundle Branch Block	Defer until donor is symptom free Accept if the following conditions are met: 1) Donor is asymptomatic and approved by donor's physician. 2) Donor has medical director approval.

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Legionnaire's Disease	Defer 72 hours after antibiotic course completion. Accept if the following conditions are met: 1) Greater than 72 hours since completion of antibiotic therapy. 2) Donor is feeling well and symptom-free. Defer one week if antibiotic administered IM or IV Accept if the following conditions are met: 1) Donor is feeling well and symptom-free 2) Greater than one week since the completion of IV or IM antibiotics treatment. Refer to Medical Director for resolution of questions
Leishmaniasis	Permanent Deferral
Leprosy	Permanent Deferral
Leukemia	Permanent Deferral
Leukoplakia	Accept.
Lipomas	Defer if malignant. See Cancer. Accept if not in antecubital areas and are benign.
Liver Disease	Permanent deferral if current. Accept if Reye's Syndrome and now well. See specific entities.
Lou Gehrig's	Permanent deferral
Lung Disorders	See specific entity. Requires Medical Director evaluation for approval
Lung Surgery	Defer until release from doctor's care and donor feels well. Requires Medical Director evaluation of reason for procedure. Underlying condition must be documented. Accept if the following conditions are met: 1) Donor has been released from doctor's care and feels well. 2) Underlying condition is not cause for deferral. 3) Donor has medical director approval for donation.
Lupus (Discoid)	Defer if other organs or body systems are involved. Accept if only skin involved.
Lupus (Systemic)	Permanent deferral.
Lyme Disease	Defer if febrile or symptomatic. Usually occurs 2 weeks after a tick bite. Typical symptoms may include flu-like symptoms, skin rash, and/or joint pain. Accept if greater than 12 months after completion of therapy and asymptomatic. Accept with positive antibody if above criteria are met.
Lymphadenopathy	Requires Medical Director evaluation - May be sign of HIV infection or other diseases.
Malaria	Defer until 3 years after completion of therapy Accept if the following conditions have been met: 1) Greater than 3 years since completion of therapy. 2) The donor has been asymptomatic for 3 years since the completion of therapy. 3) Donor is currently asymptomatic.
Malignancy	Permanent deferral for malignant melanoma, leukemia, lymphoma, Hodgkin's disease, multiple myeloma, myelodysplastic syndrome, polycythemia vera. Accept all other malignancy based on medical director approval.

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Manic-Depressive	Defer if not mentally or legally competent. Accept if mentally and legally responsible. Refer to Medication List, if applicable.
Mastitis	Defer 2 weeks after cessation of therapy and feels well. Accept if greater than 2 weeks since completion for therapy and donor feels well.
Measles	Defer until donor afebrile and free of major symptoms. Exposure requires a 21-day deferral from time of exposure. Accept if : 1) Donor is afebrile and symptom free 2) Greater than 21 days from the date of exposure and donor is symptom free.
Melanoma	Permanent deferral
Meniere's Disease	Defer if symptomatic. Accept if currently asymptomatic.
Meningitis	Defer for – 4 weeks. Accept if greater than 4 weeks and donor has not been diagnosed with West Nile Virus. Defer for 120 days after diagnosis or onset of illness, whichever is later, if meningitis is due to West Nile Virus. Accept if greater than 120 days from diagnosis or onset if diagnosed with West Nile Virus, whichever is the longest. Refer to Medical Director if donor is uncertain of diagnosis and/or treatment.
Mickulicz Syndrome	Permanent deferral.
Migraine	Defer until resolved and feels well. Accept if migraine is resolved and donor feels well.
Miscarriage	Defer 6 weeks. Accept if greater than 6 weeks and no other cause for deferral exist.
Mitral Insufficiency or Mitral Valve Prolapse	Defer until asymptomatic Accept if the following conditions are met : 1) Asymptomatic -no arrhythmias. 2) No limitation of activities. 3) On prophylactic antibiotics 4) On Inderal (Propranolol). 5) Has medical director approval Note: Other medications require Medical Director approval.
Mononucleosis ("Mono")	Defer until symptom free. Accept if symptom free and condition was not associated with hepatitis.
Multiple Sclerosis	Permanent deferral.

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Mumps	Defer 14 days after the resolution of all symptoms of infection. Accept if greater than 14 days since resolution of all symptoms. (2weeks) Defer 28 days after the last recognized contact if donor has had contact with a person with mumps. (4 weeks) Accept if greater than 28 days since last contact with a person with mumps. Contact is defined as any of the following situations: 1) Living in the same dwelling as a patient with mumps diagnosis. 2) Recognized direct contact with upper respiratory secretions or sharing utensils that might be contaminated with upper respiratory secretions with a patient with mumps diagnosis. 3) Recognized contact within three feet of a patient with a mumps diagnosis without the use of barrier precautions.
Murmurs	Defer if donor is symptomatic or has complication due to murmur; refer to medical director for deferral period. Accept if following criteria are met: 1) Asymptomatic. 2) No activity limitations. 3) Donor is not on any cardiac medications.
Muscular Dystrophy	Determine type and contact Medical Director for deferral status. Defer if donor does not know type. Accept if medical director approves.
Musculoskeletal Injuries	Defer until no longer on crutches. Accept if donor does not use under arm crutches.
Myasthenia Gravis	Permanent deferral.
Mycobacterial Infections	Permanent deferral if disseminated or extra pulmonary disease, all types. Defer for active infection. Accept if greater than 12 months after completion of therapy with no evidence of active disease.
Mycosis Fungoides	Permanent deferral.
Myocardial Infarction (MI)	Defer for one year. Accept if all of the following conditions are met. 1) Greater than 1 year since the event. 2) Donor is asymptomatic and has no limitation of activities. 3) Donor is not on any cardiac medications except anti-platelet agents. 4) Donor's physician has given written approval regarding blood donation. 5) Donor has medical director approval.
Myocarditis	Defer for 1 year after symptoms resolve. Permanent deferral if congestive heart failure present. Accept if greater than one year, symptoms are resolved and no congestive heart failure.
Narcolepsy	Defer if falling asleep during the screening process. Accept, if awake.
Nephritis	Defer until renal function is normal and condition is resolved. Accept if renal function normal and condition resolved otherwise refer to Medical Director.
Nephroblastoma (Wilm's Tumor)	Permanent deferral.
Nephroscleros	Requires Medical Director evaluation.

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Neuralgia	Accept.
Neuroblastom	Permanent deferral.
Neurofibromatosis	Defer until donor is in good health (no infection or malignancy) and no lesion in the antecubital area. Accept if donor is in good health (no infections or malignancies) and has no lesions in the antecubital area that may interfere with the aseptic scrub.
New Variant Creutzfeldt-Jacob Disease (vCJD)	Permanent Deferral
Non Specific Urethritis	Defer until asymptomatic and therapy complete. Accept if asymptomatic and therapy is complete.
Nose Bleed	Defer if donor has a bleeding disorder. Accept if donor does not have bleeding disorder.
Nursing Mothers	Accept.
Orthopedic Injuries	Defer until no longer on crutches. Okay to accept if donor uses permanent crutches (not under the arm crutches). Accept if donor does not use under arm crutches.
Osgood-Schlatter Disease	Accept.
Osteomyelitis	Defer until 1 week after cessation of therapy and feels well. Accept if greater than one week after completion of therapy.
Osteoporosis	Accept.
Otitis Media (Ear Infection)	Defer until 24 hours after cessation of therapy and feels well. Accept if greater than 24 hours since completion of therapy and donor feels well.
Ovarian Cysts	Defer if diagnosis of malignancy. Acceptable if released from doctor's care and donor feels well.
Pacemaker	Permanent deferral.
Paget's Disease Of Bone	Accept – this is a metabolic bone disease.
Paget's Disease Of Breast	Permanent deferral
Palpitations	Accept.
Pancreatitis	Defer until asymptomatic and well. Accept if symptom free and donor feels well.
Papilloma Virus	Defer until asymptomatic and well. Accept if symptom-free.
Parkinson's Disease	Requires Medical Director evaluation.
Paroxysmal Nocturnal Hemoglobinuria	Permanent deferral.
Parvovirus	Defer until donor afebrile and free of major symptoms. Exposure requires 21-day deferral from time of exposure. Accept if: 1) Donor is afebrile and symptom free. 2) Greater than 21 days since exposure and donor is symptomatic.

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Pelvic Inflammatory Disease (PID)	Defer until resolved and feels well. Defer 12 months from completion of treatment if causative agent is sexually transmitted (i.e. gonorrhea). Accept if : 1) Donor is asymptomatic and donor feels well. 2) Greater than 12 months after the completion of treatment if causative agent is sexually transmitted.
Pemphigoid/Pemphigus Vulgaris	Permanent deferral.
Pericarditis	Defer until resolved, off medications and symptom free. Accept if resolved, asymptomatic and not on related medications.
Periodontal Disease	Defer until 30 days from last episodes. Accept if the following conditions are met: 1) Past episodes were acute. 2) The donor has been asymptomatic for at least 30 days prior to the day of donation. 3) No dental or periodontal therapy has been necessary for at least 30 days prior to the day of donation.
Peripheral Vascular Disease	Defer if heart disease is a cause for deferral. Question donor about heart disease. Accept if donor meets all other criteria.
Peritoneal Dialysis	Defer 12 months after last dialysis. Accept if greater than 12 months since last dialysis.
Permanent Make-Up	Defer one week to ensure site has healed properly if the state meets the requirements. If after 7 days the site is not healed, defer an additional 7 days. Defer 12 months post-application if the state does not meet the requirements. Accept only if: 1. Greater than 7 days and was applied by a state regulated entity with sterile needles and ink that has not been re-used. 2) Greater than 12 months if the state does not meet the requirements above. Refer to ASBP State Tattoo and Permanent Make-Up Reference List to determine if the state in which tattoo was applied meets these requirements.
Pernicious Anemia	Defer if hemoglobin or hematocrit is not acceptable for donation. Accept if hemoglobin or hematocrit is acceptable for donation.
Phlebitis	Defer until off medication for 1 month and asymptomatic. Accept if greater than 1 month since the completion of medication and donor is asymptomatic.
Physical Therapy	Defer until no longer on crutches. Okay to accept if donor uses permanent crutches (not under the arm crutches). Accept if donor is not using under arm crutches.
PID (Pelvic Inflammatory Disease)	Defer until resolved and feels well. Defer 12 months from completion of treatment if causative agent is sexually transmitted (i.e. gonorrhea). Accept if : 1) Donor is asymptomatic and donor feels well 2) Greater than 12 months after the completion of treatment if causative agent is sexually transmitted.
Pilonidal Cysts	Defer until afebrile and off medications. Accept if meets all donor criteria, no chronic fever and no medications.

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Pityriasis	Defer if lesions are in the venipuncture site. Accept if lesions are not in venipuncture site.
Plasma Donation (Single)	Defer 48 hours following uncomplicated procedure, less than 100 ml of red blood loss in the machine. Defer 8 weeks if procedure is complicated by red cell loss of 100 mL or greater in machine. Accept if: 1) Greater than 48 hours and no complications 2) Greater than 8 weeks after a complicated procedure See FDA guidelines for multiple collections.
Platelet Donation/Plateletpheresis	Defer 48 hours following uncomplicated procedure, less than 100 ml of red blood loss in the machine. Defer 8 weeks if procedure is complicated by red cell loss of 100 mL or greater in machine. Accept if: 1) Greater than 48 hours and no complications 2) Greater than 8 weeks after a complicated procedure. See FDA guidelines for multiple collections.
Pleurisy	Defer until symptom free. Accept if symptom free.
Pneumoconiosis (Black Lung Disease)	Permanent deferral
Pneumonia	Defer until off antibiotics 72 hours, resolved and asymptomatic. Permanent deferral if recurrent pneumonia (>1 episode of acute pneumonia within 1 year diagnosed by culture and radiologic evidence). Accept if the following conditions are met: 1) Greater than 72 hours since completion of antibiotic therapy and symptom free 2) Only one prior episode of pneumonia in the last year.
Pneumothorax	Defer for medical director approval after evaluation of the cause of the pneumothorax. Accept if no known disease. Requires Medical Director evaluation if known disease.
Poison Ivy	Defer until donor is symptom free and no lesions in the venipuncture area. Accept if venipuncture site is free of lesions and donor has no other symptoms.
Poliomyelitis	Defer if active infection. Accept unless there is active infection.
Polycystic Kidney Disease	Defer permanently if renal function abnormal. Accept if renal function normal
Polycythemia	Permanent deferral
Polymyalgia Rheumatica	Permanent deferral
Polymyositis	Permanent deferral
Polyuria	Defer permanently if renal failure. Accept if no renal failure.
Porphyria Cutanea Tarda	Permanent deferral.

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Post-Splenectomy	Defer until donor feels well if removed due to trauma. If removed due to disease, needs medical director approval. Accept if: 1) Spleen removed because of trauma and donor feels well 2) Has medical director approval if removed because of
Platelet Donation/Plateletpheresis	Defer 48 hours following uncomplicated procedure, less than 100 ml of red blood loss in the machine. Defer 8 weeks if procedure is complicated by red cell loss of 100 mL or greater in machine. Accept if: 1) Greater than 48 hours and no complications 2) Greater than 8 weeks after a complicated procedure. See FDA guidelines for multiple collections.
Pleurisy	Defer until symptom free. Accept if symptom free.
Pneumoconiosis (Black Lung Disease)	Permanent deferral
Pneumonia	Defer until off antibiotics 72 hours, resolved and asymptomatic. Permanent deferral if recurrent pneumonia (>1 episode of acute pneumonia within 1 year diagnosed by culture and radiologic evidence). Accept if the following conditions are met: 1) Greater than 72 hours since completion of antibiotic therapy and symptom free 2) Only one prior episode of pneumonia in the last year.
Pneumothorax	Defer for medical director approval after evaluation of the cause of the pneumothorax. Accept if no known disease. Requires Medical Director evaluation if known disease.
Poison Ivy	Defer until donor is symptom free and no lesions in the venipuncture area. Accept if venipuncture site is free of lesions and donor has no other symptoms.
Poliomyelitis	Defer if active infection. Accept unless there is active infection.
Polycystic Kidney Disease	Defer permanently if renal function abnormal. Accept if renal function normal
Polycythemia	Permanent deferral
Polymyalgia Rheumatica	Permanent deferral
Polymyositis	Permanent deferral
Polyuria	Defer permanently if renal failure. Accept if no renal failure.
Porphyria Cutanea Tarda	Permanent deferral.

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Post-Splenectomy	Defer until donor feels well if removed due to trauma. If removed due to disease, needs medical director approval. Accept if: 1) Spleen removed because of trauma and donor feels well 2) Has medical director approval if removed because of disease.
Pott's Disease (Tuberculous spondylitis)	Permanent deferral if disseminated or extra pulmonary disease, all types. Defer for active infection. Accept if greater than 12 months after completion of therapy with no evidence of active disease.
Pregnancy	Defer during pregnancy and for 6 weeks after delivery or termination. Accept if greater than six weeks delivery or termination. Donors who have had any pregnancies (including only one) are considered "TRALI risk" donors. Apheresis plasma and whole-blood-derived plasma for transfusion from all blood groups (A, B, AB, and O) should not be manufactured unless donor is tested negative for HLA I and II antibodies. If donor is tested positive for HLA I or II antibodies, apheresis plasma, whole- blood-derived plasma for transfusion and other high plasma-volume blood components (including apheresis platelets) from all blood groups should not be manufactured.
Premature Atrial Contractions	Defer until asymptomatic, no medications for this condition and donor has any restriction of activities. Accept if the following conditions are met: 1) Donor is asymptomatic. 2) Donor has no restrictions on duty or activity. 3) Donor is not currently taking medications for this condition.
Progressive Multifocal Leukoencephalopathy	Permanent deferral.
Progressive Systemic Sclerosis	Permanent deferral.
Prostatitis (also see Benign Prostatic Hyperplasia)	Defer until asymptomatic Accept if the following conditions are met: 1) Asymptomatic 2) Not treated with Proscar or Avodart. Defer until 1 month after last dose of Proscar medication. Accept if the following conditions are met: 1) Asymptomatic 2) Greater than 1 month if treated with Proscar Defer until 6 months after last dose of Avodart medication. Accept if the following conditions are met: 1) Asymptomatic 2) Greater than 6 months if treated with Avodart
Protein C Deficiency	Defer for plasma donation. Accept for RBC and platelet production only.
Protein S Deficiency	Defer for plasma donation. Accept for RBC and platelet production only

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Pruritis	Defer until asymptomatic. Accept if symptom free.
Psoriasis	Defer permanently if treated with Tegison or donor has lesions in the venipuncture area. Accept if lesions not in area of venipuncture and has not been treated with Tegison.
Pulmonary Embolism	Defer 6 months. Accept if greater than 6 months since condition and donor
Pyelonephritis	Defer until disease is resolved. Defer permanently if due to deferral if chronic renal disease. Accept if disease resolved and kidney functions normal.
Q-Fever	Permanent deferral.
Rabies	Defer 1 year after exposure (animal bite). Accept if greater than 1 year since bite and donor is healed.
Raynaud's Disease (Phenomenon)	Defer permanently if in association with autoimmune disorder. Accept if not associated with an autoimmune disorder.
Reflux, Gastroesophageal	Accept.
Regional Enteritis	Permanent deferral.
Reiter's Syndrome	Permanent deferral
Relapsing Fever	Requires Medical Director evaluation.
Renal Calculi	Accept
Renal Failure	Defer permanently if for chronic renal disease. Defer for one week if acute renal disease. Accept if the following conditions are met: 1) Greater than one week and condition is resolved. 2) Acute renal failure and donor has normal renal function.
Respiratory Infection	Defer until symptom-free and off antibiotics or cold medications for 72 hours. Defer donors with active symptoms of a URI until symptom-free for 72 hours. Donors with hay fever can donate. Accept if donor is off antibiotics and or cold medication for at least 72 hours and symptom- free for 72 hours.
Reticuloendotheliosis	Permanent deferral.
Reye's Syndrome	Defer until recovered and liver function is normal. Accept, if recovered and liver function is normal.
Rhabdomyolysis	Defer until released from physician care and no limitation of activity. Accept if able to donate after released from care of physician and return to full duty.
Rheumatic Heart Disease	Refer to medical director for approval.
Rhinoplasty	Defer until healed and released from doctor's care. Accept if site is healed and released from the care of
Ringworm	Defer if in the venipuncture site. Accept if not in venipuncture site.

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Rocky Mountain Spotted Fever	Defer for 1 week after antibiotic therapy is completed and no reoccurrences. Accept if greater than 1 week since completion of antibiotic therapy and there has been no reoccurrence.
Ronnel (Insecticide)	Defer for 2 weeks after skin exposure. Agent is an anticholinesterase, may alter red cell stability. Accept if greater than 2 weeks since exposure.
Root Canal Surgery	Defer 72 hours or until completely healed. Accept if greater than 72 hours since procedure and donor is completely healed.
Rosacea	Accept.
Roseola	Defer for 2 weeks after recovered. Accept if greater than 2 weeks post recovery.
Ross River Virus	Defer if symptomatic. Accept if asymptomatic.
Rubella (German Measles)	Defer until donor afebrile and free of major symptoms. Accept if donor is afebrile and free of major symptoms. Defer 1 month after exposure unless immunization or previous infection can be documented. Accept if greater than 1 month for exposure if donor has not had immunization or previous infection. Accept if donor has evidence of immunization or prior infection before exposure (documented evidence must be provided prior to donation).
Salmonella	Defer until well and released from doctor's care. Accept if released from doctor's care, donor feels well and no recurrent septicemia. Permanent deferral if recurrent septicemia.
Sarcoidosis	Refer to Medical Director.
SARS (Severe Acute Respiratory Syndrome)	1) History of SARS, or suspected SARS, or treatment for SARS: Defer donor 28 days from cessation of symptoms and/or treatment, whichever is later. Accept if greater than 28 days cessation of symptoms or treatment whichever is longer. NOTE: If donor is currently demonstrating symptoms, follow service specific infection control guidelines. 2) Close contact with persons with SARS or suspected SARS and is asymptomatic: Defer donor 14 days after last exposure. Accept if greater than 14 days since last exposure.
Scabies	Defer until resolved. Accept if resolved
Scarlet Fever	Defer until 48 hours after exposure and feels well. See Rheumatic Heart Disease. Accept if well and asymptomatic and no complications due to Rheumatic Heart disease.
Scarring (Branding)	Defer 12 months if intentional skin scarring to make a design. Accept if greater than 12 months since scarring.
Schizophrenia	Defer if not mentally or legally responsible. Accept if donor is mentally and legally responsible.
Scleroderma	Permanent deferral

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Seizures	Defer for six months from the date of the last seizure. Accept if seizures are well controlled with or without medication and the medication is not a cause for deferral. "Well controlled" is defined as seizure-free in the past 6 months.
Sepsis	Defer 1 week after completion of antibiotic therapy and condition is resolved. Accept if no longer on antibiotics for 1 week and condition resolved.
Septoplasty	Defer until site is healed and donor has been released from doctor's care. Accept if site is healed and released from the care of physician.
Shigella	Defer until resolved and donor is asymptomatic. Accept if resolved and asymptomatic.
Shingles	Defer while active lesions are present and for 1 week afterwards. Accept if: 1) No active lesions are present. 2) Greater than 1 week since active lesions was present.
Shortness of Breath	Defer until underlying condition is evaluated. Accept if: 1) Shortness of breath is due to overexertion, 2) The donor is active and has no restrictions on his/her activities.
Sickle Cell Disease	Permanent deferral.
Sickle Cell Trait	Accept.
Sigmoidoscopy	Defer 72 hours post procedure if no biopsy was performed. Defer until biopsy results are available. If results available, ask donor if physician told them whether additional testing was needed or if any abnormalities were found. Accept if 1) Greater than 72 hours post procedure and no biopsy was performed. 2) Greater than 72 hours post procedure and no additional testing needed after biopsy or abnormalities were found. Consult Medical Director to resolve any questions.
Sinusitis	Defer until symptom-free and off antibiotics or cold medications for 72 hours. Defer donors with active symptoms of sinusitis until symptom-free for 72 hours. Accept if donor is off cold medications or antibiotics and symptom-free greater than 72 hours.
Sjogren's	Permanent deferral.
Skin Infections	Defer until off antibiotics and no lesions in the venipuncture area. If anthrax is suspected – See anthrax. Accept if lesions are not in area of venipuncture, donor is not taking antibiotics, and anthrax is not suspected.
Skin Ulcer	Defer until well-healed. If suspect for anthrax, defer. See anthrax. Accept if well-healed.
SLE (Systemic Lupus Erythematosus)	Permanent deferral.
Smallpox	Permanent deferral, unless vaccinated donor or donor with localized lesion acquired through close contact with vaccine recipient.

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Smallpox Vaccination Complications	Defer any donor who experienced complications of <i>vaccinia</i> infection acquired either through vaccination or through close contact with vaccine recipient until 14 days after all complications are completely resolved. Accept if greater than 14 days after all complications are completely resolved.
Sore Throat	Defer until symptom-free and off antibiotics for 72 hours. Defer donors with active symptoms of a sore throat until symptom-free for 72 hours. Accept if donor is off antibiotics or cold medicine for 72 hours and symptom-free for 72 hours after completion of treatment.
Spherocytosis	Permanent deferral.
Splenectomy	Defer until completely healed and released by physician if removed due to trauma. If removed due to disease, obtain medical director approval. Accept if: 1) Spleen removed because of trauma, released from medical care, and donor feels well and healthy. 2) Has medical director approval if removed because of disease.
Spondylitis	Defer if motion limitation and on immunosuppressive medication. Accept if the following conditions are met: 1) Donor has no limitation of motion (can sit in donor chairs). 2) Donor is not on immunosuppressive medication.
Stem Cell Transplant, Hematopoietic	If for hematologic malignancy/cancer, leukemia, lymphoma - Permanent deferral. For all others, refer to Medical Director.
Stitches	Defer until wound healed and stitches removed. Accept if healed and stitches have been removed.
Strep Throat	Defer until symptom-free and off antibiotics or cold medications for 72 hours. Defer donors with active symptoms of strep throat until off treatment and symptom-free for 72 hours. Accept if off antibiotics or cold medications for 72 hours and symptom-free for 72 hours after completion of treatment.
Stroke	Defer if occurred within the last 6 months. Advise prospective donors to obtain approval from their physician regarding blood donation. Accept if the following conditions are met: 1) Donor has no symptoms and no limitation of activities. 2) Greater than 6 months since the stroke. 3) Donor has written approval from their physician for blood donation. 4) Donor has medical director approval.
Styes	Defer until treatment complete. Accept if treatment is complete and donor is asymptomatic.

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Surgical Procedures	<p>Defer until released from doctor's care, feels well, and activity has been resumed. Defer 12 months if received allogeneic or autologous blood transfusion. Defer indefinitely if donor received a transfusion of blood or blood products collected in the United Kingdom or France since 1980.</p> <p>Requires Medical Director evaluation pre-op disease process.</p> <p>Accept if the following conditions are met: 1) Released from doctor's care, feels well, and full activity has been resumed. 2) Reason for surgery or medical condition for surgery is not a cause for deferral. 3) Greater than 12 months since the last transfusion, and no transfusion in the UK or France.</p>
Syphilis	<p>Defer for 12 months after treatment completed.</p> <p>Accept if greater than 12 months after treatment completion, need document evidence of treatment.</p>
Tattoos/Permanent Make-up	<p>Defer one week to ensure site has healed properly if the state meets the requirements. If after 7 days the site is not healed, defer an additional 7 days.</p> <p>Defer 12 months post-application if the state does not meet the requirements.</p> <p>Accept only if: 1. Greater than 7 days and was applied by a state regulated entity with sterile needles and ink that has not been re-used. 2) Greater than 12 months if the state does not meet the requirements above.</p> <p>Refer to ASBP State Tattoo and Permanent Make-Up Reference List to determine if the state in which tattoo was applied meets these requirements.</p>
Tendonitis	<p>Defer if symptomatic. Accept if symptom-free.</p>
Thalassemia	Permanent deferral.
Thalassemia Minor (Thalassemia Trait)	<p>Defer if the hematocrit or hemoglobin does not meet the requirement for blood donation.</p> <p>Accept if the hematocrit or hemoglobin meets the requirement for blood donation.</p>
Thrombocythemia	<p>Defer until resolved if underlying cause not malignancy. Permanent deferral if Essential Thrombocythemia.</p> <p>Accept if condition is resolved and underlying cause is not a reason for deferral.</p>
Thrombophlebitis	<p>Defer until asymptomatic and off medication for 1 month. Accept if asymptomatic and off medication 1 month.</p>
TIA (Transient Ischemic Attacks)	Refer to medical director for approval.
Tick Bite	<p>Defer 2 weeks if no symptoms of infection (Lyme disease). Defer if febrile or symptomatic. Typical symptoms may include flu-like symptoms, skin rash, and/or joint pain.</p> <p>Accept if greater than 2 weeks, afebrile and symptom free.</p>

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Tinea Versicolor Infection	Defer for 1 month after completion of fungal therapy and donor is asymptomatic. Defer if involving skin and nails and infection is in the venipuncture area. Accept if the following conditions are met: 1) Involving only skin or nails and away from venipuncture site. 2) Accept if other tissues involved and donor is well and asymptomatic and off all antifungal therapy for 1 month.
Tissue Graft	Defer 12 months for donors who have received allogeneic Defer indefinitely if bovine. Defer autologous graft for 1 day if not healed Accept if greater than 12 months post procedure and graft was not bovine. Accept autologous graft if healed
Tongue Separation	Defer for 12 months. Accept if greater than 12 months since separation and healed.
Tonsillectomy & Adenoidectomy (T&A)	Defer until healed. Accept if healed.
Tonsillitis	Defer if chronic condition exists or until the donor is asymptomatic. Accept if the following conditions are met: 1) Past episodes were acute. 2) The donor is asymptomatic on the day of donation.
Tooth Extractions	Defer 72 hours or until completely healed. Accept if greater than 72 hours since extraction and completely healed.
Torticollis	Accept.
Tourette Syndrome	Defer if movement affects the phlebotomy procedure. Accept if movements do not affect phlebotomy.
Toxic Shock Syndrome	Defer for 2 weeks after completion of antibiotic therapy and donor feels well. Accept if greater than 2 weeks since completion of antibiotic therapy and donor feels well.
Toxoplasmosis	Defer 1 week after cessation of therapy and feels well. Accept if greater than 1 week since completion of therapy and donor feels well.
Transfusions	Defer 12 months if donor received allogeneic or autologous blood or blood product transfusion(s). Defer indefinitely if donor received a transfusion of blood or blood products collected in the United Kingdom or France since 1980. Accept if greater than 12 months since last transfusion and transfusion was not received in the United Kingdom or France.
Transient Ischemic Attack (TIA)	Refer to medial director for approval
Transplant	Defer 12 months if donor received allogeneic transplant(s). Permanent deferral following dura mater transplant or xenotransplantation. Permanent deferral if for cancer or autoimmune disease. Permanent deferral if Kidney transplant Accept if greater than 12 months since transplant and transplant was not dura mater or for cancer or an autoimmune disease.
Transverse	Permanent Deferral
Trichomonas	Defer until treatment is completed and donor is asymptomatic. Accept if asymptomatic and treatment completed.

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Trypanosomia	Permanent deferral.
Tubal Ligation	Defer until incision is healed, released from physician's care, feels well, and returned to duty if surgery involved less than 1 day hospitalization. Otherwise refer to Medical Director. Accept if the following conditions are met: 1) Greater than 1 day since discharge from hospital. 2) Donor's incision is healed, released from physician care, and feels well. 3) Hospitalization was less than 1 day.
Tuberculosis	Permanent deferral if disseminated or extra pulmonary disease, all types. Defer for active infection. Accept if greater than 12 months after completion of therapy with no evidence of active disease.
Tuberculosis Skin Test	Defer if test was not part of basic health screening, the site is red or has induration (swelling). Defer until test is read if not part of basic health screening until read. Defer Donors with positive TB skin test. Defer for 1 year after treatment completion. Accept donors who have just received a TB skin test, if the following conditions exist: 1) The test was part of a basic health screen (not because the donor is symptomatic). 2) There is no redness or induration (swelling). Accept donor who had TB skin test and results are negative. Accept: if greater than one year since completion of treatment and the donor feels well and healthy.
Tumor Removal	Defer for 6 weeks post excision. Accept if greater than 6 months since removal and no malignancy.
Typhoid Fever	Defer until recovered and asymptomatic. Accept if recovered and asymptomatic.
Ulcer Disease	Defer until pain-free. Accept if pain-free.
Ulcer, Skin	Defer until well-healed. Defer if suspect for anthrax. See anthrax. Accept if well healed.
Ulcerative Colitis	Defer permanently, except if post-colectomy and well. Accept if post-colectomy and donor is healed and well.
Undulant Fever (Brucellosis or Malta Fever)	Requires Medical Director evaluation
Upper Respiratory Infection (URI)	Defer until symptom-free and off antibiotics or cold medications for 72 hours. Defer donors with active symptoms of a URI until symptom-free for 72 hours. Donors with hay fever can donate. Accept if donor is off antibiotics and or cold medication for at least 72 hours and symptom- free for 72 hours.
Urinary Tract Infection (UTI)	Defer until 72 hours after completing antibiotic therapy and symptoms resolved. Accept if greater than 72 hours since the completion of antibiotic therapy and symptoms are resolved.
Urticaria	Defer only if lesions in area of venipuncture. Accept if no lesions in the area of the venipuncture.

Armed Services Blood Program Medical Conditions List

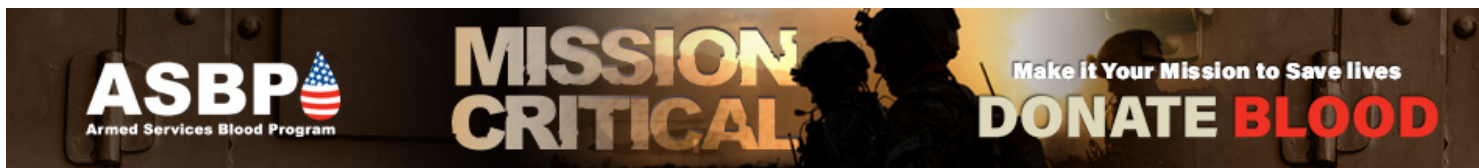
Medical Condition	Comment
UTI (Urinary Tract Infection)	Defer until 72 hours after completing antibiotic therapy and symptoms resolved. Accept if greater than 72 hours since the completion of antibiotic therapy and symptoms are resolved.
Vaginitis	Defer until 72 hours after completing antibiotic therapy and symptoms resolved. Accept if greater than 72 hours since the completion of antibiotic therapy and symptoms are resolved.
Variant Creutzfeldt-Jacob Disease (vCJD)	Permanent deferral
Varicella-Zoster Infection	Defer 21 days after exposure. (3 weeks) Accept if greater than 21 days after exposure. (3 weeks) Defer for one week after lesions are completely healed. Accept if greater than one week after lesions are completely healed. Defer one year if injected with VZIG (varicella zoster immune globulin) post- exposure. Accept if greater than one year since injection with VZIG.
Vasectomy	Defer 72 hours and feels well/fully recovered. Accept if greater than 72 hours and donor feels well and fully recovered.
Venereal Warts (Human Papilloma Virus)	Defer until healed if recently removed. Accept if healed and no recent lesions.
Vincent's Angina	Defer if chronic condition exist. Accept if the following conditions are met: 1) Past acute episodes are acceptable. 2) The donor is asymptomatic on the day of donation.
Vitiligo	Accept. Partial or total loss of skin pigmentation, often occurring in patches.
Von Recklinghausen's Disease	Defer until donor is in good health, has no malignancies, no lesions in the antecubital area. Accept if donor is in good health (no infections or malignancies) and has no lesions in antecubital area.
Von Willebrand's Disease	Permanent deferral.
Warts (Human Papilloma Virus)	Defer until healed if recently removed. Accept if healed and no recent lesions.
West Nile Virus (WNV)	Defer for 120 days after positive test or diagnosis of illness or onset of illness, whichever is later. Accept if greater than 120 days since a positive test, diagnosis or onset of WNV.
Whole Blood Donation	Defer 8 weeks, if single unit donation. Accept if greater than 8 weeks since single unit donation Defer 16 weeks, if double unit donation. Accept if greater than 16 weeks since a double unit donation.
Wilm's Tumor (Nephroblastoma)	Permanent deferral.
Wilson's Disease	Requires Medical Director evaluation
Wolff-Parkinson-White	Requires Medical Director evaluation

Armed Services Blood Program Medical Conditions List

Medical Condition	Comment
Yeast Infection (Vaginal)	Defer 1-week after cessation of medication and well, if related to antibiotic therapy or steroid therapy. Refer to Medical Director, if there is a question of immunodeficiency. Accept if greater than one week after cessation of medication (antibiotic or steroid therapy) and symptom -free.

EXHIBIT 57

Armed Services Blood Program: Is My Blood Donation Safe?



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Is My Blood Donation Safe?

08/13/2014
By Mark Salcedo, ASBP Blood Donor Recruiter, Fort Sam Houston, Texas

The safety of both blood donors and recipients is the primary goal for the Armed Services Blood Program. Each step of the blood donation process is designed to make sure that the donors are safe and that the donated blood does not cause harm to those receiving the products. The blood bank industry, by design, is stringently regulated to ensure your safety.



A blood donor record form and blood samples are used to ensure blood donated to the Armed Services Blood Program is safe for transfusion.

The ASBP and the three Service Blood Program Offices – Army, Navy and Air Force – use a multi-layered approach. This approach includes a blood donor screening, a review of medical history and the testing of the blood for different viruses. Ultimately, the goal is to ensure all blood and blood products provided by the ASBP are high quality and safe for transfusion.

Blood Donor Pre-qualification

Age: Although some states allow 16 year olds to donate blood with parental consent, the minimum age for military blood donors is 17 years old without parental consent. There is no maximum age as long as the donor is in good health and meets all the medical requirements.

Health: Potential donors must feel healthy on the day of donation and have no cold or flu-like symptoms. If a donor is feeling slightly sick, they are asked to wait for 72 hours after they are over their symptoms before donating.

Weight: Donors must weigh at least 110 pounds for a whole blood donation. The donor center staff will remove about one pint of blood, about 500 milliliters, during the process. Inside the collection set is an anticoagulant to keep the blood from clotting and nutrients to keep the red cell functioning. Although it may seem like a large amount of blood, it's perfectly safe and only about the same volume of some energy drinks.

Tattoos: Donating blood to the ASBP after getting a tattoo varies by state. Currently, 34 states regulate and inspect their tattoo facilities. If a donor receives a tattoo in one of the approved states, the waiting period is only seven days as long as the tattoo is healed. If the state is not approved, donors must wait a full 12 months because of the risk of hepatitis B and hepatitis C transmission.

The Donation Process

What to bring: Each donor must complete a Blood Donation Record (DD572) on the date of donation. When donors arrive at a military blood donor center or to a mobile blood drive, they are asked to bring their travel history, any medications lists (including over-the-counter medications) and photo identification.

Assessing eligibility: Using specific criteria established by the Food and Drug Administration and Service Blood Program Offices, ASBP blood donor center staff will review the information (medication, medical conditions and previous travel) provided by the donor to determine his or her eligibility. To ensure the safety of the blood products, accuracy and honesty are essential at this station. It is important to know that all medical information provided by the donor is confidential.

Medical History Section

Donor history questionnaire: A uniform donor medical history questionnaire ensures that donor screening is standardized across all military collection centers. All donors must complete this form on the day of donation. While all units of donated blood are tested for HIV, hepatitis and other infectious diseases, it's important that donors answer openly, honestly and completely with the staff member conducting the medical interview. The questionnaire contains questions to protect the recipient as well as the donor. Again, all information provided by the donor during the interview is strictly confidential.

Medications: Most medications do not prevent donors from donating blood. Donor eligibility is based on the reason that the medication was prescribed not necessarily the medication itself. Medications used to control blood pressure, birth control pills and thyroid medications do not affect your eligibility. As long as the medical condition is controlled by the



prescribed medication and the donor is healthy, the blood donation is usually acceptable.

Antibiotics: If you have recently taken an antibiotic, donors must wait 72-hours after the last dose has been completed before donating.

Medical conditions: There is sometimes a confusion about specific medical conditions and who may or may not be able to donate. Some of the more common accepted medical conditions are: allergies, diabetes mellitus (if controlled and stable), high blood pressure (if controlled with medications), and Sickle Cell Trait. Donors who have questions about their medical conditions can contact the center directly for more information.

Travel restrictions: Travel to foreign countries may cause donors to be ineligible for varying periods of time. The criteria concerning foreign travel can change and it is recommended that donors contact their local blood donor center directly regarding their specific travel. For service members deployed to Iraq and Afghanistan, the deferral period is 12 months upon return to the United States.

Vaccinations: Depending on the type of vaccine, donors may be asked to wait for a short period of time before donating blood. For immunizations like the flu shot, the donor is eligible to donate so long as they do not have cold or flu-like symptoms. For service members receiving the anthrax vaccine, there is no waiting period unless symptoms develop.

Vitals and Iron Testing Section

Physical: Each donor is given a "mini-physical" before their donation. This includes having their temperature taken and having their vital signs (blood pressure and pulse) and iron levels checked. This exam is done for the donor's safety and to ensure the donor and can tolerate the collection procedure.

Fever, blood pressure and pulse: Donors with a fever (a temperature higher than 99.5°F), high blood pressure (greater than 180/100 mmHg), a very high or very low heart rate (must be between 50-100 beats per minute), or an irregular pulse will be temporarily deferred from donating blood.

Iron: The donor's iron level is checked using a finger stick procedure. Iron helps carry oxygen throughout the body. If you don't have enough iron, your body can't make enough healthy red blood cells to benefit the patient receiving the blood product. If the donor's iron level is too low, he/she will be temporarily deferred for 24 hours from donating blood.

Medical Deferrals: Understanding Why You May Not be Able to Donate

Deferrals: Some donors may not be eligible to donate blood. For the ASBP, about 30 percent of the military is not eligible, they are known as "deferred" donors. Prospective donors can be deferred at any point during the process for a number of reasons. The primary goal is to ensure the health of the donor and the health of those who may receive the blood products.

Types of deferrals: There are three main types of deferrals: temporary, permanent or indefinite. The length and type of deferral will depend on the specific reason for the disqualification (e.g. low iron, medical condition or previous travel).

Temporary deferral: A temporarily deferred donor is unable to donate blood for a limited period of time only. This time can be as short as 24 hours (e.g., someone with low iron levels) or as long as several years (e.g., someone who has traveled to Korea). Once the temporary deferral period has ended, the donor is welcome to return at their earliest convenience.

Permanent deferral: A permanent deferral is given to donors who have tested positive for HIV, hepatitis B or C or a patient with sickle cell disease or amyotrophic lateral sclerosis, more commonly known as ALS or Lou Gehrig's disease. Unfortunately, these donors will never be allowed to donate blood.

Indefinite deferral: An indefinite deferral is sometimes confused with a permanent deferral. An indefinite deferral means a donor is unable to donate blood for unspecified period of time due to current regulatory requirements. A common example is someone who lived in or traveled to England from 1980 through 1996 for more than three months. If the FDA revises its policies or develops an improved blood test, donors with an indefinite status may be allowed to donate in the future.

Donor Deferral Registry: If a donor is deferred, his or her name is entered into a list of deferred donors maintained by the local blood center. This list is often known as the "Donor Deferral Registry." If a deferred donor attempts to give blood before the end of the deferral period, the donor will not be accepted for that donation.

What to do if you are deferred from donating: Donors with a permanent or indefinite deferral can still support the ASBP by recruiting donors or sponsoring a blood drive. Contact your local blood donor recruiter for more information.

Viral Marker Testing: Behind-the-scenes on Making Blood Donations Safe

Testing: All blood donated to the ASBP is run through a variety of tests before it is made available for transfusion. This testing helps ensure that the donated blood is safe for transfusion. During the blood donation, several sample tubes are collected for viral marker testing and an assortment of different tests are used. Currently, 14 different FDA-licensed tests are performed on every unit of blood collected which nearly eliminates the risk of HIV and hepatitis.

- Blood group (A, B, AB, or O) and Rh type (positive or negative)
- Test for any unexpected red blood cell antibodies (antibody screen)
- Antibodies to Human Immunodeficiency Virus (anti-HIV-1/2)
- Hepatitis C virus (anti-HCV)
- Human T-cell Lymphotropic virus (anti-HTLV-I/II)
- Hepatitis B core antigen (anti-HBc)
- Hepatitis B surface antigen (HBsAg)
- Nucleic acid test (NAT) for Hepatitis C virus (HCV) ribonucleic acid (RNA)
- Nucleic acid test (NAT) for HIV-1 RNA

- Nucleic acid test (NAT) for West Nile virus (WNV) RNA
- Nucleic acid test (NAT) for HBV DNA
- Serologic test for syphilis
- Test for antibodies to *Trypanosoma cruzi* (Chagas' disease)
- Serologic test for Cytomegalovirus (CMV)

Results: The test results are reported as reactive/positive or nonreactive/negative. If all initial testing is negative the donated unit is cleared through an extensive quality review process and made available to the blood bank.

Donors who have repeat reactive or confirmed positive testing will be deferred permanently from future blood donations.

About the Akeroyd Blood Donor Center

For more information or questions about donating blood with the Akeroyd Blood Donor Center, please call the blood donor recruiter directly at (210) 295-4655 or (210) 295-4989.

Walk-in donors are always welcome at the Akeroyd Blood Donor Center. The center is open from 7:30 a.m. to 12:00 p.m., Monday through Friday. The center is located at B1240 Harney Road, behind Budge Dental Clinic on Fort Sam Houston.

About the Armed Services Blood Program

Since 1962, the Armed Services Blood Program has served as the sole provider of blood for the United States military. As a tri-service organization, the ASBP collects, processes, stores and distributes blood and blood products to Soldiers, Sailors, Airmen, Marines and their families worldwide. As one of four national blood collection organizations trusted to ensure the nation has a safe, potent blood supply, the ASBP works closely with our civilian counterparts by sharing donors on military installations where there are no military blood collection centers and by sharing blood products in times of need to maximize availability of this national treasure. To find out more about the ASBP or to schedule an appointment to donate, please visit www.militaryblood.dod.mil. To interact directly with ASBP staff members, see more photos or get the latest news, follow @militaryblood on Facebook, Twitter, Flickr, YouTube and Pinterest. Find the drop. Donate.

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EXHIBIT 58

Armed Services Blood Program: The A-B-Os of Blood Type



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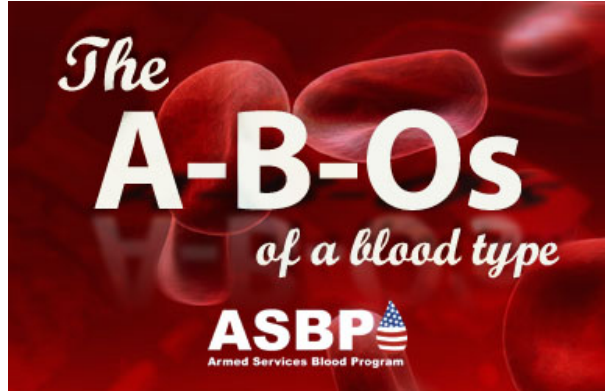
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The A-B-Os Of A Blood Type

04/14/2014
 By Carl Norman, ASBP Blood Donor Recruiter, Fort Leonard Wood, Mo.

Every hour of every day someone in the Department of Defense needs blood. Whether it's a child with a rare blood disease, an adult injured in a vehicle accident, an individual with cancer or a service member injured on the battlefield, blood is a lifesaving and much-needed commodity. The Armed Services Blood Program seeks volunteer donors every day to meet those needs.



The Fort Leonard Wood Blood Donor Center breaks down the A-B-Os of a blood type.

To meet normal operational requirements, military treatment facilities around the world require approximately 400 units of blood every day or about 12,000 per month. When accidents happen, illness strikes or someone falls on the battlefield, lost blood has to be replaced or the results can be deadly.

When a person needs a blood transfusion, one of the main steps in the process is knowing the individual's blood type.

"Knowing what blood types are compatible with others when transfusing blood is very important," said Capt. Paul Ambrose, Fort Leonard Wood Blood Donor Center officer-in-charge. "If a patient receives the wrong blood type, it can result in a transfusion reaction with symptoms ranging from a fever to kidney failure. At any rate, it will make the recipient very ill and could even cause death. That is why we test and cross-match blood products that will be transfused."

Blood types fall into one of four blood groups – A, B, AB and O. Tiny markers known as antigens, which cover the cell's surface, determine these blood groups.

Medical experts say an antigen is any substance that, when introduced into a body and recognized as foreign, will bring about an immune response. This might result in producing an antibody that will react specifically with that antigen.

According to Ambrose, when a donor gives a unit of whole blood, it is usually processed into two components: packed red blood cells and fresh frozen plasma. Packed red blood cells contain antigens and fresh frozen plasma contains antibodies.

Here's how it works:

- Group A whole blood has A antigens and B antibodies
- Group B whole blood has B antigens and A antibodies
- Group AB whole blood has both A and B antigens and neither A nor B antibodies
- Group O whole blood has neither A nor B antigens but has both A and B antibodies

In addition to A and B antigens, blood also has a D antigen, according to medical experts. The presence or absence of this antigen helps determine an individual's exact blood type.

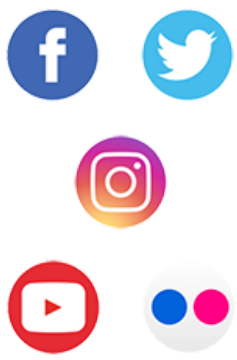
Individuals who have the D antigens are known as Rh-positive and individuals without them are known as Rh-negative. The combination of an individual's blood group (A, B, AB, O) and the presence or absence of the Rh antigen – whether positive or negative -- determines an individual's blood type.

"Knowing your blood type is very important whether you're giving to someone else or having to receive it," Ambrose said. "Donors and recipients must have their blood types matched to make sure everyone is safe in the donation process. This is known as a crossmatch."

That said, here's some interesting facts about each of the blood groups:

Group A blood: 40 percent of the American population

- Type A+ and A- donors have the second most common blood type.
- Approximately 34 percent of the populations have A+ blood.



- A- donors represent approximately 6 percent of the population.
- A+ patients can receive A+, A-, O+ or O- red blood cells.
- A- patients can receive O- packed red blood cells only.
- A- donors can also provide red blood cells for the more scarce type AB patients, if necessary.

Group B blood: 11 percent of the American population

- B+ and B- donors have more rare blood types.
- B+ donors make up 9 percent of the population.
- B- donors are the second rarest with only 2 percent of the population having this blood type.
- B+ patients can receive B+, B-, O+ and O- red blood cells.
- B- patients can only receive B- and O- red blood cells.
- B- donors can also provide red blood cells for the more scarce type AB patients, if necessary.

Group AB blood: 4 percent of the American population

- AB+ and AB- donors have the rarest blood types in the U.S.
- AB+ donors make up 3 percent of the population.
- AB- donors make up only 1 percent of the population.
- AB donors are considered to be “universal plasma donors” because anyone can receive type AB plasma. This means that AB plasma is often used in emergency situations before a person’s exact blood type can be determined.
- AB+ patients can receive red blood cells from all types.
- AB- patients can only receive AB-, A-, B- or O- red blood cells.

Group O blood: 45 percent of the American population

- O- donors make up only 7 percent of the American population.
- O- donors are considered to be “universal donors” because anyone can receive O- red blood cells. This means that O- red blood cells are often used in emergency situations before a person’s exact blood type can be determined.
- O- patients can only receive O- red blood cells.
- O+ donors have the most common blood type – 38 percent of the American population. To put that in perspective, consider that almost every third person you see walking down the street has O+ blood.
- O+ patients can receive O+ and O- red blood cells only.

“No one ever expects to need blood, but the consequences can be deadly if it is needed and not available,” Ambrose said. “Whether giving or receiving blood, knowing your blood type is essential in the blood donation and transfusion processes.”

Anyone wanting more information or to donate blood at the Fort Leonard Wood Blood Donor Center 573-596-5385.

To find out more about the Armed Services Blood Program or to schedule an appointment, please visit us online: www.militaryblood.dod.mil. To interact directly with some of our staff, see more photos or to get the latest news, visit us here: www.facebook.com/militaryblood, www.flickr.com/militaryblood and www.twitter.com/militaryblood.

EXHIBIT 59

Short Communication Investigation of Incident HIV Infections Among U.S. Army Soldiers Deployed to Afghanistan and Iraq, 2001-2007

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Short Communication

Investigation of Incident HIV Infections Among U.S. Army Soldiers Deployed to Afghanistan and Iraq, 2001–2007

Paul T. Scott,¹ Shilpa Hakre,² Otha Myles,¹ Eric E. Sanders-Buell,² Gustavo H. Kijak,² Francine E. McCutchan,² Robert J. O'Connell,¹ Sheila A. Peel,¹ J. Connor Eggleston,² Warren B. Sateren,¹ Micaela Robb-McGrath,² Robert L. Mott,³ Steven K. Tobler,⁴ Eileen Nolan,² Bruno P. Petrucci,² Nelson L. Michael,¹ and Steven B. Cersovsky⁵

Abstract

The U.S. Army initiated an investigation in response to observations of a possible increase in HIV incidence among soldiers deployed to combat. Human immunodeficiency virus (HIV)-infected U.S. Army soldiers are not eligible to deploy. Combat presents a health hazard to HIV-infected soldiers and they pose a threat to the safety of the battlefield blood supply and their contacts. All soldiers are routinely screened for HIV every 2 years and those who deploy are also screened both prior to and after deployment. Seroconversion rates were estimated for all soldiers who deployed to Afghanistan or Iraq in the period 2001–2007 and all active duty soldiers who did not. Seroconverters with an estimated date of infection, based on calculation of the midpoint between the last seronegative and first seropositive test date, that was either before or during deployment were eligible for inclusion. Confidential interviews and medical record reviews were conducted to determine the most likely time, geographic location, and mode of infection. Reposed predeployment samples were tested for HIV ribonucleic acid. The HIV seroconversion rate among all soldiers who deployed was less than the rate among those who did not deploy: 1.04 and 1.42 per 10,000 person-years, respectively. Among 48 cases, most were determined to have been infected in the United States or Germany and prior to deployment ($n=20$, 42%) or during rest and relaxation leave ($n=13$, 27%). Seven seronegative acute infections were identified in the predeployment period. Subtype was determined for 40 individuals; all were subtype B infections. All were acquired through sexual contact. These findings can inform development of preventive interventions and refinement of existing screening policy to further reduce HIV-infected deployed soldier person time.

THE PREVALENCE OF HIV INFECTION in the U.S. Army population remains at approximately 0.02%,¹ and is significantly lower than that of the general U.S. population. The epidemic in the Army is similar to that in the U.S. general population; HIV infection disproportionately affects blacks and males and also disproportionately affects certain regions of the country including the South and Northeast.^{2–4} By regulation, all U.S. soldiers are subject to periodic serologic screening for HIV every 2 years. In addition, soldiers who deploy to combat are also screened both prior to and after returning from deployments. HIV-infected soldiers are excluded from overseas missions.^{5,6} Requirements for U.S. Army soldiers who deployed to Afghanistan or Iraq from

October 2001 to December 2007 were for serologic screening for HIV infection within 365 days before deployment and within 30 days after the end of deployment. HIV force screening began in 1986 with the purpose of enhancing the safety of blood products obtained in urgent donation settings, such as a battlefield, preventing potentially fatal complications from administration of military-required, live vaccines, and monitoring HIV-infected troops for continuing physical qualification for duty.⁷

Approximately 5 years ago observations by Army investigators suggested that there may be an increase in HIV incidence among soldiers associated with combat deployments.^{8–10} On July 14, 2007, the U.S. Army Surgeon General ordered an

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investigation to describe the location, time, and mode of transmission of HIV infections among U.S. Army soldiers who had deployed to Afghanistan and Iraq after October 1, 2001.

Soldiers with HIV seroconversions were identified using archived personnel, deployment, and HIV screening surveillance data from the Defense Medical Surveillance System (DMSS).¹¹ The rate of HIV seroconversion among soldiers who deployed to Afghanistan or Iraq was compared to the rate among active duty soldiers who did not deploy to Afghanistan or Iraq at any time during the study period. The midpoint between the last seronegative and first seropositive test date was estimated to be the date of HIV infection. Soldiers with an HIV-positive test who had deployed to Iraq or Afghanistan at any time during the study period were eligible for inclusion. Those who had a midpoint date either prior to or during deployment were included in this investigation. Soldiers were confirmed as cases after they individually verified their deployment dates.

All confirmed cases were invited to participate in a detailed epidemiologic interview and to permit a review of existing personnel and medical records. Soldiers were reminded of the protections from adverse action and confidentiality of the information obtained as part of epidemiologic interviews required by Army regulation.⁵ To avoid the potential for favorable reporting, soldiers were not required to participate. Veterans who had separated from the Army were asked to provide informed consent and permission to release existing medical records. A single military infectious disease physician, who conducted interviews at U.S. Military Treatment Facilities, administered a questionnaire that guided the interviews and elicited individual health, social, and military occupational history including medical encounters and potential exposures to HIV.

For each case, archived serum remaining from the last seronegative HIV test performed prior to deployment was obtained from the Department of Defense Serum Repository (DoDSR)¹¹ and subjected to confirmatory HIV serologic testing^{2,12} and nucleic acid amplification testing (NAAT, AmpliCor HIV-1 Monitor v 1.5, Roche). Acute HIV infection (AHI) in an individual was identified by an HIV-seronegative sample that was NAAT positive. Whole blood specimens were collected at the time of epidemiologic interview for genotyping. Nucleic acid was extracted from plasma and serum using the QiAamp Viral RNA mini kit (QIAGEN Inc., Valencia, CA). HIV genotyping and sequence analysis were performed, as previously described, using a multiregion hybridization assay (MHA) for subtype B/non-B (MHA_{bn}) and partial length sequencing.^{2,13}

The most likely time, geographic location, and mode of acquisition of HIV infection were determined using all available data. A timeline of events in the period of risk prior to HIV infection was generated for each participant and included self-assessment of the most likely time, location, and mode of infection; self-reported behavioral and occupational exposures; medical encounter and laboratory test records; and the dates and locations of all deployments, rest and relaxation (R&R) activities, and military assignments. Cases of probable, acute retroviral syndrome were identified using clinical histories and compatible medical encounter data. Where possible, administrative and medical records data were used to validate participant self-reports.

Approval of this investigation was obtained from the Division of Human Subjects Protections and Institutional Review Board of the Walter Reed Army Institute of Research (WRAIR #1678).

Among the 1,134,001 soldiers who deployed to Afghanistan or Iraq during the study period, 131 seroconverted (1.04/10,000 person years). By comparison, 258 of the 1,816,901 soldiers who did not deploy to Afghanistan or Iraq during the study period seroconverted (1.42/10,000 person-years).

Of the 131 seroconverters who deployed, 67 were not included because their midpoint date did not meet the inclusion criteria or due to misclassification of infection status or history of deployment. Of the 64 who were eligible for inclusion, nine declined participation, one was deceased, and one did not respond. Five others were excluded because the actual deployment dates individually verified by the soldier were different from those obtained from archived surveillance data such that their midpoint date was not prior to or during deployment. Thus, 48 confirmed cases participated. Compared to the overall deploying Army, cases were older, of higher rank, and were more frequently black and unmarried (Table 1).

Of the 48 confirmed cases, 20 (42%) were determined to have been infected before deployment, 13 (27%) during leave for R&R, and one (2%) while deployed. Determination of the most likely time of infection for four of the soldiers could be narrowed to only two time periods because exposure histories spanned more than one period. Five (10%) were determined to have been infected in the period between their deployment end date and postdeployment HIV serologic screening. For five other soldiers, there were insufficient existing data or exposure histories obtained in the interview to narrow the most likely time of infection down to even two periods (Fig. 1).

Most were determined to have been infected in the continental United States or Germany. Most (13/20) of the soldiers who were determined to have acquired their HIV-1 infection prior to deployment were infected in the last 6 months prior to departing for Afghanistan or Iraq (Fig. 2). Seven soldiers' predeployment samples were HIV seronegative and NAAT positive. These samples were collected between 290 and 41 days (median 76) prior to deployment. HIV subtype was determined by MHA or partial length sequencing for 40 of 48 participants and all were subtype B. For eight participants, samples were either not available or nontypeable.

High-risk exposures in the period at risk included unprotected sex with opposite and same sex partners; unprotected sex with strangers and other high-risk partners including commercial sex workers, injection drug users, and persons subsequently identified as HIV-infected; unprotected sex with multiple partners; and unprotected sex after alcohol use. None were emergency blood transfusion donors or recipients. One individual refused to provide a history of exposures.

Twenty-three individuals (48%) had a clinically apparent illness consistent with acute retroviral syndrome (ARS). Five were medically evacuated for evaluation of lymphadenopathy and one for evaluation of a febrile illness. Two soldiers contracted a sexually transmitted infection in addition to HIV during the period between when they were determined to have been infected and the end of their deployment. No participant experienced any vaccine adverse events.

This is the first report of HIV infections among U.S. Army soldiers deployed in support of combat operations. Overall, the rate of new HIV infections among those who deployed did

TABLE 1. CHARACTERISTICS OF HIV-INFECTED CASES (N=48) COMPARED TO ALL HIV-UNINFECTED ACTIVE ARMY PERSONNEL WHO DEPLOYED IN THE PERIOD 2001–2007

Variable	All deploying active Army personnel n (%)	Investigation participants n (%)
Year of operation		
2002	56,226 (5)	2 (4)
2003	276,178 (24)	16 (33)
2004	230,695 (20)	14 (29)
2005	215,326 (19)	9 (19)
2006	162,507 (14)	6 (13)
2007	186,181 (16)	1 (2)
Age group ^{a,b}		
20–24	390,256 (34)	8 (17)
25–29	236,806 (21)	14 (29)
30–39	303,381 (27)	16 (33)
40+	138,370 (12)	10 (21)
Sex		
Male	1,019,894 (90)	47 (98)
Female	114,107 (10)	1 (2)
Race ^b		
Black	209,168 (18)	32 (67)
Other	924,869 (82)	16 (33)
Component		
Active	Not applicable	33 (69)
Reserve	Not applicable	15 (31)
Grade ^b		
E1–E4	537,927 (47)	18 (38)
E5+	596,090 (53)	30 (62)
Marital status ^{b,c}		
Married	590,549 (52)	22 (46)
Single	486,144 (43)	21 (44)
Other	57,344 (5)	5 (10)
Education		
Master degree	Not available	4 (8)
Associate/Bachelor degree		11 (23)
Some College		22 (46)
<High School		11 (23)
Occupation		
Combat arms	Not available	14 (29)
Combat support		23 (48)
Medical		4 (8)
Other support		7 (15)

^a<20 age group (6% of deploying Army personnel) not shown.

^bDifferences were statistically significant ($p < 0.05$, χ^2 /Fisher's exact tests).

^cOther includes divorced, separated, widowed, unknown.

not exceed the rate among nondeploying soldiers and infection while deployed in Afghanistan and Iraq was extremely rare. Single, male, and black soldiers were overrepresented among the soldiers with new HIV infections who deployed. This was not unexpected as these findings are consistent with those in a previous report of the epidemic of HIV in the U.S. Army and Air Force.² However, these data demonstrate that HIV infection results in short-term morbidity and lost duty time in the combat environment. The realities of the current combat environment support the rationale that served as a basis for implementing force-wide screening policies 25 years

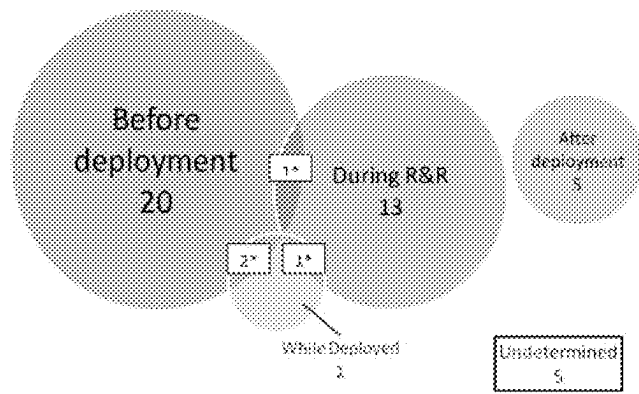


FIG. 1. Numbers of cases with determination of most likely time of infection occurring during particular periods in relation to deployment ($n=48$). R&R locations: 11 continental United States, 1 South America, 1 unknown. *The most likely time of infection could be narrowed to only one of two time periods because exposure histories spanned more than one period.

ago.⁷ Deployment and the battlefield present potential exposures to blood-borne pathogens including HIV. In addition to sexual transmission^{14,15} there is potential contact with the battlefield supply of non-FDA-approved blood products,^{16,17} occupational combat exposures, and casualty care with infection control measures limited by austere field conditions.^{18,19} The probability of any transfusion-transmitted (TT) infection in combat settings is relatively low, while the potential impact is high. Underscoring this is a recent report of the first documented case of TT hepatitis C virus infection in a U.S. military recipient of a battlefield transfusion of non-FDA licensed, fresh whole blood,¹⁶ as well as a recent report of TT HIV infection in the United States.²⁰

Optimal HIV-related policy development and decision making rely on both knowledge of the current epidemiology and careful consideration of the technical, fiscal, and operational costs associated with each potential strategy. The observed, small number of HIV-infected soldiers in the combat theater of operations suggests that periodic force screening and perideployment screening using serological diagnostic algorithms to identify HIV infection are highly successful and effectively decrease HIV-infected deployed soldier person time. These findings contributed to an interim change in deployment screening policy that shortened the required HIV testing interval from 365 days to 90 prior to deployment in order to increase case finding, referral for clinical care, and exclusion from deployment eligibility. They may also inform further refinement of screening policy and laboratory methodology.

These data identify potential time period targets for the delivery of preventive interventions. As part of soldier readiness processing, soldiers preparing to deploy receive country-specific threat briefs that include information about potential disease, environmental, and occupational health hazards, and individual countermeasures available to stay healthy. These briefs include specific information and prevention messages about HIV/HIV-related infections. These data also reinforce the need to maintain a highly sensitive, readily adaptable, state-of-the-art capacity to determine HIV

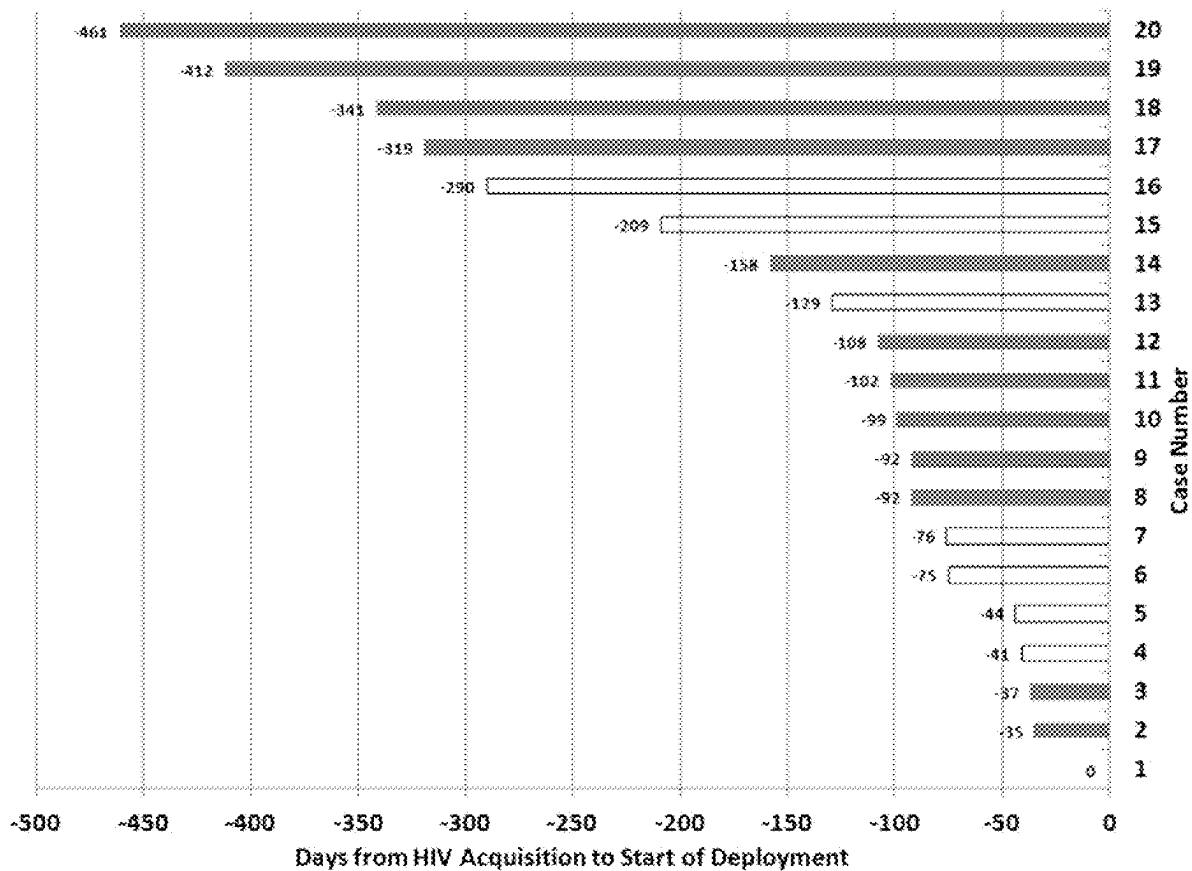


FIG. 2. Days from determination of most likely time of acquisition of HIV infection to start of deployment for soldiers infected prior to deployment ($n=20$).

infection status when the tempo of military operations is high. Identification of acute HIV infection is a rare event.²¹ By using an enhanced diagnostic algorithm that included HIV NAAT testing in this investigation that exceeded the sensitivity and time of earliest detection of the routine deployment serology-only screening diagnostic algorithm in place during the study period, we identified seven HIV infections that were RNA positive and serology negative. These results indicated that infection occurred as early as 5–22 days prior to sample collection.²² The finding of acute infection occurring in close proximity to predeployment HIV screening suggests that there may be an association between mobilization for deployment and HIV infection acquisition.

Predeployment HIV testing is one part of the soldier readiness processing and training that occurs prior to deployment. This testing, performed in addition to the periodic HIV testing of the entire force, is conducted only among soldiers preparing to deploy. It is possible then that there is a relationship between incident HIV infection and deployment. There was no control group so additional study is warranted to investigate the possibility that deployment is associated with changes in behavior and exposures associated with HIV infection.

Future study is also warranted of soldiers who had incident HIV infections and deployed but were not compliant with deployment screening interval regulations and were not included in this investigation. A limitation of this study is that the inclusion criteria excluded those who have an estimated

date of infection that was after the end of deployment. Due to the variability in compliance with predeployment and post-deployment and periodic HIV screening interval requirements, these inclusion criteria potentially excluded soldiers who may have contributed HIV infected person time while deployed and also eliminated description of the epidemiology of postdeployment incident HIV infection. Additional study of those soldiers with deployment exposure and post-deployment HIV infection is warranted. And on-going surveillance efforts of and reporting requirements for HIV screening compliance should continue. Findings from these studies would inform development and optimal timing for delivery of preventive interventions.

This study supports the utility of perideployment HIV screening. The findings of this investigation can advance the objectives of a force-wide HIV screening program to improve individual and force health, prevent the deployment of HIV-infected soldiers, and protect the safety of the battlefield blood supply.

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Author Disclosure Statement

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