

Donor Reaction & Injury Intervention Protocol

INTRODUCTION

This procedure provides guidelines for the:

1. Assessment and intervention when donors display adverse symptoms, sustain injuries, or experience allergic reactions.
 - a. When calling EMS, a physician or Donor Relations, be prepared to provide the most detailed report possible.
 - b. Staff should contact a physician (303-206-2139) or Donor Relations (303-363-2202 or 720-984-5328 - cell phone) any time staff is unsure of what intervention is appropriate or upon donor request.
 - c. Anytime EMS is being considered for a non life-threatening situation or is called for a medical emergency / injury, contact the Bonfils physician on-call (303-206-2139).
2. Completion and processing of the *Donor Reaction & Injury Report (F1 DR-078-PRD)*.
 - a. The Donor Reaction & Injury Report is completed when the donor/patient has an injury, has a severe reaction, “calls back” after leaving the donation site or returns to a donation site as a result of a reaction or injury. Refer to pages 3-8 for more detailed information on when a report is needed.
3. For all reports completed for minors (under 18), a parent should be contacted preferably before the donor leaves the center or mobile drive area.

Note: 4th adjustments and hyperventilation reactions do not require a call to parents.

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DEFINITIONS

ABC:	Airway, breathing and circulation.
Anaphylaxis:	Life-threatening, allergic response that appears rapidly following exposure to allergen(s); characterized by respiratory distress and shock; may include facial swelling, rash, hives, nausea, vomiting, diarrhea, and/or abdominal cramping.
Allergy:	An acquired hypersensitivity (production of antibodies) to a substance that does not normally cause a reaction caused by subsequent exposure to a particular antigen.
ACD-A:	Anticoagulant
Citrate Effect:	Donor reaction to citrate infusion during apheresis procedure caused by a decrease in calcium, and potentially resulting in muscle cramping, numbness, chills, tingling sensations and/or feelings of anxiety.

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Citrate Toxicity:	A side effect resulting from the rapid infusion of anticoagulant containing citrate during apheresis procedures. Initial symptoms include mild anxiety, chilliness and tingling sensations around the mouth and fingers, followed by carpal-pedal spasm, confusion/disorientation, and possibly tetany.
Convulsions:	Involuntary muscle contractions and relaxations, generally lasting for a minimum of 30 seconds.
Emesis Basin	Any type of a leak proof container used to hold vomit (i.e. trash can, empty segment bag).
Diaphoresis:	Profuse sweating.
Hematoma:	A confined swelling, with or without bruising, caused by a break in a blood vessel.
Hyperventilation:	Condition in which there is more than the normal amount of air entering and leaving the lungs, resulting in low levels of carbon dioxide; usually accompanied by anxiety and possible carpal-pedal spasm.
Hypovolemia:	A physiologic response of a donor or patient induced by volume depletion (deficiency of plasma) characterized by decreased blood pressure, increased heart rate, light-headedness, pallor, profuse sweating, nausea and possible loss of consciousness.
Infiltration:	Escape of fluid into subcutaneous tissue.
LOC:	Loss of Consciousness
Circumoral Paresthesia:	Sensation of tingling, pricking or numbness around a person's mouth with no apparent long term effect. Commonly known as "pins and needles" sensation.
Shock:	Shock is a critical condition brought on by a sudden drop in blood flow through the body. There is failure of the circulatory system to maintain adequate blood flow. This sharply curtails the delivery of oxygen and nutrients to vital organs. Shock may be caused by a variety of conditions including hemorrhage, infection, drug reaction, trauma, poisoning, myocardial infarction, and dehydration.
Tetany:	A nervous response characterized by intermittent tonic spasms that usually involve the extremities. May be caused by continuous hyperventilation or may be seen with factors that interfere with calcium absorption, such as sodium citrate.
Vasovagal Reaction:	A reflex of the involuntary nervous system that causes the heart to slow down and that, at the same time, affects the nerves to the blood vessels in the legs permitting those vessels to dilate (widen). As a result the heart puts out less blood, the blood pressure drops, and what blood is circulating tends to go into the legs rather than to the head. The brain is deprived of oxygen and fainting episode occurs.

Donor Reaction & Injury Intervention Protocol**COMPLETING THE DONOR REACTION & INJURY REPORT**

Complete each section:

1. Donor Information
2. Donation information
3. Reaction Information
4. Identify the Type of Reaction(s)/Injury and mark all applicable signs and symptoms
5. Additional Information (if more documentation is necessary to accurately relay the situation, i.e. any contact made with a minor's parents)
6. Discharge / Release Information

Note: If a report is being completed due to a 4th adjustment, the only required sections are Donor Information and Donation Information.

ROUTING OF THE DONOR REACTION & INJURY REPORT (F1 DR-078-PRD)

1. Refer to appropriate reaction/injury grid (pages 4-8) to evaluate if report is required.
2. Call Donor Relations at (303) 363-2202 as soon as possible following any reaction/injury that requires a report. (4th adjustment notifications are exempt). Document who you spoke to on page 2 of *Donor Reaction & Injury Report* (upper right hand corner). If staff is not available, leave a detailed message and include the following:
 - Donor name
 - Donor phone number
 - Donor Tech name/phone number and location of drive
 - Detailed description of reaction/injury and interventions performed including indication of any physician/EMS contact.
 - Document "message left" on Injury report under "Donor Relations Contact"
3. Forward completed reports to Donor Relations who will then facilitate follow-up.
 - a. Fax report to Donor Relations ASAP following the reaction/injury at (303) 363-3992.
 - b. Send original via interoffice mail.
 - c. If reaction / injury is related to an apheresis procedure, please attach a copy of the Procedure record to the Donor Reaction & Injury form and forward to Donor Relations.

CROSS REFERENCES

F1 DR-078-PRD Donor Reaction & Injury Report
QR-006-PRD Product Investigation Report (PIR)

REFERENCES

1. F.A. Davis Company, Taber's Cyclopedic Medical Dictionary, 1989
2. McGraw Hill, Inc., Harrison's Principles of Internal Medicine, 11th Edition, 1987

ARM INJURIES

	Small Hematoma / Bruise	Large Hematoma / Bruise	Nerve Irritation	Arterial Puncture
Signs & Symptoms	Pressure/swelling/ tenderness Redness/warmth	Small hematoma PLUS pain OR Large hematoma	Immediate intense pain at site Numbness or tingling in fingers, hand or arm Shooting pain down arm Weakness of arm	Bright red blood Pulsing sensation in tubing Pulsing blood flow Rapid draw (< 4 minutes) Pressure/swelling/ tenderness
Routine Interventions	Continue collection with donor consent as long as hematoma does not worsen Upon needle removal, apply constant, firm pressure until bleeding stops Apply cold compress	Discontinue Procedure Immediately Apply constant, firm pressure until bleeding stops Apply cold compress	Discontinue Procedure Immediately Apply constant, firm pressure until bleeding stops Apply cold compress	Discontinue Procedure Immediately Donor Technician must apply constant firm pressure for at least 10 minutes Check for radial pulses and good circulation after bleeding has stopped – If no pulses or circulation problems, call EMS
Donor Instructions	Apply cold compresses intermittently for 12-24 hours, then use warm compresses thereafter. If bleeding resumes, apply firm, direct pressure and elevate arm directly above head. If condition worsens or there are any problems or concerns, call Donor Relations.	Apply cold compresses intermittently for 12-24 hours, then use warm compresses thereafter. If bleeding resumes, apply firm, direct pressure and elevate arm directly above head. If condition worsens or there are any problems or concerns, call Donor Relations.	Contact Donor Relations if condition worsens or there are any problems. A Donor Relations nurse will be contacting you to follow-up.	Apply pressure should bleeding occur. Seek medical attention should bleeding, pain, numbness/tingling occur. Contact Donor Relations if condition worsens or there are any problems. A Donor Relations nurse will be contacting you to follow-up.
Documentation	Donation Record <ul style="list-style-type: none"> • Hematoma • Routine Intervention Performed • Instructions Given 	Donation Record <ul style="list-style-type: none"> • Hematoma • Routine Intervention Performed • Instructions Given 	Donor Injury Report Donation Record <ul style="list-style-type: none"> • Other – Nerve irritation • Routine Intervention Performed • Instructions given • Donor Injury Report Filed 	Donor Injury Report Donation Record <ul style="list-style-type: none"> • Other – Possible Arterial Puncture • Routine Interventions Performed • Instructions given • Donor Injury Report Filed

VASOVAGAL / HYPOVOLEMIC REACTIONS

	MILD VASOVAGAL REACTION (VV) – NO LOC	MODERATE VV REACTION – LOC, UNCOMPLICATED	SEVERE VV REACTION – LOC, COMPLICATED	SEVERE VV REACTION WITH AN INJURY
SIGNS & SYMPTOMS	Cold extremities/chills Feeling of warmth Hypotension Lightheadedness/dizziness Nausea/vomiting Pallor (pale skin or lips) Slow or Rapid Pulse Sweating Twitching Weakness	Mild signs and symptoms PLUS LOC < 60 seconds	Moderate signs and symptoms PLUS Convulsions LOC >60 seconds Loss of bowel/bladder control Tetany	Severe signs and symptoms PLUS Injury/Fall
ROUTINE INTERVENTIONS	Tilt donor bed back or lie donor down Elevate feet Apply cold towels Offer fluids Monitor V/S Observe and reassure donor If nauseous, discontinue procedure, turn towards side, and provide emesis basin	Discontinue procedure Tilt donor bed back or lie donor down Elevate feet Apply cold towels Offer fluids Monitor V/S Observe and reassure donor If nauseous turn towards side and provide emesis basin	Discontinue procedure Tilt donor bed back or lie donor down Elevate feet Apply cold towels Offer fluids Monitor V/S Observe and reassure donor If nauseous turn towards side and provide emesis basin	Discontinue procedure Tilt donor bed back or lie donor down Elevate feet Apply cold towels Offer fluids Monitor V/S Observe and reassure donor If nauseous turn towards side and provide emesis basin Treat injury
DONOR INSTRUCTIONS	If symptoms resume, sit down immediately, do not operate heavy machinery. Seek medical attention. Increase fluid intake. Contact Donor Relations for any questions or concerns.	If symptoms resume, sit down immediately, do not operate heavy machinery. Seek medical attention. Increase fluid intake. Contact Donor Relations for any questions or concerns.	If symptoms resume, sit down immediately, do not operate heavy machinery. Seek medical attention. Increase fluid intake. A Donor Relations nurse will be contacting you to follow-up.	If symptoms resume, sit down immediately, do not operate heavy machinery. Seek medical attention. Increase fluid intake. A Donor Relations nurse will be contacting you to follow-up.
DOCUMENTATION	Donation Record: <ul style="list-style-type: none">• Mild• Routine Intervention Performed• Instructions given• Release V/S	Donation Record: <ul style="list-style-type: none">• Moderate• Routine Intervention Performed• Instructions given• Release V/S	Donation Record: <ul style="list-style-type: none">• Severe• Routine Intervention Performed• Instructions given• Donor Injury Report Filed• Release V/S Complete Donor Injury Report • Record V/S approximately every 10 minutes	Donation Record: <ul style="list-style-type: none">• Severe• Routine Intervention Performed• Instructions given• Donor Injury Report Filed• Release V/S Complete Donor Injury Report • Record V/S approximately every 10 minutes

OTHER TYPES OF REACTIONS

	Localized Allergic Reaction	Hyperventilation	Medical Emergency Stroke	Medical Emergency Cardiac	Medical Emergency Respiratory
Signs & Symptoms	Itching/Hives Skin irritation rashes	Rapid breathing with or without tingling of lips, fingers, and hands Perspiration Possible feelings of suffocation	Sudden numbness or weakness of the face, arm, or leg (especially on one side of the body) Sudden trouble seeing in one or both eyes Slurred Speech Sudden trouble walking, dizziness or loss of balance and/or coordination	Chest discomfort (may be described as squeezing, pressure) Discomfort in other areas of the upper body (arm, jaw, back, or stomach) Shortness of breath Profuse sweating Nausea Lightheadedness	Feelings of suffocation, unable to breathe Talking/coughing is difficult Rapid labored breathing Nasal flaring and breathing is labored Audible wheezing upon inspiration/expiration
Routine Interventions	Continue procedure with donor consent	Discontinue procedure Have donor breathe into paper bag for 1-3 minutes	Discontinue procedure Activate EMS Comfort Donor Monitor V/S	Discontinue procedure Activate EMS Comfort Donor Monitor V/S	Discontinue procedure Activate EMS Comfort Donor Monitor V/S
Donor Instructions	If symptoms worsen seek medical attention. Contact Donor Relations for any questions or concerns. A cold towel may be applied to irritated area.	Provide routine post-donation instructions. Educate and reassure donor.			
Documentation	Donation Record <ul style="list-style-type: none"> • Other – Allergic reaction • Routine Intervention Performed • Instructions given 	Donor Injury Report Donation Record <ul style="list-style-type: none"> • Other – Hyperventilation • Routine Intervention Performed • Instructions Given • Donor Injury Report Filed 	Donor Injury Report Donation Record <ul style="list-style-type: none"> • Other – Medical Emergency • Routine Intervention Performed • Donor Injury Report Filed 	Donor Injury Report Donation Record <ul style="list-style-type: none"> • Other – Medical Emergency • Routine Intervention Performed • Donor Injury Report Filed 	Donor Injury Report Donation Record <ul style="list-style-type: none"> • Other – Medical Emergency • Routine Intervention Performed • Donor Injury Report Filed

APHERESIS REACTIONS

	Mild Citrate Reaction (Resolves with TUMS)	Severe Citrate Reaction	Allergic Reaction (other than localized)	Hemolysis
Signs & Symptoms	Tingling around the mouth in the face and/or hands and feet Lethargy Feeling a sense of “vibration” Cramps in hands/feet	Confusion/disorientation Carpal –pedal spasms Tetany – muscle tightness Chills/Shivering Circumoral Paresthesia Nausea/Vomiting Pallor Rapid Pulse	Anaphylactic Shock Decreased BP Itching in mouth Wheezing Difficulty breathing Abdominal cramps Nausea/vomiting Increased heart rate Collapse Pallor	Pinkish to cherry red fluid in collection line
Routine Interventions	Pause procedure Offer Tums Monitor donor and press “continue” when ready If s/s persist: Decrease ACD-A rate Monitor donor for 10 minutes Decrease ACD-A again if s/s persist Discontinue procedure if symptoms are intolerable – give rinseback if possible	Discontinue procedure Do not give rinseback Contact physician on call Consider activating EMS Monitor V/S periodically	Discontinue Procedure Do not give rinseback Contact physician on call Consider activating EMS Monitor V/S periodically	Discontinue Procedure Do not give rinseback Contact Physician on-call Consider activatingEMS Monitor V/S periodically
Donor Instructions	Educate and reassure donor.	Educate and reassure donor.	Educate and reassure donor.	Educate and reassure donor. Provide any other instructions given by on-call physician
Documentation	Donation Record • Other – Citrate • Routine intervention performed • Instructions given Donor Care Plan Procedure Record	Donor Injury Report Donation Record • Other – Citrate • Instructions given • Donor Injury Report Filed Donor Care Plan Procedure Record	Donor Injury Report Donation Record • Other – Allergic Reaction • Routine intervention performed • Instructions given • Donor Injury Report Filed Procedure Record Donor Care Plan	Donor Injury Report Donation Record • Other – Hemolysis • Routine Intervention performed • Instructions given • Donor Injury Report Filed Procedure Record Donor Care Plan Initiate a PIR

APHERESIS REACTIONS - CONTINUED

	Infiltration	Reduced or no Anti Coagulant flow	Anti Coagulant and Saline Solutions were reversed (dRBC Collections)
Signs & Symptoms	Swelling Donor discomfort at phlebotomy site Trima machine producing "return" alerts IV fluid leaking into tissues or outside the vein.	Large egg-white appearing clump in platelet bag	Large egg-white appearing clump in platelet bag accompanied by s/s of a severe citrate reaction
Routine Interventions	Discontinue Procedure Do not give rinseback Apply constant, firm pressure to site until bleeding has stopped Apply cold compress to site	Discontinue Procedure Do not give rinseback Contact Physician on call Consider activating EMS Monitor V/S periodically	Discontinue Procedure Do not give rinseback Contact Physician on call Consider activating EMS Monitor V/S periodically
Donor Instructions	Apply cold compresses intermittently for 12-24 hours, then use warm compresses thereafter. If bleeding resumes, apply firm, direct pressure and elevate arm directly above head. If condition worsens or there are any problems or concerns, call Donor Relations.	Educate and reassure donor. Provide any other instructions given by on-call physician.	Educate and reassure donor. Provide any other instructions given by on-call physician.
Documentation	<ul style="list-style-type: none"> • Donation Record <ul style="list-style-type: none"> ○ Other – Infiltration ○ Routine intervention performed ○ Instructions given • Donor Care Plan • Procedure Record 	<ul style="list-style-type: none"> • Donor Injury Report • Donation Record <ul style="list-style-type: none"> ○ Other – no ACD-A ○ Routine intervention performed ○ Instructions given ○ Donor Injury Report Filed • Procedure Record • Donor Care Plan • Initiate a PIR 	<ul style="list-style-type: none"> • Donor Injury Report • Donation Record <ul style="list-style-type: none"> ○ Other – ACD-A /Saline reversed ○ Routine intervention performed ○ Instructions given ○ Donor Injury Report Filed • Procedure Record • Donor Care Plan • Initiate a PIR

Donor Reaction & Injury Report

Donor Relations – Phone: (303) 363-2202 Cell: (720) 984-5328 Fax: (303) 363-3992

Donor Information

Donor Name: _____ Donor ID/L4SSN: _____
DOB: _____ Day Phone: _____ Evening Phone: _____

Donation Information

Donation Date: _____ Name of CDC/CBDO: _____ Donation Type: _____ 4th Adjust.
Donor Height: _____ Donor Weight: _____ Report Completed by: _____

Reaction/Injury Information

Date Reaction Began: _____ Time Reaction Began: _____ Time Reaction Ended: _____

Location Reaction Began: _____

Reaction began > 30 minutes after needle withdrawal? Recovery required > 30 minutes

Donor call-back Date/Time of call-back: _____

Type of Reaction/Injury (Mark all signs and symptoms that apply)

Vasovagal *

- Cold extremities/chills
- Convulsions
- Feeling of warmth
- Hypotension
- Lightheadedness/dizziness
- Loss of bladder and/or bowel control
- LOC < 60 seconds
- LOC > 60 seconds
- Nausea / vomiting
- Pallor (pale skin or lips)
- Rapid pulse
- Slow pulse
- Sweating
- Tetany
- Twitching
- Weakness

Did donor fall? Yes No

Where did the fall occur? _____

Systemic Allergic Reaction/Anaphylaxis *

- Anxiousness, restlessness
- Arrhythmia
- Cyanosis
- Generalized hives
- Generalized itching
- Generalized rash
- High blood pressure
- Laryngeal edema with stridor (noisy breathing)
- Low blood pressure
- Pulmonary edema
- Rapid pulse
- Scratchy feeling in throat
- Shortness of breath
- Slow pulse
- Sneezing and nasal congestion
- Swollen tongue, throat, eyes and face
- Wheezing

Local Allergic Reaction

- Itching at insertion or bandage site
- Rash/hives at insertion or bandage site
- Redness at insertion or bandage site

Hyperventilation *

Medical Emergency *

- Cardiac
- Respiratory
- Stroke

****Vital Signs (Record VS approximately every 10 minutes)***

Time	BP	Pulse	Position (circle one)
Pre-donation			Sitting
			Sitting / Lying down / Feet elevated
			Sitting / Lying down / Feet elevated
			Sitting / Lying down / Feet elevated
			Sitting / Lying down / Feet elevated
			Sitting / Lying down / Feet elevated
Release			Sitting

VS required for Vasovagal, Anaphylaxis, Hyperventilation, and Medical Emergencies

Donor Identifier: _____ Donor Relations Contact: _____

Arm Injuries

Arm: Right Left

Nerve Irritation

- Immediate intense pain at site
- Numbness or tingling of fingers, hand or arm
- Shooting pain down arm
- Weakness of arm

Hematoma/Infiltration (circle one)

- Pain
- Pressure/swelling/tenderness
- Redness/warmth

Venipuncture: #1 #2

Arterial Puncture

- Bright red blood
- Pulse sensation in tubing
- Pulsing blood flow
- Rapid draw (less than 4 minutes)
- Pressure/swelling/tenderness

Is radial pulse present? Yes No

Is there any arm discoloration? Yes No

Was pressure held for 10 minutes? Yes No

Apheresis Reactions

Severe Citrate Reaction

- Bluish tint to skin (cyanosis)
- Spasms in hands and/or feet
- Chills shivering
- Circumoral Paresthesia (pins and needles)
- Mental confusion
- Muscle tightness or cramping, tetany
- Nausea/vomiting
- Pallor
- Rapid pulse
- Sharp chest pain
- Shock (low blood pressure)
- Shortness of breath
- Slow pulse
- Tachycardia
- Twitching/tremors

Hemolysis

- Back/flank pain
- Bluish tint to skin (cyanosis)
- Hematuria (blood in urine)
- Mental confusion
- Pallor
- Red plasma
- Shock (low blood pressure)
- Shortness of breath
- Tachycardia

Additional Information/Details: (i.e. Parent phone calls, any information not on the check-list)

Discharge / Release:

Was a Bonfils' physician notified? Pager (303) 206-2139 Yes No Whom? _____

Donor released to: Self Other (If other, relationship to donor): _____

Was EMS activated? Yes No Was donor transported by EMS? Yes No

Donor refused treatment/medical advice (please explain): _____

DONOR RELATIONS USE ONLY

Did donor seek medical attention? Yes No BCx notified? Yes No, date of notification: _____

Details: _____
