Disaster Operations Handbook

Coordinating the Nation's Blood Supply During Disasters and Biological Events

Mention of specific products or equipment by contributors to this AABB publication does not represent an endorsement of such products by the AABB, nor does it necessarily indicate a preference for those products over other similar competitive products.

Efforts are made to have publications of the AABB consistent in regard to acceptable practices. However, for several reasons, they may not be. First, as new developments in the practice of blood banking occur, changes may be recommended to the AABB *Standards for Blood Banks and Transfusion Services*. It is not possible, however, to revise each publication at the time such a change is adopted. Thus, it is essential that the most recent edition of the Standards be consulted as a reference in regard to current acceptable practices. Second, the views expressed in this publication represent the opinions of authors. The publication of this book does not constitute an endorsement by the AABB of any view expressed herein, and the AABB expressly disclaims any liability arising from any inaccuracy or misstatement.

Disaster Operations Handbook

Coordinating the Nation's Blood Supply During Disasters and Biological Events

AABB Interorganizational Task Force on Domestic Disasters and Acts of Terrorism

American Association of Blood Banks

America's Blood Centers

American Red Cross

Blood Centers of America/hemerica

Armed Services Blood Program Office

Centers for Disease Control and Prevention

Department of Health and Human Services

Food and Drug Administration

Advanced Medical Technology Association

American Association of Tissue Banks

American Hospital Association

College of American Pathologists

Plasma Protein Therapeutics Association

To purchase additional copies of this book, please call our sales department at (301) 215-6499 or fax orders to (301) 907-6895. AABB sales representatives are available from 8:30 am to 5:00 pm, EST, Monday through Friday, for telephone access. For other book services, including chapter reprints and large quantity sales, ask for the Senior Sales Associate.

Visit the American Association of Blood Banks Web site at www.aabb.org or e-mail our sales department at sales@aabb.org.

American Association of Blood Banks

8101 Glenbrook Road

Bethesda, Maryland 20814-2749

ISBN NO. 1-56395-168-1

Printed in the United States

CONTENTS

1 INTRODUCTION

1.1 PURPOSE OF OPERATIONS HANDBOOK

The purpose of this Operations Handbook is to assist blood centers, hospital blood banks, and transfusion services in preparing for and responding to future domestic disasters and acts of terrorism affecting the blood supply. The Handbook is intended to facilitate coordination among these facilities, national blood organizations, and federal, state, and local government officials, in the event of a disaster, to

- Determine medical need for blood
- Facilitate transportation, if needed, of blood from one facility to another
- Communicate a common message to the national blood community and the public about the status of the blood supply in the disaster-affected community

1.2 BACKGROUND OF TASK FORCE/PARTICIPATING ORGANIZATIONS

Following the events of September 11, 2001, the blood community recognized the need to evaluate its actions in response to the tragedy, examine "lessons to be learned," and develop recommendations relating to its response to future domestic disasters and acts of terrorism. In December 2001, the American Association of Blood Banks (AABB) convened a task force of representatives from various blood banking organizations, blood collector and hospital suppliers, and government agencies to address these concerns.

This Disaster Operations Handbook was prepared by the AABB Interorganizational Task Force on Domestic Disasters and Acts of Terrorism, whose members are as follows:

- American Association of Blood Banks (AABB)
- America's Blood Centers (ABC)
- American Red Cross (ARC)
- Blood Centers of America/hemerica (BCA)
- Armed Services Blood Program Office (ASBPO)
- Centers for Disease Control and Prevention (CDC)
- Department of Health and Human Services (HHS)
- Food and Drug Administration (FDA)
- Advanced Medical Technology Association (AdvaMed)
- American Association of Tissue Banks (AATB)
- American Hospital Association (AHA)
- College of American Pathologists (CAP)
- Plasma Protein Therapeutics Association (PPTA)

The Task Force believes that there are no *currently* identified scenarios in which the immediate need for blood and/or blood components would be beyond the capabilities of the blood community to meet. The single greatest risk of domestic disasters and acts of terrorism is not lack of supply, but disruption of the blood system.

Previous domestic disasters have led to three overarching lessons:

1. The need to control collections in excess of actual need
2. The need to ensure that facilities maintain inventories to be prepared for disasters at all times in all locations (note that a seven-day supply of the combined inventory of both blood collectors and hospitals is recommended to be prepared for a disaster)
3. The need for overall inventory management within the United States

1.3 HANDBOOK ORGANIZATION

The primary focus of the Handbook is to outline steps to be taken by **blood centers and hospitals that collect allogeneic blood**. For these institutions, referred to as **"affected blood collectors,"** the Handbook includes detailed subsections:

Section 2: Preparation Checklist: steps to take to be prepared for a disaster

Section 3: Activation/Event Occurs: steps to take in event of disaster

Section 4: Education/Implementation: guidance for staff training and drills

Section 5: Quick Reference Materials

In addition, the Handbook includes a separate supplement for hospitals that have transfusion services only and collect autologous blood only.

1.4 DEFINITION OF A "DISASTER"

Unless otherwise stated, a "disaster" includes any domestic disaster or act of terrorism that

- Suddenly requires a much larger amount of blood than usual
  OR
- Temporarily restricts or eliminates a blood collector's ability to collect, test, process, and distribute blood
  OR
- Creates a sudden influx of donors, requiring accelerated drawing of blood to meet an emergent need elsewhere

Thus, this Handbook addresses how the blood community will respond to natural disasters and acts of terrorism, including situations resulting in mass casualties potentially requiring large amounts of blood, as well as bioterrorism* attacks with infectious agents, which would not necessarily require more blood but could substantially limit the blood supply by affecting donor suitability.

1.5 MEETING MEDICAL NEED

The Task Force made the following assumptions with regard to the principles it will follow as the best way to meet immediate medical needs within the first 24 hours:

- Any immediate shipment will consist of Type O red blood cells (RBCs)
- Immediate shipment should not exceed the usual one-day amount of blood (all types) distributed by the affected blood collector
- Immediate shipment will be from blood collector(s) with access to the most rapid means of transportation to the affected blood collector

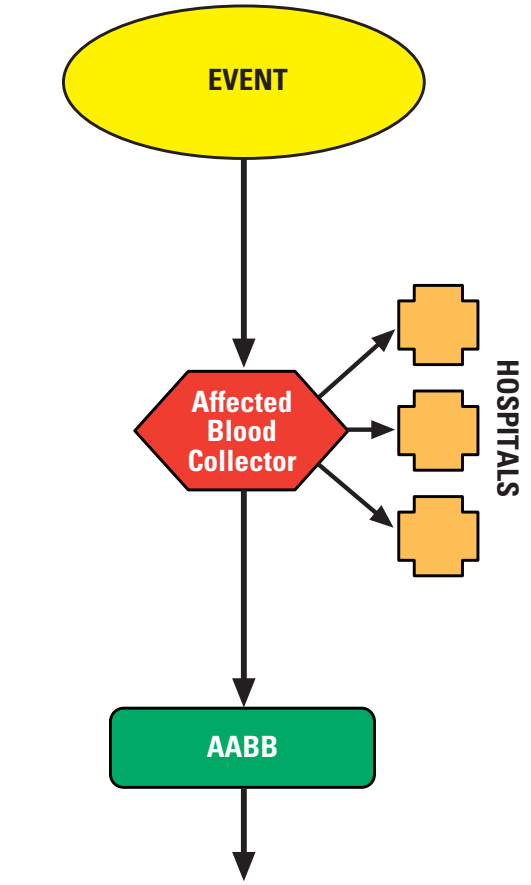
Most disasters do not require immediate or extensive use of platelets or plasma, and the need for these components can be evaluated if special circumstances arise.

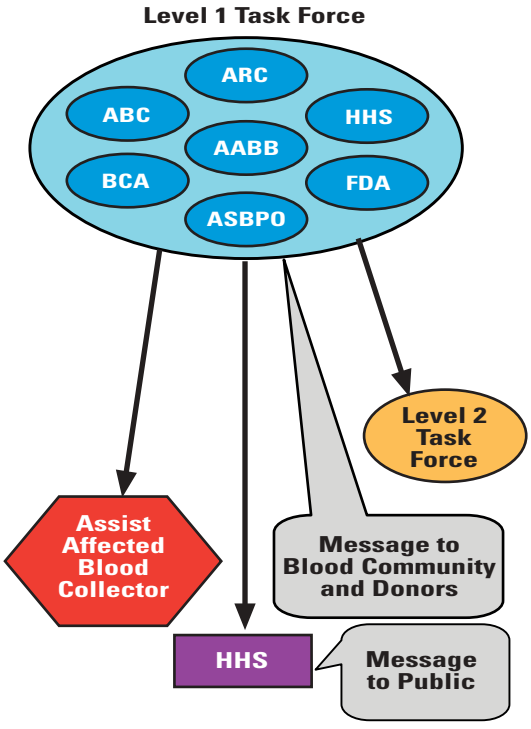
The Task Force will reassess medical need at 24 hours and may alter the strategy for meeting blood needs depending on the circumstances.

1.6 OVERVIEW OF RESPONSE PLAN

The response plan is centered on the blood collector (BC) in the affected area acting as a main conduit for information and communication. The affected blood collector's role is to assess the local medical need for blood and to communicate this need to the Task Force (TF) via the AABB. The Task Force will then consider the national response and recommend an action strategy including, but not limited to, the shipment of blood to the affected blood collector and the coordination and dissemination of a message to the blood community and donors.

*For events involving bioterrorism, refer to Section 3.2, Biological Attack Response Process.





OVERVIEW OF RESPONSE PLAN

Step 1: Affected Blood Collector Assesses Medical Need for Blood

- ✓ Contact local hospital customers and emergency services to determine impact of event, including:
  - Nature of emergency (e.g., disaster, terrorism*)
  - Number of current and expected hospital admissions
  - Potential effect on local donor base
- ✓ Gather information on local blood inventory levels from both BC and hospital customers
- ✓ Calculate the medical need for blood for a non-biological event* which is based on three units of Type O RBCs per current and expected hospital admissions resulting from the event (see Event Assessment Form)

** For biological attacks see Section 3.2, Biological Attack Response Process.*

Step 2: Affected BC Contacts AABB (within 1 hour of event)

- ✓ Contact AABB
  (800) 458-9388 (landline)
  (240) 994-6700 (cell)
  Call letters (ham radio)
  nbe@aabb.org (wireless e-mail: e.g., Blackberry)
- ✓ Report medical need and local blood inventories

Step 3: Interorganizational Task Force Conference Call

- ✓ AABB convenes a conference call with Level 1 TF members (Level 2 TF members included if necessary)
- ✓ TF determines national strategy and coordination efforts, including:
  1. Message to blood community/donors
  2. Transportation and coordination of blood to affected BC
  3. Next steps until event is resolved
- ✓ Communicate decisions to Level 2 TF members

Step 4: Implementation of Task Force Recommendations

- ✓ TF representatives communicate recommendations to their respective constituencies
- ✓ Unified message distributed to blood community and donors (e.g., joint press releases)
- ✓ TF works with HHS to develop message for public at large (communicated by HHS)

2 PREPARATION CHECKLIST

2.1 COMMUNICATION STRATEGIES

In order to prepare to respond to a disaster, blood collectors should take several steps to ensure that they will be able to effectively communicate with other key parties during an emergency. Blood collectors should establish processes and procedures for the following lines of communication:

Strategy 1: Blood Collector to Hospital Transfusion Service

- ✓ BC should identify appropriate contacts at the hospital(s) it serves to determine the complete medical need once an event occurs
- ✓ BC will need to know the current and potential disaster-related hospital admissions as well as the Type O RBC inventory during an event (see Appendix 6.5, Event Assessment Form)
- ✓ BC should implement redundant lines of communication with hospital customers to ensure that communication can be established and maintained during an event

Modes of Communication: BC should identify lines of communication to be used in the event of a disaster. The flow of technological devices used for communicating during a disaster is as follows:

Level 1: Landline telephones
Level 2: Cellular telephones
Level 3: Amateur (ham) radio
Level 4: E-mail/wireless technologies such as Blackberry

Strategy 2: Blood Collector to Task Force*

BC should be prepared to contact the Task Force within 1 hour of an event. Before contacting the Task Force, BC should have as much of the following information as possible available:

- ✓ Number of current and expected disaster-related hospital admissions (see Appendix 6.5, Event Assessment Form)
- ✓ Current inventory levels on Type O RBC
- ✓ Contact person and best means of communication with that person

Upon collection of that information, BC to contact the Task Force, via AABB, at:

(800) 458-9388 (landline)
(240) 994-6700 (cell)
Call letters (ham radio)
nbe@aabb.org (wireless e-mail, Blackberry)

**If a blood collector is located in a state with an existing statewide response plan (e.g., California Blood Bank Society, Emergency Response/Disaster Response plan) then the coordinating entity (e.g., command center) may act as a liaison for the affected BC. Arrangements for contact with a centralized statewide response system must be in place prior to a disaster; therefore, please contact the Task Force (number above) and provide contact information and details of the response system.*

2.2 TRANSPORTATION OPTIONS

Preparation requires each blood collector to establish and maintain local contact with shipping companies. The Transportation Options Grid in Appendix 6.4 is to be used as a guide in managing the shipper's contact information. The information should be verified and updated every six months. In the event that blood needs to be transported to an affected area, the Task Force recommends the following transportation option hierarchy:

1. Commercial Airline Carriers

Carrier	Phone	Web
Airborne Express	(800) 247-2676	www.airborne.com
AirNet Express	(888) 888-8463	www.airnet.com
Federal Express	(800) 463-3339	www.fedex.com
Network Courier	(800) 938-1801	www.netcour.com
NowEx	(866) 888-8900	www.nowex.net
Sky Courier	(800) 336-3344	www.skycourier.com
United Parcel Service	(800) 742-5877	www.ups.com

2. Angel Flight America (AFA)

AFA is a nationwide volunteer pilots' network that has agreed to work with the Task Force and blood community as a whole to transport blood and blood products during times of emergency. Contact the regional AFA affiliate's (below) nearest BC to establish a communication procedure in case of an emergency. In cases of uncertainty about which AFA affiliate serves an area, contact AFA's national headquarters office at (877) 621-7177, or on the Web at www.angelflightamerica.org.

AFA Affiliate	Phone	Web
National HQ	(877) 621-7177	www.angelflightamerica.org
Northeast	(800) 549-9980	www.angelflightne.org
Mid-Atlantic	(800) 296-3797	www.angel-flight.org
Southeast	(800) 352-4256	www.angelflightse.org
Central	(800) 474-9464	www.angelflightcentral.org
South Central	(888) 784-0061	www.angelflightsc.org
West	(888) 426-2643	www.angelflight.org

3. Centers for Disease Control and Prevention (CDC) National Pharmaceutical Stockpile (NPS)

The mission of CDC's NPS is to ensure the availability and rapid deployment of life-saving pharmaceuticals, antidotes, other medical supplies, and equipment necessary to counter the effects of nerve agents, biological pathogens, and chemical agents.

NPS has agreed to assist the blood community during national emergencies by delivering blood to affected areas. Blood collectors located nearest the NPS supply depots may be asked to deliver blood packages to the NPS depot for transport to a destination near the affected area. The blood collector in the affected area is responsible for receiving the blood package at a predetermined time and location for distribution to hospitals.

4. Ground Carriers

Ground carriers may be used to deliver blood to the affected area and will be essential if air assets are unavailable (e.g., if the Federal Aviation Administration restricts airspace). Several ground carriers have priority nonstop services. Contact local and regional carriers and establish a process in the event that ground transportation is needed.

Carrier	Phone	Web	Comments
Fedex Custom Critical	(800) 762-3787	www.fedexcustomcritical.com	
NowEx	(866) 888-8900	www.nowex.net	
Messenger Courier Association of the Americas	(202) 785-3298	www.mcaa.com	Web site has a courier locator by state

5. Local Police and Other Emergency Service Vehicles

Local emergency services may be needed to transport blood through affected areas to hospitals. BCs should establish and maintain collaborative relationships with local law enforcement and emergency services organizations. Consider the following critical issues:

- ✓ Educate local authorities about blood
  - Critical life-saving nature of blood
  - High priority to get blood from BC to hospitals (or from airport to BC/hospitals)
  - Perishable nature of blood
  - Temperature issues related to transporting blood—containers are validated for 24–48 hours from the time they are packed and shipped and must be delivered before temperatures fall outside required levels

- Storage capacity issues—due to limitations of refrigeration capacity, blood may have to be transported to multiple locations
- Hazardous substance issues—blood collected for transfusion and donor samples for testing that blood are non-biohazardous

✓ Blood collectors should consider having company logos on all vehicles and may want to have magnetized signs that can quickly be put on extra vehicles as needed

2.3 COORDINATION STRATEGIES (WITH STATE/LOCAL/FEDERAL AUTHORITIES)

The blood collector should identify the local and state emergency organizations to contact in the event of a disaster. BC should be listed on local emergency response plans supporting hospital and healthcare organizations.

Establish Relationship with Emergency Management Office(s)

- ✓ See Appendix 6.2 for a list of State Offices and Agencies of Emergency Management, or visit the FEMA Web site at www.fema.gov/fema/statedr.shtm
- ✓ Establish BC as a critical entity (blood supplier) within emergency response plans and ask to be included in appropriate planning sessions and practice scenarios
- ✓ Locate the critical staging areas that emergency response organizations will use, as these locations may be used as delivery points for blood and supplies

Hospital Admissions Estimation

- ✓ Establish a relationship with the entity(s) responsible for estimating the number of hospital admissions (e.g., survivors needing hospital care) expected from the event
- ✓ Use these figures to cross-check those collected from the hospital customers on the Event Assessment Form (Appendix 6.5)
- ✓ Establish redundant lines of communication with the entity to ensure that contact can be made throughout an event

Transportation Coordination

- ✓ Establish relationships with state and local law enforcement agencies, as their assistance may be needed to transport (or allow BC to transport) blood to hospitals in affected areas
- ✓ Educate local authorities on blood issues, including life-saving nature, packaging and storage requirements (e.g., temperature), and hazardous materials issues (e.g., units of blood are non-biohazardous)
- ✓ Acquire signage (e.g., magnetic signs) for BC vehicles that local law enforcement will recognize and approve for clearance into affected areas
- ✓ Establish alternate transportation means/routes for critical BC personnel who may need to report for duty in an affected area

Critical Services Restoration

- ✓ Contact local public utilities and ask them to place BC on priority service (e.g., telephone and electricity) restoration lists as an emergency services provider

Emergency Supplies Distribution

- ✓ Establish relationship and operational procedures with emergency organizations responsible for distributing essential supplies such as food, water, and shelter supplies (e.g., blankets). These supplies may be needed for staff and/or donors during a disaster.

2.4 VENDOR MANAGEMENT/SUPPLY CHAIN STRATEGIES

Blood collectors should be able to rapidly identify needed supplies, key sources of material, and methods of transportation in preparation for a disaster or act of terrorism. Many facilities operate on a "just in time" inventory system. Such a system may not be adequate for operation during a disaster, especially if increased numbers of donors will be drawn. Below is a checklist of supply and transportation needs that should be addressed prior to a disaster.

Needed Supplies

- ✓ Prepare a list of critical products, services, and supplies related to collection, processing, controlled-temperature transport, and storage
- ✓ Determine inventory of each

Source of Supplies

- ✓ Prepare a list of vendors and contact information for each product, service, and supply

Transportation

- ✓ Develop a contingency plan with the vendor(s)—manufacturer/distributor

2.5 WORKING WITH LOCAL UTILITIES TO RESTORE SERVICES (TELECOM, POWER)

A key component to being prepared for a disaster is making sure the blood collector has all essential utilities functional as soon as possible after a disaster has occurred. BC must remain operational and communicate with the outside world. **Blood collectors must ensure that they are on priority lists for phones and power.**

Step 1: Phones

During an emergency, certain entities are entitled to priority service for having their phone lines restored.

- ✓ BC should contact its long distance provider, explaining that it is a health entity that needs to be placed on the priority list for restoration of service once the phone lines have gone out
- ✓ BC should contact its local service provider when long distance and local providers differ

By placing itself on a priority list, BC will also help to ensure that it can receive incoming calls, as phone companies regulate which calls are routed during an emergency.

Step 2: Power

In preparation for power outages, the blood collector should

- ✓ Determine the rules in the local community regarding priority status for return of power
- ✓ Check with the local power company as to its procedures for deeming an entity top priority for restoration of power in the event of an outage (Note: the power company may direct BC to a city/local government)
- ✓ Review all power backup plans for its facility. Ideally, a BC should have alternative sources of power.
- ✓ Communicate with its vendors to determine procedures for obtaining back-up power in case of an emergency. Alternative sources of power/light that may be necessary include generators, batteries, and flashlights.

2.6 STRATEGIES FOR MANAGING DONORS, VOLUNTEERS, AND CROWDS

To prepare for potential crowds, blood collectors should consider the following issues:

Planning for Collections

- ✓ Prepare a system for identifying donors BC wants to draw versus those who should return later
- ✓ Consider drawing only Type O Positive, O Negative, and other Rh Negative donors
- ✓ Consider implementing a system to draw only samples for ABO/Rh testing from other prospective new donors

Donor/Crowd Control

- ✓ Determine the maximum capacity of donors BC will handle—consider such factors as supply, staff, time, and need
- ✓ Locate facilities for mass collections in case the primary collection site is not sufficient or operational
- ✓ Prepare additional site(s) that allow for plenty of parking

Volunteers

- ✓ Appoint a contact person for working with volunteers
- ✓ Consider regulatory issues (e.g., unless already trained, volunteers should be assigned only nonregulatory tasks)
- ✓ Prepare list of previous volunteers who may be available for an emergency
- ✓ Prepare a strategy for dealing with volunteers who are not needed
- ✓ Develop training materials
- ✓ Plan for how volunteers will be identified for security purposes

2.7 STRATEGIES FOR WORKING WITH THE MEDIA

If a natural disaster or act of terrorism occurs, BC will need to inform the general public about its medical needs relating to blood.

To communicate medical needs to its current donor base and potential new donors expediently, it is best to contact print and broadcast reporters—if reporters are not already calling BC—to provide them with an accurate, concise message. However, before conversing with any press members, BC should speak with the Task Force to ensure that a consistent message is being delivered. To reach the appropriate Task Force media representative, call (800) 458-9388.

Whenever possible, BC should coordinate its messages to the media with those of the Task Force. For example, it would be best for BC to handle inquiries from local media, while forwarding inquires from national media outlets (*New York Times*, *AP*, NBC's *Today Show*, etc.) to the Task Force media representative.

In preparation for a potential disaster, BC should

- ✓ Update media lists (TV, newspapers, radio stations, wire services, etc.) on an ongoing basis
- ✓ Decide who will serve as spokesperson(s) and ensure that they have received media training
- ✓ Draft as many press materials (bios, fact sheets, etc.) as possible ahead of time (see Appendix 6.3, Boilerplate Press Releases)
- ✓ Be prepared to provide media with contact information for the Interorganizational Task Force
- ✓ Share and, whenever possible, coordinate all media messages with the Task Force

2.8 SAFETY AND SECURITY CONCERNS

The blood collector should take steps to ensure the safety and security of staff, volunteers, and donors both onsite and during mobile operations (e.g., transporting blood to affected hospitals):

Security

- ✓ Permanent security identification (e.g., photo ID) should be issued to all staff
- ✓ Temporary security identification should be prepared for issue to anyone who needs access to the BC facility, such as volunteers, donors, and vendors
- ✓ BC may elect to use professional security guards to help manage crowds and/or secure the BC facility during a crisis

Physical Safety

- ✓ BC should prepare procedures for staff to be implemented during an event, including
  - Evacuation Plans: Evacuation routes for both the BC facility and local area should be established in case staff, volunteers, and donors must be quickly evacuated
  - Emergency Shifts: An emergency staff schedule should be prepared that balances tasks and staff resources, with the goal of controlling fatigue (fatigue can lead to errors and compromises safety)
  - Emergency Contacts: A directory of staff emergency contact information (e.g., home phone numbers) should be established and maintained
  - Managing Donors: A plan for a potential influx of donors should be prepared, with safety issues (e.g., crowd control) as a primary concern

Emergency Supplies

- ✓ BC should establish and maintain a depot of emergency supplies at the facility (e.g., flashlights, batteries, water). A comprehensive list of emergency supplies can be found on the FEMA Web site at www.fema.gov/rrr/emprep.shtm.
- ✓ Mobile vans and BC vehicles should also be equipped with mobile emergency kits. An emergency car kit can be found on the FEMA Web site listed above.

3 Activation/ Event Occurs

3.1 Step-by-Step Response Process

The response plan is centered on the blood collector in the affected area (affected blood collector) acting as a main conduit for information and communication. The affected blood collector's role is to assess the immediate and short-term need for blood by using the Event Assessment Form (Appendix 6.5) and to communicate this need to the Interorganizational Task Force via the AABB. The Task Force will then consider the national response and recommend an action strategy, including but not limited to the shipment of blood to the affected blood collector and the coordination and dissemination of a message to the blood community and donors.

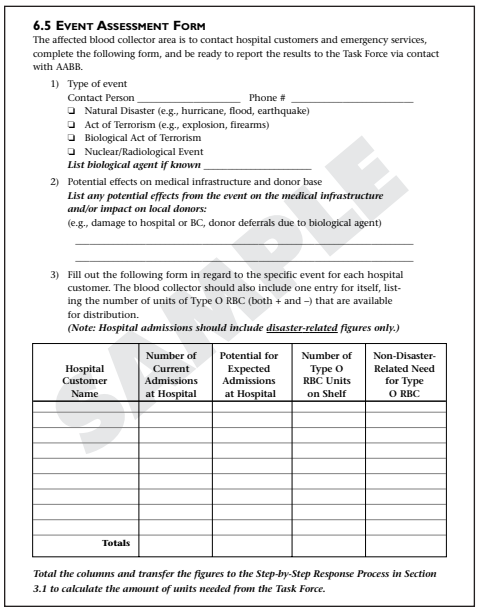
Step 1: Affected Blood Collector Assesses Medical Need for Blood

✓ Contact local hospitals and emergency services to determine

- Type of event* (e.g., natural disaster, act of terrorism)
- Current and expected hospital admissions by facility
- Current blood inventory levels of Type O RBC by facility

*For events involving bioterrorism, refer to Section 3.2, Biological Attack Response Process.

✓ Complete the Event Assessment Form (Appendix 6.5) and fill in the totals in the following chart



6.5 EVENT ASSESSMENT FORM

The affected blood collector area is to contact hospital customers and emergency services, complete the following form, and be ready to report the results to the Task Force via contact with AABB.

1) Type of event
Contact Person _____ Phone # _____
❑ Natural Disaster (e.g., hurricane, flood, earthquake)
❑ Act of Terrorism (e.g., explosion, firearms)
❑ Biological Act of Terrorism
❑ Nuclear/Radiological Event
List biological agent if known _____

2) Potential effects on medical infrastructure and donor base
List any potential effects from the event on the medical infrastructure and/or impact on local donors:
(e.g., damage to hospital or BC, donor deferrals due to biological agent)
_____
_____

3) Fill out the following form in regard to the specific event for each hospital customer. The blood collector should also include one entry for itself, listing the number of units of Type O RBC (both + and –) that are available for distribution.
(Note: Hospital admissions should include disaster-related figures only.)

Hospital Customer Name	Number of Current Admissions at Hospital	Potential for Expected Admissions at Hospital	Number of Type O RBC Units on Shelf	Non-Disaster-Related Need for Type O RBC
Totals				

Total the columns and transfer the figures to the Step-by-Step Response Process in Section 3.1 to calculate the amount of units needed from the Task Force.

SAMPLE

Total the columns (all hospital customers) on the Event Assessment Form (Appendix 6.5) and add the totals to the following charts. Complete the charts by adding or subtracting as indicated.

Hospital Admissions Expected (Disaster Related Only)

Total Current Hospital Admissions:		_____
Total Potential for Expected Hospital Admissions:	(+)	_____
Total Hospital Admissions Expected:	(A) =	_____

Type O (both + and -) RBC Available

Total Type O RBC at Hospitals and Blood Collector:		_____
Total Type O RBC Needed for Non-Disaster Related Need:	(-)	_____
Total of Type O RBC Available:	(B) =	_____

Calculate the total number of units needed from the Task Force

Total Hospital Admissions Expected			Total Type O RBC Needed		Total Type O RBC Available		Total Type O RBC Needed from TF
_____	*Multiply (A) by 3*	x 3 units =	_____	(–) minus	_____	=	_____
(A)					(B)		

Step 2: Affected Blood Collector Contacts AABB (within 1 hour of event)

✓ Contact AABB

AABB Representatives will also attempt to contact the affected blood collector.

Use the following hierarchy to contact AABB. For instance, if landline phones are busy or not functioning, try dialing the cellular phone numbers.

Hierarchy of Communication with AABB

Level 1: ***Landline Phone Numbers***

(800) 458-9388 (main 800 number)

(800) 458-9387 (auxiliary 800 number)

(800) 544-5192 (auxiliary 800 number)

Level 2: ***Cellular Phone Numbers***

(240) 994-6700

(240) 994-6701

(240) 994-6702

(240) 994-6703

Level 3: ***Amateur Radio***

Call Sign TBD on Network TBD

Level 4: ***Wireless E-mail (Blackberry)***

nbe@aabb.org

Step 3: Interorganizational Task Force Conference Call

✓ AABB will convene a conference call with Level 1 Task Force representatives. Depending on the nature of the event, a contact person from the affected blood collector may be asked to participate in the call. If Level 2 Task Force representatives need to participate in the conference call, they will be notified. Dial-in instructions will be communicated by AABB staff to the Task Force representatives via phone and on the Web at www.aabb.org/disaster.

Level 1 TF Members	*Level 2 TF Members*
AABB	AATB
ABC	AdvaMed
ARC	AHA
ASBPO	CAP
BCA	CDC
FDA	PPTA
HHS	

✓ Task Force determines national strategy and coordination efforts, including
- Constructing message to blood community and donors
- Coordinating broad public message in conjunction with HHS
- Transportation and coordination of needed blood to the affected area
- Determining next steps until event has been resolved
- Communicating recommendations to Level 2 Task Force members if they are not on the conference call

Step 4: Implementation of Task Force Recommendations

✓ AABB will communicate the Task Force recommendations to the affected BC and will remain in constant contact with the affected BC until the event has been resolved

✓ Task Force representatives will communicate the Task Force recommendations to their respective constituencies

✓ A unified message (e.g., press releases) regarding the event status and Task Force recommendations will be disseminated to the blood community and donors via each constituency channel (for example, ABC, BCA, and AABB will communicate the recommendation to their respective members)

✓ Task Force will work with HHS to develop a broad message to be delivered to the public at large

3.2 BIOLOGICAL ATTACK RESPONSE PROCESS

If a community is faced with a biological attack with infectious agent(s), the issues facing blood collectors and hospitals regarding the potential impact on the blood supply and medical needs will not necessarily mirror those that arise following other types of disasters. Biological attacks may or may not require more blood. By affecting donor suitability, a biological attack may substantially limit the blood supply needed for ongoing unrelated transfusion needs. The impact on the donor population will depend on which biological agent is involved. The spread of certain agents may require immediate deferral policies. (For example, FDA has developed deferral policies relating to smallpox, in case there is an attack and/or a need for mass smallpox immunization.)

In the event of a biological attack, the affected BC should focus first on the impact on the blood supply and communicate this information to the Task Force. In particular, the affected BC should

- Identify appropriate deferral policies relating to biological agent used
- Estimate the scope of expected shortages resulting from donor deferrals

If a biological attack takes place and the affected BC has questions about the most recent deferral policies relating to the particular biological agent, it should contact the Task Force. The Task Force can act as a conduit between FDA and affected BC(s) to determine the appropriate course of action for deferring donors following a biological attack. The Task Force will also develop messages to be conveyed to the public about the impact of the biological attack on the blood supply.

In addition, should it identify an immediate need for blood (e.g., if there is a need to quarantine the blood supply or an increased transfusion need), the blood collector should contact the Task Force, which will work to facilitate shipment of blood to the affected BC.

3.3 TRANSPORTATION OF BLOOD TO AFFECTED AREA

If the Task Force determines that the affected BC needs assistance (e.g., blood delivered), then the blood collector(s) with access to the most rapid means of transportation will be contacted to ship blood to the affected BC.

- ✓ A representative of the Task Force (e.g., ARC, ABC, BCA, AABB) will contact the blood collector(s) with access to the most rapid means of transportation to the affected BC and facilitate a shipment of blood to the affected BC
  Note: In some cases, because of disaster-related effects on local infrastructures (e.g., highways closed), the BC located closest to the affected BC may not have the most rapid means of transporting blood.
- ✓ The BC responsible for shipping the blood should utilize the hierarchy of transportation options in Section 2.2, Transportation Options.
- ✓ Delivery locations will be arranged prior to shipment. The Task Force representative will confirm the appropriate delivery point with the affected BC. In some cases, the initial delivery point will be an alternate airport or staging area for other emergency supplies being delivered to the affected area.
- ✓ The affected BC is responsible for picking up the shipment at the pre-arranged location (discussed with the Task Force representative) and may need to utilize local law enforcement authorities or emergency service personnel to pick up and deliver the shipment to hospitals.
- ✓ Storage capacity at affected BC and hospitals should be considered. Blood may need to be delivered to multiple locations if storage is an issue.

3.4 COORDINATION STRATEGIES (WITH STATE/LOCAL/FEDERAL AUTHORITIES)

The blood collector should coordinate activities with local and state emergency organizations. BC should be listed on local emergency response plans supporting hospital and health-care organizations.

Contact Emergency Management Office(s)

- ✓ See Appendix 6.2 for a list of State Offices and Agencies of Emergency Management, or visit the FEMA Web site at www.fema.gov/fema/statedr.shtm
- ✓ Establish BC as a critical entity (blood supplier) and ask to be included in health-related emergency response discussions/decisions (e.g., where patients are being sent)
- ✓ Locate the critical staging areas that will be used by emergency response organizations, as these locations may be used as delivery points for blood and supplies—it may be advisable to send a BC staff member familiar with blood shipment to the staging area

Hospital Admissions Estimation

- ✓ Contact the entity(s) responsible for estimating the number of hospital admissions (e.g., survivors needing hospital care) expected from the event
- ✓ Use these figures to cross-check those collected from the hospital customers on the Event Assessment Form (Appendix 6.5)
- ✓ Establish redundant lines of communication with the entity to ensure that contact can be made throughout the crisis

Transportation Coordination

- ✓ Contact state and local law enforcement agencies, as their assistance may be needed to transport (or allow BC to transport) blood to hospitals in affected areas
- ✓ Apply signage (e.g., magnetic signs) to all BC vehicles so that local law enforcement will recognize and approve them for clearance into affected areas
- ✓ Establish alternate transportation means/routes for critical BC personnel who may need to report for duty in an affected area

Critical Services Restoration

✓ Contact local public utilities (e.g., telephone and electricity) and ask for BC to be placed on priority service restoration lists as an emergency services provider

Emergency Supplies Distribution

✓ Contact emergency organizations responsible for distributing essential supplies such as food, water, and shelter supplies (e.g., blankets). These supplies may be needed for staff and/or donors during a disaster.

3.5 VENDOR MANAGEMENT/SUPPLY CHAIN

Blood collectors should be able to rapidly identify needed supplies, key sources of material, and methods of transportation.

Needed Supplies

- ✓ Review list of critical products, services, and supplies related to collection, processing, controlled-temperature transport, and storage
- ✓ Determine inventory on hand
- ✓ Determine need for additional inventory based on estimated medical need for transfused blood and availability of blood from outside sources
- ✓ Do NOT request large volumes of supplies unless a large donor volume is highly probable

Source of Supplies

- ✓ Work with established vendors and current distributors to obtain additional supplies

Note: Distributors and manufacturers will be coordinating with the Task Force and will evaluate and prioritize demand on a national level if necessary.

Transportation

- ✓ Activate previously devised contingency plans with manufacturers/ distributors
- ✓ Notify vendors of interruptions to the normal transportation methods, such as local clearances or transportation barriers

Note: Manufacturers/distributors will advise if there are delays in shipment of products.

3.6 REGULATORY CONCERNS

While the availability of blood may be the primary concern in the event of a disaster, the safety of the blood supply is also paramount. Adherence to FDA regulations once an actual event has occurred is crucial. It is important to follow current good manufacturing practice and AABB *Standards*. Any consideration of regulatory exemptions will be driven on a case-by-case basis by medical need only. The Task Force will be in touch with FDA in the event of a disaster and will seek to convey to the blood community any changes in regular FDA policy.

The Task Force recommends the following during a disaster:

- ✓ Blood collection should be performed only by facilities that routinely collect allogeneic blood. Facilities that routinely collect only autologous blood or do not collect blood routinely should NOT collect allogeneic blood during a disaster.
- ✓ Units of blood released for transfusion should be fully tested, including testing for infectious disease. Blood collectors should already have in place policies and procedures for emergency and exceptional release that may be applied if absolutely necessary to meet immediate needs.
- ✓ Testing should be performed only by facilities that routinely test allogeneic blood. In the event that the routine testing facility is unavailable, back-up testing facilities that have been previously identified and approved by FDA may be used.
- ✓ All regulated functions should be performed by existing trained staff. Unless previously trained, volunteers may be used for non-regulated functions only. For example, volunteers could collect samples for later ABO/Rh testing. Such collection will not be considered a regulated function. Volunteers may also be used to educate and inform potential donors of non-eligibility criteria using predefined general questions such as history of travel.
- ✓ Unlicensed, registered allogeneic collection facilities may ship blood only within the state. In times of disaster, FDA may allow interstate shipment provided the product is appropriately labeled. FDA must grant permission prior to any such shipment.
- ✓ FDA has a plan for expedited release of test kits, reagents, etc., for collecting and processing blood donations in an emergency. Blood collectors wishing to activate this plan in an emergency should contact the vendor/supplier.

3.7 STRATEGIES FOR MANAGING DONORS, VOLUNTEERS, AND CROWDS

Once a disaster has occurred, blood collectors should establish strategies for managing donors as well as volunteers. BC should encourage donors not to appear en masse after an event until the medical need has been assessed. BC should be prepared, however, to control significant crowds.

Collect Donors According to Predetermined Plan

- ✓ Collect only Type O positive, O negative, and other Rh negative RBCs
- ✓ Implement plan for handling remainder of donors (e.g., draw samples from new donors)

Donor/Crowd Control

- ✓ Maintain frequent communication with the donors waiting
- ✓ Enforce the limits on the number of donors staff can handle
- ✓ Consider shutting down existing mobile collection sites to focus on certain large or fixed sites
- ✓ Locate facilities for mass collections in the event that the primary collection site is not sufficient or operational
- ✓ Set up triage tables where donors can be screened by ABO group, medical questions can be answered, and pledges can be obtained
- ✓ Allow for plenty of parking
- ✓ Take steps to avoid staff burnout
- ✓ Set a time to shut down...the lines may never end

Volunteers

- ✓ Issue temporary security identification to volunteers
- ✓ Assign predetermined, non-regulated tasks to volunteers
- ✓ Tell volunteers who is the assigned contact person
- ✓ Train volunteers on their exact responsibilities
- ✓ Track volunteers by getting their name, phone number, and training status
- ✓ Maintain records of each volunteer's responsibilities

3.8 COORDINATING A COMMON MESSAGE TO BLOOD COLLECTORS AND THE PUBLIC

- ✓ Task Force will evaluate the situation and determine the appropriate message to be conveyed to the public
- ✓ Task Force will provide message to the affected BC and to Task Force members
- ✓ Task Force representatives will distribute message to their constituents
- ✓ HHS will disseminate message to the public at large

3.9 WORKING WITH THE MEDIA

When a disaster has occurred, it is imperative to inform the general public about blood supply needs. As past experience shows, many individuals will want to do all they can to help. The affected BC should communicate its needs in order to manage the donation process in an efficient and orderly manner.

Before conversing with any press members, BC should speak with the Task Force to ensure that a consistent message is being delivered. To reach the appropriate Task Force media representative, call (800) 458-9388.

Whenever possible, BC should coordinate its messages to the media with those of the Task Force. For example, it would be best for BC to handle inquires from local media while forwarding inquires from national media outlets (*New York Times*, *AP*, NBC's *Today Show*, etc.) to the Task Force media representative.

- ✓ The head of the affected BC will determine the message to be relayed to the media
  - That leader should be in touch with the Interorganizational Task Force to determine medical need
- ✓ The affected BC will need to draft a press release indicating how members of the community should respond in terms of giving blood. The following are key questions to ask during the disaster:
  - Do you have enough blood to treat those wounded from this particular disaster? If so, draft a press release encouraging the public to contact your facility to schedule an appointment in the next 30 days. (This is your opportunity to secure donations in the near future, when you might otherwise experience a drop-off.)
  - Do you need donations now? If so, contact Task Force to determine if blood can be shipped to your BC. If Task Force cannot arrange shipment, draft a press release with a message requesting the public to contact your facility to schedule an appointment to donate in the next couple of days.
  - (See Appendix 6.3 for sample press releases.)
- ✓ Confirm the media spokesperson
- ✓ Distribute the press release
  - Forward a copy to the Task Force, via the AABB (e-mail: publicrelations@aabb.org)
- ✓ Contact members of the media if they are not already calling BC
- ✓ Should BC require additional assistance, call the AABB's public relations department at (301) 215-6526

3.10 SAFETY AND SECURITY CONCERNS

The affected BC should takes steps to ensure the safety and security of staff, volunteers, and donors both onsite and during mobile operations (e.g., transporting blood to affected hospitals).

- ✓ Should a disaster directly "hit" a BC, an assessment of any damage to people, property, supply, and infrastructure will need to be conducted and reported to the Task Force
- ✓ BC should respond to any and all requests made by the local authorities concerning evacuation, as the safety of staff and donors is critical
- ✓ BC staff, volunteers, donors, and vendors should be issued security identification to help protect against unwanted intruders
- ✓ The help of local law enforcement authorities may be needed to secure the BC facility and to ensure safety for staff, volunteers, and donors

4 Education/ Implementation

The following education and training materials were developed by the California Blood Bank Society Emergency Preparedness Committee.

4.1 Recommended Training and Assignment Sheet

Working with the Interorganizational Task Force Disaster Operations Handbook

Background

Strategies and approaches to domestic disasters and acts of terrorism found in the Disaster Operations Handbook were developed by an Interorganizational Task Force (TF) to ensure that in the event of a national disaster, blood collection and distribution efforts run smoothly and are managed properly, with the public receiving clear and consistent messages regarding the status of America's blood supply.

Assignment

Recommended Approach: Blood collectors are encouraged to use a "train the trainer" model whereby selected individuals are trained who, in turn, are reassigned to train staff at a departmental level. Training should be conducted for each employee upon hire and at least annually thereafter. Trainers are encouraged to review key elements of the TF Disaster Operations Handbook and link them with their organization's internal disaster plan. Acting as a facilitator, the trainer should guide trainees through group exercises where key elements of the Handbook and local disaster plan are applied to mock disaster scenarios in group tabletop exercises. Group exercises should be followed by a written knowledge assessment to ensure competency and course evaluation. In addition, the organization should schedule annual refresher training for all staff along with quarterly and/or semi-annual disaster drills that include resource-sharing groups as applicable.

Required Materials

- TF Disaster Operations Handbook
- State Emergency Response Plan (as applicable)
- Blood Collector Emergency Response Plan (developed by BC)
- Disaster Scenarios [specific to disaster type, the BC(s), and their state(s)]
- Knowledge Assessment (developed by individual BC)

Learning Objectives

Upon completion of training, trainees will be able to

- Relate the key elements of the TF Disaster Operations Handbook to their organization's emergency response plan
- Apply TF Disaster Operations Handbook guidelines to a disaster response scenario, assess the medical need for blood, and report that need to TF
- Train staff at the department level to use the TF Disaster Operations Handbook in conjunction with the blood center's emergency response plan

4.2 RECOMMENDED TRAINING PLAN AND ASSIGNMENT SHEET

Working with the TF Disaster Operations Handbook

Competency Standards

Verify that the trainee is able to

- Apply TF Disaster Operations Handbook guidelines to a given situation using the blood center's emergency response plan
- Use the TF Disaster Operations Handbook decision tree and calculate the medical need for blood
- Report appropriate medical need information to TF via AABB for assessment and appropriate resource commitment

Training Guidance

The trainer should use adult learning techniques that include (but are not limited to) a combination of visual, auditory, and tactile (hands-on) input followed by critical knowledge application (see sample training map below). For example, the trainer should explain key elements of the TF Disaster Operations Handbook and relate them to state and local Blood Collector Disaster Response Plans, then facilitate the group exercise. Finally, the trainer should budget time for questions and answers followed by administration of the knowledge assessment. Once training has been completed at all levels in the organization, management should be notified so that an appropriate disaster drill can be scheduled and carried out. There should also be an annual review of training material; presentation of the material should be varied to keep interest.

Sample Training Map

TASK	STRATEGY	MEDIA
Apply TF Disaster Operations Handbook guidelines to a given situation using the blood center's emergency response plan	Lecture, discussion, facilitated practice exercises: • Divide participants into groups of three to five and ask each group to choose a spokesperson • Provide a different disaster scenario to each group and ask them to apply the key elements they have learned to the situation • Ask group to calculate the medical need using the disaster operations formula • Ask spokesperson from each group to report and critique exercise • Allow for questions and answers • Administer the knowledge assessment	PowerPoint presentation, lecture note handouts, critical application exercise, and knowledge assessment

5 Quick Reference Materials

5.1 Checklist Summary

Preparation Checklist

Done ✓	Task	Start Date	Projected Completion Date	Staff Initial
	Communication Strategies (2.1) Record and maintain emergency contact list information at hospital customer(s)			
	Establish redundant communication lines with hospital customer(s) (e.g., landline, wireless)			
	Work with hospital customer(s) to determine best way to collect information on disaster-related hospital admissions and Type O RBC inventories during an event			
	Record contact information for Task Force (via AABB) in appropriate locations			
	Transportation Options (2.2) Establish contact with shippers (use Appendix 6.4)			
	Establish collaborative relationships with local emergency services and law enforcement for potential transportation needs			
	Conduct educational briefing on blood transportation issues for local emergency services and law enforcement			
	Consider having logo on BC vehicles (or use magnetic signs)			

Done ✓	Task	Start Date	Projected Completion Date	Staff Initial
	Coordination with Emergency Management Organizations (2.3) Establish redundant lines of communication with EMS office(s) and command center(s)			
	Locate potential staging areas to be used by emergency management organizations during an event			
	Establish relationship with entity responsible for estimating the number of disaster-related hospital admissions			
	Vendor/Supply Chain Issues (2.4) Prepare a list of vendors and critical supplies that may be needed during a disaster			
	Local Utility Restoration (2.5) Contact local and long distance providers and establish BC as a priority healthcare entity			
	Contact local power company and establish BC as a priority healthcare entity			
	Managing Donors and Volunteers (2.6) Prepare a system for identifying donors BC wants to draw (e.g., Type O and Rh Negative) versus those who should return later			
	Determine maximum capacity for donors at BC—consider supplies, staff, and need			
	Establish relationship with large facilities (e.g., convention center) that may be used if mass collections are called for			
	Prepare a system to deal with potential influx of volunteers—consider training, regulatory, and security issues			
	Working with the Media (2.7) Devise procedures for contacting Task Force to relay consistent/unified information in regard to the need for blood and donors			
	Establish a contact list for local media (e.g., TV, newspaper, radio stations)			

Done ✓	Task	Start Date	Projected Completion Date	Staff Initial
	Working with the Media (2.7) continued Decide who will serve as a spokesperson and who will serve as a back-up spokesperson and ensure that they receive media training			
	Prepare and customize boilerplate press releases (Appendix 6.3) for potential events			
	Safety and Security (2.8) Devise and implement a security identification scheme (e.g., photo ID) for employees, donors, volunteers, and vendors			
	Prepare a local evacuation plan in the event that staff/donors/volunteers must be quickly evacuated from BC facility			
	Prepare an emergency staff work schedule that can be implemented in the event of a disaster—consider minimal staff scenarios (e.g., hurricane evacuation) and maximum staff scenarios (e.g., mass collections)			
	Create and maintain an emergency contact list for staff members			
	Prepare emergency supply kits for BC facility and BC vehicles (e.g., bloodmobiles)			
	Step-by-Step Response (3.1) **Step 1** Prepare a procedure for collecting the following figures: 1) Total current disaster-related hospital admissions 2) Total potential disaster-related hospital admissions 3) Total Type O RBC inventory at hospital customer(s) 4) Total Type O RBC inventory at hospital customer(s) that is needed for non-disaster-related transfusions			
	Step 2 Prepare a procedure for contacting the Task Force via the AABB			

Done ✓	Task	Start Date	Projected Completion Date	Staff Initial
	Step 3 continued Determine which staff member (plus a back-up person) will act as a liaison with the Task Force and participate in the Task Force conference calls			
	Education and Training (4) Integrate the key issues of the handbook recommendations into any existing disaster/ emergency plans*—most important, instructions to contact the Task Force via the AABB during an event			
	Identify the key staff who need to be involved in training and implementation of the Handbook recommendations—consider night and weekend crews			
	Use the Recommended Training and Assignment Sheet (Section 4) to devise a training and assessment program for key staff			

** If your facility does not have an existing plan, consider using the FEMA "Emergency Management Guide for Business and Industry" as a starting point. The guide can be found on the FEMA Web site at www.fema.gov/library/bizindex.shtm.*

5.2 CRITICAL CONTACT INFORMATION

Use the following grid as a guide to organize and store emergency phone numbers:

Organization	Phone Number	Contact Person	Last Updated
AABB Task Force	Landline: (800) 458-9388 Cell: (240) 994-6700 E-mail: nbe@aabb.org		
Hospital Customers			
Local Emergency Management Agency(s)			
State Emergency Management or FEMA Office(s)			
Entity Responsible for Assessing Disaster-related Hospital Admissions			
Critical Suppliers/ Vendors			
Local Phone Company Priority Restoration			
Long Distance Company Priority Restoration			
Local Power Company Priority Restoration			
Local Media Contacts			

6 APPENDICES

6.1 GLOSSARY OF TERMS

Term	Definition
Affected blood collectors	Blood centers and hospitals that collect allogeneic blood and that are directly affected by an event
Amateur radio	Amateur (ham) radio that can be used to contact amateur radio network established to assist communication efforts during an emergency
Bioterrorism	Terrorist attack that involves the use of biological weapons of mass destruction, such as anthrax, smallpox, or botulism
Current hospital admissions	Disaster-related patients actually admitted to a hospital
Disaster	Includes any domestic disaster or act or terrorism that: Suddenly requires a much larger amount of blood than usual ***OR*** Temporarily restricts or eliminates a blood collector's ability to collect, test, process, and distribute blood ***OR*** Creates a sudden influx of donors, requiring accelerated drawing of blood to meet an emergent need elsewhere
Expected hospital admissions	The potential for expected disaster-related (live) victims to be admitted to a hospital
Interorganizational Task Force	A task force of representatives from various blood banking organizations, blood collector and hospital suppliers, and government agencies
Immediate medical need	The amount of Type O blood needed by the affected facility for disaster-related transfusion purposes within the first 24 hours of an event
Non-disaster-related need	The amount of blood needed for pre-disaster operations/transfusions
Transfusion services	Facilities that do not collect allogeneic blood

6.2 EMERGENCY MANAGEMENT OFFICES BY STATE

ST	Agency	Phone	Web
AL	Alabama Emergency Management Agency 5898 County Road 41 P.O. Drawer 2160 Clanton, AL 35046-2160	(205) 280-2200	www.aema.state.al.us
AK	Alaska Division of Emergency Services P.O. Box 5750 Fort Richardson, AK 99505-5750	(907) 428-7000	www.ak-prepared.com
AZ	Arizona Division of Emergency Services 5636 East McDowell Road Phoenix, AZ 85008	(602) 244-0504	www.dem.state.az.us
AR	Arkansas Dept of Emergency Management P.O. Box 758 Conway, AR 72033	(501) 730-9750	www.adem.state.ar.us
CA	California Governor's Office of Emergency Services P.O. Box 419047 Rancho Cordova, CA 95741	(916) 845-8510	www.oes.ca.gov
CO	Colorado Office of Emergency Management Division of Local Government Department of Local Affairs 15075 South Golden Road Golden, CO 80401-3979	(303) 273-1622	www.dola.state.co.us/ oem/oemindex.htm
CT	Connecticut Office of Emergency Management Military Department 360 Broad Street Hartford, CT 06105	(860) 566-3180	www.mil.state.ct.us/ oem.htm
DE	Delaware Emergency Management Agency 165 Brick Store Landing Road Smyrna, DE 19977	(302) 659-3362	www.state.de.us/ dema/index.htm
DC	District of Columbia Emergency Management Agency 2000 14th Street, NW, 8th Floor Washington, DC 20009	(202) 727-6161	http://dcema.dc.gov/ main.shtm
FL	Florida Division of Emergency Management 2555 Shumard Oak Boulevard Tallahassee, FL 32399-2100	(850) 413-9969	www.floridadisaster.org
GA	Georgia Emergency Management Agency P.O. Box 18055 Atlanta, GA 30316-0055	(404) 635-7000	www2.state.ga.us/gema
HI	Hawaii State Civil Defense 3949 Diamond Head Road Honolulu, HI 96816-4495	(808) 734-4246	www.scd.state.hi.us

ST	Agency	Phone	Web
ID	Idaho Bureau of Disaster Services 4040 Guard Street, Building 600 Boise, ID 83705-5004	(208) 334-3460	www.2.state.id.us/bds
IL	Illinois Emergency Management Agency 110 East Adams Street Springfield, IL 62701	(217) 782-2700	www.state.il.us/iema
IN	Indiana State Emergency Management Agency 302 West Washington Street Room E-208 A Indianapolis, IN 46204-2767	(317) 232-3986	www.ai.org/sema/index.html
IA	Iowa Division of Emergency Management Department of Public Defense Hoover Office Building Des Moines, IA 50319	(641) 281-3231	www.state.ia.us/government/dpd/emd/index.html
KS	Kansas Division of Emergency Management 2800 S.W. Topeka Boulevard Topeka, KS 66611-1287	(785) 274-1401	www.ink.org/public/kdem
KY	Kentucky Emergency Management EOC Building 100 Minuteman Parkway, Building 100 Frankfort, KY 40601-6168	(502) 607-1682	http://kyem.dma.state.ky.us
LA	Louisiana Office of Emergency Preparedness 7667 Independence Boulevard Baton Rouge, LA 70806	(225) 925-7500	www.loep.state.la.us
ME	Maine Emergency Management Agency State Office Building, Station 72 Augusta, ME 04333	(207) 626-4503	www.state.me.us/mema
MD	Maryland Emergency Management Agency Camp Fretterd Military Reservation 5401 Rue Saint Lo Drive Reistertown, MD 21136	(410) 517-3600 Toll-free (877) 636-2872	www.mema.state.md.us
MA	Massachusetts Emergency Management Agency 400 Worcester Road Framingham, MA 01702-5399	(508) 820-2000	www.state.ma.us/mema
MI	Michigan Division of Emergency Management 4000 Collins Road P.O. Box 30636 Lansing, MI 48909-8136	(517) 333-5042	www.msp.state.mi.us/division/emd/emdweb.htm
MN	Minnesota Division of Emergency Management Department of Public Safety Suite 223 444 Cedar Street St. Paul, MN 55101-6223	(615) 651-0450	www.dps.state.mn.us/emermgt

ST	Agency	Phone	Web
MS	Mississippi Emergency Management Agency P.O. Box 4501 - Fondren Station Jackson, MS 39296-4501	(601) 352-9100 Toll-free (800) 442-6362	www.msema.org/index.htm
MO	Missouri Emergency Management Agency P.O. Box 16 2302 Militia Drive Jefferson City, MO 65102	(573) 526-9100	www.sema.state.mo.us/semapage.htm
MT	Montana Division of Disaster & Emergency Services 1100 North Main P.O. Box 4789 Helena, MT 59604-4789	(406) 841-3911	www.state.mt.us/dma/des/index.shtml
NE	Nebraska Emergency Management Agency 1300 Military Road Lincoln, NE 68508-1090	(402) 471-7410	www.nebema.org
NV	Nevada Division of Emergency Management 2525 South Carson Street Carson City, NV 89711	(775) 687-4240	www.dem.state.nv.us
NH	Governor's Office of Emergency Management State Office Park South 107 Pleasant Street Concord, NH 03301	(603) 271-2231	www.nhoem.state.nh.us
NJ	New Jersey Office of Emergency Management P.O. Box 7068 West Trenton, NJ 08628-0068	(609) 538-6050	www.state.nj.us/njoem/index.html
NM	Emergency Management Bureau Department of Public Safety P.O. Box 1628 13 Bataan Boulevard Santa Fe, NM 87505	(505) 476-9606 (505) 476-9650	www.dps.nm.org
NY	New York State Emergency Management Office 1220 Washington Avenue Building 22, Suite 101 Albany, NY 12226-2251	(518) 457-2222	www.nysemo.state.ny.us
NC	North Carolina Division of Emergency Management 116 West Jones Street Raleigh, NC 27603	(919) 733-3867	www.dem.dcc.state.nc.us
ND	North Dakota Division of Emergency Management P.O. Box 5511 Bismarck, ND 58506-5511	(701) 328-8100	www.state.nd.us/dem

ST	Agency	Phone	Web
OH	Ohio Emergency Management Agency 2855 W. Dublin Granville Road Columbus, OH 43235-2206	(614) 889-7150	www.state.oh.us/odps/division/ema
OK	Oklahoma Department of Civil Emergency Management P.O. Box 53365 Oklahoma City, OK 73152-3365	405-521-2481	www.odcem.state.ok.us
OR	Oregon Emergency Management Department of State Police 595 Cottage Street, NE Salem, OR 97310	(503) 378-2911 ext. 225	www.osp.state.or.us
PA	Pennsylvania Emergency Management Office P.O. Box 3321 Harrisburg, PA 17105-3321	(717) 651-2001	www.pema.state.pa.us
RI	Rhode Island Emergency Management Office 645 New London Avenue Cranston, RI 02920-3003	(401) 946-9996	www.state.ri.us/riema/riemaaa.html
SC	South Carolina Emergency Management Division 1100 Fish Hatchery Road West Columbia, SC 29172	(803) 737-8500	www.state.sc.us/emd
SD	South Dakota Division of Emergency Management 500 East Capitol Pierre, SD 57501-5070	(605) 773-6426	www.state.sd.us/military/sddem.htm
TN	Tennessee Emergency Management Agency 3041 Sidco Drive Nashville, TN 37204-1502	(615) 741-4332	www.tnema.org
TX	Texas Division of Management Agency 5805 North Lamar Austin, TX 78752	(512) 424-2138	www.txdps.state.tx.us/dem
UT	Utah Division of Comprehensive Emergency Management 1110 State Office Building P.O. Box 141710 Salt Lake City, UT 84114-1710	(801) 538-3400	http://des.utah.gov
VT	Vermont Emergency Management Agency Department of Public Safety Waterbury State Complex 103 South Main Street Waterbury, VT 05671-2101	(802) 244-8721	www.dps.state.vt.us
VA	Virginia Department of Emergency Management 10501 Trade Court Richmond, VA 23236-3713	(804) 897-6502	www.vdem.state.va.us

ST	Agency	Phone	Web
WA	State of Washington Emergency Management Division Building 20, M/S: TA-20 Camp Murray, WA 98430-5122	(253) 512-7000	www.wa.gov/wsem
WV	West Virginia Office of Emergency Services Building 1, Room EB-80 1900 Kanawha Boulevard, East Charleston, WV 25305-0360	(304) 558-5380	www.state.wv.us/wvoes
WI	Wisconsin Emergency Management 2400 Wright Street P.O. Box 7865 Madison, WI 53707-7865	(608) 242-3232	http://badger.state.wi.us/agencies/dma/wem/index.htm
WY	Wyoming Emergency Management Agency 5500 Bishop Boulevard Cheyenne, WY 82009-3320	(307) 777-4920	http://wema.state.wy.us

6.3 BOILERPLATE PRESS RELEASES

6.3.1 Immediate Statement Press Release

FOR IMMEDIATE RELEASE
MONTH XX, 2003

CONTACT: Name
PHONE: (XXX) XXX-XXXX
[Insert Name of Organization]
or
Name of AABB's Public Relations Director
American Association of Blood Banks
(301) 215-6557 or (301) 215-6526
publicrelations@aabb.org

[Insert Name of Organization] WORKING WITH INTERORGANIZATIONAL TASK FORCE ON DOMESTIC DISASTERS AND ACTS OF TERRORISM TO DETERMINE LOCAL BLOOD SUPPLY NEEDS

Information to Be Disseminated to Media Shortly

CITY, STATE - [Insert Name of Organization] is currently working with the American Association of Blood Banks' (AABB) Interorganizational Task Force on Domestic Disasters and Acts of Terrorism to ascertain blood supply needs resulting from [explosion, bombing, fire, etc.] in CITY, STATE.

Additional information will be forthcoming.

About the Interorganizational Task Force on Domestic Disasters and Acts of Terrorism

The Task Force was formed in January 2002 to make certain that blood collection efforts in response to domestic disasters and acts of terrorism run smoothly and are managed properly, with the public receiving clear and consistent messages regarding the status of America's blood supply. It is composed of representatives from various blood services and associations, government agencies, and commercial entities who work together to try to ensure that facilities maintain safe and adequate inventories at all times in preparation for disasters, and have a mechanism in place to assess the need for collections and/or transportation of blood should a disaster occur.

The AABB serves as the designated coordinating entity for the Interorganizational Task Force on Domestic Disasters and Acts of Terrorism. In addition to AABB, members are the America's Blood Centers (ABC), American Red Cross (ARC), Blood Centers of America/hemerica (BCA), Armed Services Blood Program Office (ASBPO), Centers for Disease Control and Prevention

(CDC), Department of Health and Human Services (HHS), Food and Drug Administration (FDA), Advanced Medical Technology Association (AdvaMed), American Association of Tissue Banks (AATB), American Hospital Association (AHA), College of American Pathologists (CAP), and Plasma Protein Therapeutics Association (PPTA). Donald Doddridge, chief operations officer of Florida Blood Services, Inc., serves as chairman of the Task Force.

In the event of an emergency situation, the AABB immediately convenes a meeting of Task Force representatives. Local blood center(s) are responsible for ascertaining medical need based on casualty estimates using predetermined formulas, assessing available local supply, and communicating that information to the Interorganizational Task Force.

In a disaster, the first priorities of the Task Force are to

- Verify and communicate to the blood community the medical need for blood;
- Identify sites with existing excess blood inventory;
- Determine the need, if any, for blood shipment and the logistics of such shipments; and
- Develop public messages and facilitate the discussion of donor issues.

About [Name of Organization Sending This Release]

[Insert one paragraph with descriptive information about the organization that is distributing this press release.]

###

6.3.2 Adequate Blood Supply Press Release

FOR IMMEDIATE RELEASE
MONTH XX, 2003

CONTACT: Name
(XXX) XXX-XXXX
[Insert Name of Organization]
or
Name of AABB's Public Relations Director
American Association of Blood Banks
(301) 215-6557 or (301) 215-6526
publicrelations@aabb.org

DISASTER TASK FORCE DETERMINES CURRENT U.S. BLOOD SUPPLY IS ADEQUATE TO HANDLE DEMANDS RESULTING FROM [EXPLOSION, BOMBING, FIRE...] in CITY, STATE

Nation's Citizens Should Contact Local Blood Banks to Schedule an Appointment to Donate Blood in the Near Future

CITY, STATE - The American Association of Blood Banks' (AABB) Interorganizational Task Force on Domestic Disasters and Acts of Terrorism has determined that blood supplies and current inventory levels are meeting hospital needs resulting from [explosion, bombing, fire, etc.] in CITY, STATE. However, the Task Force is concerned that future supplies may dwindle because blood has a shelf life of only 42 days. To maintain a healthy blood supply level, the Task Force recommends that people who would like to help, but who have not yet given blood, wait 30 days and then donate in honor and remembrance of those who were affected by [the event].

"The blood banking and transfusion community has taken an inventory of the U.S. blood supply and ascertained that local blood banks located in and around [city/state of domestic disaster or act of terrorism] have enough blood to meet medical need," said Donald Doddridge, chairman of the Interorganizational Task Force. "To ensure that we have adequate blood inventories on our shelves every day in all locations across the country, we recommend that citizens wanting to donate contact their local hospital or blood center and schedule appointments in the near future."

The need for blood will be ongoing, especially over the next few weeks, as disaster victims require additional care, as deferred elective surgeries are rescheduled, or if there should be any further emergencies. The Task Force encourages donors and potential donors to make giving blood a regular part of their lives. Those interested in donating blood may contact the following organizations to find a local blood collection site and to schedule an appointment:

- American Association of Blood Banks: www.aabb.org; 1-866-FROM-YOU (1-866-376-6968)

- America's Blood Centers: www.americasblood.org; 1-888-USBLOOD (1-888-872-5663)
- American Red Cross: www.redcross.org; 1-800-GIVE-LIFE (1-800-448-3543)

The Task Force was formed in January 2002 to make certain that blood collection efforts in response to domestic disasters and acts of terrorism run smoothly and are managed properly, with the public receiving clear and consistent messages regarding the status of America's blood supply. It is composed of representatives from various blood services and associations, government agencies, and commercial entities who work together to try to ensure that facilities maintain safe and adequate inventories at all times in preparation for disasters and have a mechanism in place to assess the need for collections and/or transportation of blood should a disaster occur.

The AABB serves as the designated coordinating entity for the Interorganizational Task Force on Domestic Disasters and Acts of Terrorism. In addition to AABB, members are the America's Blood Centers (ABC), American Red Cross (ARC), Blood Centers of America/hemerica (BCA), Armed Services Blood Program Office (ASBPO), Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS), Food and Drug Administration (FDA), Advanced Medical Technology Association (AdvaMed), American Association of Tissue Banks (AATB), American Hospital Association (AHA), College of American Pathologists (CAP), and Plasma Protein Therapeutics Association (PPTA).

In the event of an emergency situation, the AABB immediately convenes a meeting of Task Force representatives. Local blood center(s) are responsible for ascertaining medical need based on casualty estimates using pre-determined formulas, assessing available local supply, and communicating that information to the Interorganizational Task Force.

In a disaster, the first priorities of the Task Force are to

- Verify and communicate to the blood community the medical need for blood;
- Identify sites with existing excess blood inventory;
- Determine the need, if any, for blood shipment and the logistics of such shipments; and
- Develop public messages and facilitate the discussion of donor issues.

About [Name of Organization Sending This Release]

[Insert one paragraph with descriptive information about the organization that is distributing this press release.]

###

6.3.3 Blood Donations Needed Press Release

FOR IMMEDIATE RELEASE
MONTH XX, 2003

CONTACT: Name
(XXX) XXX-XXXX
[Insert Name of Organization]
or
Name of AABB's Public Relations Director
American Association of Blood Banks
(301) 215-6557 or (301) 215-6526
publicrelations@aabb.org

BLOOD DONATIONS NEEDED [in Particular Area of the Country] AS [EXPLOSION, BOMBING, FIRE...] CAUSES EXTENSIVE INJURIES

Task Force Urges Nation's [or Particular Area of the Country's] Citizens to Contact Local Blood Banks and Give Blood

CITY, STATE - The American Association of Blood Banks' (AABB) Interorganizational Task Force on Domestic Disasters and Acts of Terrorism is encouraging citizens to respond to national appeals for blood in the wake of the recent tragedies [explosion, bombing, fire, etc....] in CITY, STATE. The task force recommends that individuals interested in responding to this national crisis contact their local blood collection facilities before going out to donate. Those interested in donating blood may contact the following organizations to find a local blood collection site and to schedule an appointment:

- American Association of Blood Banks: www.aabb.org; 1-866-FROM-YOU (1-866-376-6968)
- America's Blood Centers: www.americasblood.org; 1-888-USBLOOD (1-888-872-5663)
- American Red Cross: www.redcross.org; 1-800-GIVE-LIFE (1-800-448-3543)

"We have ascertained that the medical need for blood as a result of the [explosion, bombing, fire...] is great, and the current supply in and around [Particular Area of the Country] is low," said Donald Doddridge, chairman of the Interorganizational Task Force. "To replenish the blood supply in [Particular Area of the Country] and to ensure that we have adequate blood inventories on our shelves every day in all locations across the country, we recommend that citizens wanting to donate contact their local blood collector and schedule appointments in the near future."

Currently, the Interorganizational Task Force is working to find alternative means of shipping blood into [City, State] and other areas as necessary.

The need for blood will be ongoing, especially over the next few weeks, as disaster victims require additional care, as deferred elective surgeries are rescheduled, or if there should be any further emergencies. The Task Force encourages donors and potential donors to make giving blood a regular part of their lives.

The Task Force was formed in January 2002 to make certain that blood collection efforts in response to domestic disasters and acts of terrorism run smoothly and are managed properly, with the public receiving clear and consistent messages regarding the status of America's blood supply. It is composed of representatives from various blood services and associations, government agencies, and commercial entities who work together to try to ensure that facilities maintain safe and adequate inventories at all times in preparation for disasters, and have a mechanism in place to assess the need for collections and/or transportation of blood should a disaster occur.

The AABB serves as the designated coordinating entity for the Interorganizational Task Force on Domestic Disasters and Acts of Terrorism. In addition to AABB, members are the America's Blood Centers (ABC), American Red Cross (ARC), Blood Centers of America/hemerica (BCA), Armed Services Blood Program Office (ASBPO), Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS), Food and Drug Administration (FDA), Advanced Medical Technology Association (AdvaMed), American Association of Tissue Banks (AATB), American Hospital Association (AHA), College of American Pathologists (CAP), and Plasma Protein Therapeutics Association (PPTA).

In the event of an emergency situation, the AABB immediately convenes a meeting of Task Force representatives. Local blood center(s) are responsible for ascertaining medical need based on casualty estimates using predetermined formulas, assessing available local supply, and communicating that information to the Interorganizational Task Force.

In a disaster, the first priorities of the Task Force are to

- Verify and communicate to the blood community the medical need for blood;
- Identify sites with existing excess blood inventory;
- Determine the need, if any, for blood shipment and the logistics of such shipments; and
- Develop public messages and facilitate the discussion of donor issues.

About [Name of Organization Sending This Release]

[Insert one paragraph with descriptive information about the organization that is distributing this press release.]

###

6.4 TRANSPORTATION OPTIONS GRID

Manage the contact information for shipping companies in the following grids:

Commercial Airline Carriers

Carrier	Account #	Contact Person	Phone	Email/Web	Last Update

Ground Carriers

Carrier	Account #	Contact Person	Phone	Email/Web	Last Update

Angel Flight America (AFA) Affiliate

Regional AFA Contact Person(s): _____

Regional AFA Contact Phone #(s): _____

Last Update: _____

6.5 EVENT ASSESSMENT FORM

The affected blood collector area is to contact hospital customers and emergency services, complete the following form, and be ready to report the results to the Task Force via contact with AABB.

1) Type of event
   Contact Person _____ Phone # _____
   - ❏ Natural Disaster (e.g., hurricane, flood, earthquake)
   - ❏ Act of Terrorism (e.g., explosion, firearms)
   - ❏ Biological Act of Terrorism
   - ❏ Nuclear/Radiological Event

   List biological agent if known _____

2) Potential effects on medical infrastructure and donor base
   List any potential effects from the event on the medical infrastructure and/or impact on local donors:
   (e.g., damage to hospital or BC, donor deferrals due to biological agent)

   _____

   _____

3) Fill out the following form in regard to the specific event for each hospital customer. The blood collector should also include one entry for itself, listing the number of units of Type O RBC (both + and –) that are available for distribution.
   (Note: Hospital admissions should include <u>disaster-related</u> figures only.)

Hospital Customer Name	Number of Current Admissions at Hospital	Potential for Expected Admissions at Hospital	Number of Type O RBC Units on Shelf	Non-Disaster-Related Need for Type O RBC
Totals				

Total the columns and transfer the figures to the Step-by-Step Response Process in Section 3.1 to calculate the amount of units needed from the Task Force.

DISASTER OPERATIONS HANDBOOK—HOSPITAL SUPPLEMENT

COORDINATING THE NATION'S BLOOD SUPPLY DURING DISASTERS AND BIOLOGICAL EVENTS

Disaster Operations Handbook—Hospital Supplement Contents

7.1 INTRODUCTION

7.1.1 PURPOSE OF OPERATIONS HANDBOOK

The purpose of this Operations Handbook is to assist blood centers, hospital blood banks, and transfusion services in preparing for and responding to future domestic disasters and acts of terrorism affecting the blood supply. The Handbook is intended to facilitate coordination among these facilities, national blood organizations, and federal, state, and local government officials, in the event of a disaster, to

- Determine medical need for blood
- Facilitate transportation, if needed, of blood from one facility to another
- Communicate a common message to the national blood community and the public about the status of the blood supply in the disaster-affected community

This Hospital Supplement to the Operations Handbook addresses the hospital role in ensuring that blood for transfusion will be available. It does not address internal hospital transfusion policies that will be needed in the event of a disaster except to establish that all blood provided will be type O.

7.1.2 HANDBOOK ORGANIZATION

The primary focus of this supplement is to outline steps to be taken by hospital transfusion services in relationship to blood supply issues in the event of a "disaster" (see definition below). It also addresses hospitals that collect only autologous units. Hospitals that collect allogeneic units should consult the complete Interoganizational Task Force Disaster Operations Handbook, which contains more detailed information about a variety of practical and logistical issues blood collectors should address in preparing for and activating a disaster response plan (e.g., communications, transportation, managing donors, and volunteers). This Hospital Supplement to the Operations Handbook does not address specific details relating to such aspects of disaster planning (e.g., the need for utilities) since hospital disaster plans

would address them on a broader scale. Hospital transfusion services should consult their hospital disaster plans for guidance.

Transfusion services may access the complete Disaster Operations Handbook on AABB's Web site at www.aabb.org/disaster.

7.1.3 BACKGROUND OF TASK FORCE/PARTICIPATING ORGANIZATIONS

Following the events of September 11, 2001, the blood community recognized the need to evaluate its actions in response to the tragedy, examine "lessons to be learned," and develop recommendations relating to its response to future domestic disasters and acts of terrorism. In December 2001, the American Association of Blood Banks (AABB) convened a task force composed of representatives from various blood banking organizations, blood collector and hospital suppliers, and government agencies to address these concerns.

This Disaster Operations Handbook was prepared by the AABB Interorganizational Task Force on Domestic Disasters and Acts of Terrorism, whose members are as follows:

- American Association of Blood Banks (AABB)
- America's Blood Centers (ABC)
- American Red Cross (ARC)
- Blood Centers of America/hemerica (BCA)
- Armed Services Blood Program Office (ASBPO)
- Centers for Disease Control and Prevention (CDC)
- Department of Health and Human Services (HHS)
- Food and Drug Administration (FDA)
- Advanced Medical Technology Association (AdvaMed)
- American Association of Tissue Banks (AATB)
- American Hospital Association (AHA)
- College of American Pathologists (CAP)
- Plasma Protein Therapeutics Association (PPTA)

The Task Force believes that there are no *currently* identified scenarios in which the immediate need for blood and/or blood components would be beyond the capabilities of the blood community to meet. The single greatest risk of domestic disasters and acts of terrorism is not lack of supply, but disruption of the blood system.

Previous domestic disasters have led to three overarching lessons:

1. The need to control collections in excess of actual need
2. The need to ensure that facilities maintain inventories to prepare for disasters at all times in all locations (note that a seven-day supply of the combined inventory of both blood collectors and hospitals is recommended in preparing for a disaster)
3. The need for overall inventory management within the United States

7.1.4 DEFINITION OF A "DISASTER"

Unless otherwise stated, a "disaster" includes any domestic disaster or act of terrorism that

- Suddenly requires a much larger amount of blood than usual
  OR
- Temporarily restricts or eliminates a blood collector's ability to collect, test, process, and distribute blood
  OR
- Creates a sudden influx of donors requiring accelerated drawing of blood to meet an emergent need elsewhere

Thus, this Handbook addresses how the blood community will respond to natural disasters and acts of terrorism, including situations resulting in mass casualties potentially requiring large amounts of blood, as well as bioterrorism* attacks with infectious agents, which would not necessarily require more blood but could substantially limit the blood supply by affecting donor suitability.

7.1.5 MEETING MEDICAL NEED

The Task Force made the following assumptions with regard to the principles it will follow as the best way to meet immediate medical needs within the first 24 hours.

- Blood supplied to meet emergency needs for transfusion will be type O red blood cells (RBC)
- Most disasters do not require extensive use of platelets or plasma, and the need for these components can be evaluated if special circumstances arise

The Task Force will reassess medical need at 24 hours and may alter the strategy for meeting blood needs depending on the circumstances.

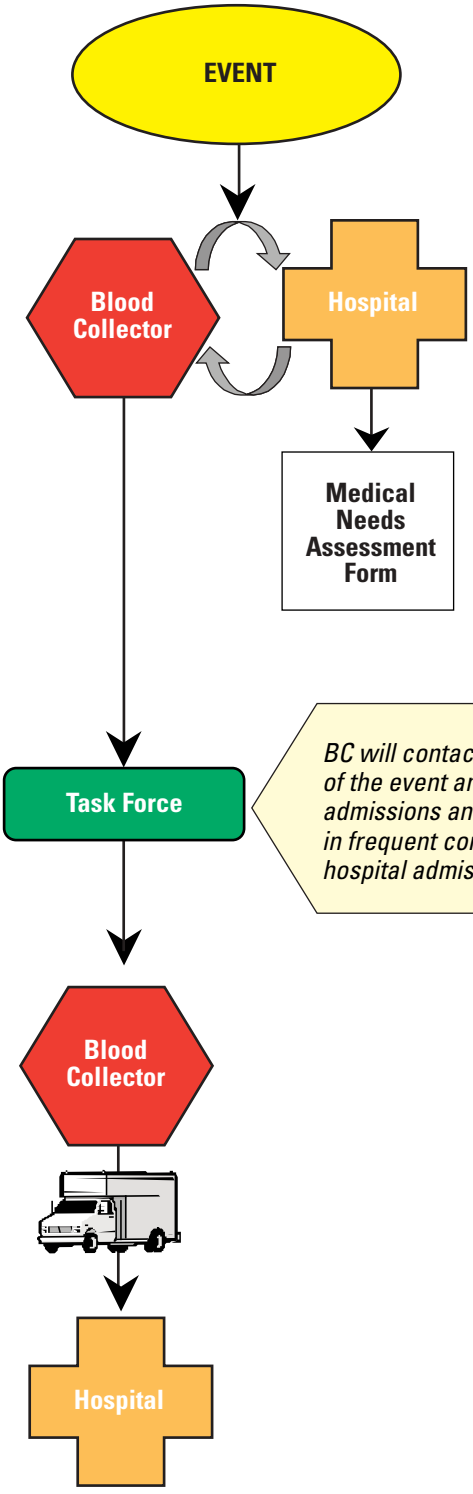
---

* For events involving Bioterrorism refer to Section 7.2.2, "Biological Attack Response Process."

7.2 Activation/ Event Occurs

7.2.1 Overview of Hospital Response in Determining Medical Need for Blood

In case of a disaster, hospitals need to collaborate with the blood collector(s) in the affected area (affected blood collector). The hospital will determine the immediate (i.e., within the first 24 hours) and short-term medical need for blood and communicate that information to the affected blood collector. The affected blood collector will act as a main conduit for information and communication to the Interorganizational Task Force (TF) via the AABB. The Task Force will then consider the national response and recommend an action strategy including, but not limited to, the shipment of blood to the affected blood collector and the coordination and dissemination of a message to the blood community and donors. Hospitals should coordinate all messages about the need for blood with the affected blood collector.



Step 1: Affected Blood Collector Assesses Medical Need for Blood

- ✓ Affected blood collector (BC) contacts local hospital customers and emergency services to determine impact of event, including
  - Type of event (e.g., disaster, terrorism*)
  - Current and expected hospital admissions
  - Current blood inventory levels of Type O RBC
- ✓ If blood is immediately needed, the affected BC will distribute blood to hospital from existing BC inventories
- ✓ Hospital completes Hospital Medical Needs Assessment and communicates results to blood collector**

** In case of bioterrorism, see Section 7.2.2, Biological Attack Response Process*

*** If hospital is supplied by more than one blood collector, report information to the primary supplier (to prevent duplicative results).*

BC will contact the Interorganizational Task Force within 1 hour of the event and report information on current and expected hospital admissions and current Type O RBC inventory levels. BC will remain in frequent contact with TF and report any updates to the hospital admission and blood inventory numbers.

Step 2: Arrange Transport of Blood to Hospital

If TF determines that there is need for blood in excess of what is available to the affected BC, then

- ✓ TF will coordinate the immediate shipment from blood collector(s) with access to the most rapid means of transportation to the affected blood collector
- ✓ Hospital and affected BC should collaborate on receipt of blood shipment from Task Force. Issues to consider include
  - Points of delivery/emergency staging areas
  - Disruption to normal transportation routes/methods
  - Security/identification issues for drivers

Step 3: Continue to Communicate with Affected Blood Collector

- ✓ Establish regular times for communicating with BC until event has been resolved

Step 1: Assess Medical Need for Blood

- ✓ Affected blood collector will contact local hospitals and emergency services to determine
  - Type of event* (e.g., natural disaster, act of terrorism)
  - Current and expected hospital admissions
  - Current blood inventory levels of Type O RBC
- ✓ Hospital will complete the Hospital Medical Needs Assessment by filling in the totals in the following chart.
- ✓ If you are a hospital supplied by more than one BC, report this information to the primary supplier. It is important not to provide duplicate information to multiple blood collectors.

** For events involving bioterrorism, refer to Section 7.2.2, Biological Attack Response Process.*

Hospital Medical Needs Assessment

Hospital Admissions Expected (Disaster Related Only)

Total Current Hospital Admissions:		_____
Total Potential for Expected Hospital Admissions:	(+)	_____
Total Hospital Admissions Expected:	(A) =	_____

Type O (both + and -) RBC Available

Total Type O RBC at Hospital:		_____
Total Type O RBC Needed for Non-Disaster Related Need:	(-)	_____
Total of Type O RBC Available:	(B) =	_____

Calculate the total number of units needed from the Task Force

Total Hospital Admissions Expected	*Multiply (A) by 3*	Total Type O RBC Needed		Total Type O RBC Available		Total Type O RBC Needed from TF
_____ (A)	x 3 units =	_____	(–) minus	_____ (B)	=	_____

Step 2: Arrange Transport of Blood to Hospital

To allow for efficient transport and receipt of blood, the hospital should

- ✓ Be in contact with blood collector to arrange for transportation of blood to hospital
- ✓ Activate previously devised contingency plans with blood collector
- ✓ Notify blood collector of interruptions to the normal transportation methods, such as local clearances or transportation barriers

Step 3: Continue to Communicate with Affected Blood Collector

- ✓ Continue to communicate with the affected blood collector(s), updating the collector(s) about any changes in medical need for blood as soon as possible

7.2.2 BIOLOGICAL ATTACK RESPONSE PROCESS

If a community is faced with a biological attack with infectious agent(s), the issues facing blood collectors and hospitals regarding the potential impact on the blood supply and medical needs will not necessarily mirror those that arise following other types of disasters. Biological attacks may or may not require more blood. By affecting donor suitability, a biological attack may substantially limit the blood supply. The impact on the donor population will depend on which biological agent is involved in a disaster. The spread of certain agents may require immediate deferral policies. (For example, FDA has developed deferral policies relating to smallpox, in case there is an attack and/or a need for mass smallpox immunization.)

In the event of a biological attack, the blood collector should estimate the number of donors who will be deferred and the scope of expected shortages resulting from such deferrals and communicate this information to the Task Force.

The Task Force can act as a conduit between FDA and affected blood collector(s) in determining the appropriate course of action for deferring donors following a biological attack. The Task Force will also develop messages to be conveyed to the public about the impact of the biological attack on the blood supply.

In addition, should it identify an immediate need for blood (e.g., if there is a need to quarantine the blood supply or for increased transfusions), the blood collector should contact the Task Force, which will work to facilitate shipment of blood to the affected BC.

Transfusion services should contact their blood collector in the event of a biological attack that results in increased blood usage. The BC will then notify the Task Force and coordinate activities.

7.2.3 REGULATORY CONCERNS

While the availability of blood may be the primary concern in the event of a disaster, the safety of the blood supply is also paramount. Adherence to FDA regulations once an actual event has occurred is crucial. It is important to follow current good manufacturing processes and AABB Standards. Any consideration of regulatory exemptions will be driven by medical need. The Task Force will be in touch with FDA in the event of a disaster and will seek to convey to the blood community any changes in regular FDA policy.

The Task Force suggests the following recommendations during a disaster:

- ✓ Blood collection should be performed only by facilities that routinely collect allogeneic blood. Facilities that routinely collect only autologous blood or do not collect blood routinely should NOT collect allogeneic blood during times of disaster. Blood donor screening, collection, and labeling for autologous donors is quite different from the requirements for allogeneic donors, and must be performed by personnel who are trained in these functions.
- ✓ Units of blood released for transfusion should be fully tested, including infectious disease testing. Transfusion services should already have in place policies and procedures for emergency and exceptional release that may be applied if absolutely necessary to meet immediate needs.
- ✓ Testing should be performed only by facilities that routinely test allogeneic blood. Infectious disease testing is highly regulated. Facilities that do not routinely test allogeneic blood may inadvertently fail to meet these stringent regulated testing requirements.
- ✓ All regulated functions should be performed by existing trained staff. Volunteer personnel may be used for non-regulated functions only.
- ✓ Unlicensed, registered allogeneic collection facilities may ship blood only within the state. In times of disaster, FDA may allow interstate shipment provided the product is appropriately labeled. FDA must grant permission prior to any such shipment.

7.2.4 WORKING WITH THE MEDIA

When a disaster has occurred, it is imperative to inform the general public about blood supply needs. As past experience shows, many individuals will want to do all they can to help. Hospital transfusion services should coordinate messages about blood needs with the blood collector. The hospital may wish to refer media inquiries to the blood collector, or contact the blood collector for the appropriate message to convey.

7.3 GLOSSARY OF TERMS

7.3 GLOSSARY OF TERMS

Term	Definition
Affected blood collectors	Blood centers and hospitals that collect allogeneic blood and that are directly affected by an event
Amateur radio	Amateur (ham) radio that can be used to contact amateur radio network established to assist communication efforts during an emergency
Bioterrorism	Terrorist attack that involves the use of biological weapons of mass destruction, such as anthrax, smallpox, or botulism
Current hospital admissions	Disaster-related patients actually admitted to a hospital
Disaster	Includes any domestic disaster or act or terrorism that: Suddenly requires a much larger amount of blood than usual ***OR*** Temporarily restricts or eliminates a blood collector's ability to collect, test, process, and distribute blood ***OR*** Creates a sudden influx of donors, requiring accelerated drawing of blood to meet an emergent need elsewhere
Expected hospital admissions	The potential for expected disaster-related (live) victims to be admitted to a hospital
Interorganizational Task Force	A task force of representatives from various blood banking organizations, blood collector and hospital suppliers, and government agencies
Immediate medical need	The amount of Type O blood needed by the affected facility for disaster-related transfusion purposes within the first 24 hours of an event
Non-disaster-related need	The amount of blood needed for pre-disaster operations/transfusions
Transfusion services	Facilities that do not collect allogeneic blood