California Blood Bank Society

Disaster Response Plan

Distributed November 2011

This plan is intended for use by our institutional members. Should any person, agency or organization duplicate this plan in part or whole, acknowledgement and credit must be given to CBBS.

CBBS DISASTER RESPONSE PLAN

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Section 1

Purpose

This plan coordinates the activities of all California Regional Blood Centers in the event of a local, regional, or national emergency.

Primary focus

The primary focus of the plan centers on community blood centers, and how they communicate and coordinate shipments of blood and blood components during an emergency. Secondarily, the plan may be utilized during times of National emergency keeping in mind that communication with National Agencies (FEMA, American Red Cross, AABB National Blood Exchange etc.) is vital to prevent duplication of effort and to safeguard the movement of resources to the affected area.

Definition(s)

The table below lists terms and definitions

Term	Definition
Disaster	• General - a sudden misfortune or calamity causing widespread distress or misery or loss of life. • Related to Blood Centers – a situation that: 1. suddenly requires a much larger amount of blood than usual; 2. temporarily restricts or eliminates a blood center's ability to collect, test, process and distribute blood; 3. creates a sudden influx of donors requiring accelerated drawing of blood to meet an emergent need elsewhere.

Section 1 – Continued

What blood centers need to do

Each blood center will need to:

• develop blood center internal disaster response plans
• create an **Emergency Response Team (ERT)**
• consider plans for an off-site alternate command center
• **ERT** should carry hard copy of emergency procedure contact information 24/7
• develop the means for alternate communication (such as, but not limited to) Amateur radio (HAM radio), cell phone, Fax, Internet e-mail. Consider GETS/WPS cards/system. (www.wps.gov)

Note: Amateur radio will require installation of appropriate amateur band high frequency and 2 meter antenna, a dedicated HAM radio operator and use of the operator's HAM radio equipment and/or purchase of high frequency and 2 meter Ham radios.

• become familiar with the CalEMA mutual aid disaster response plan (see Appendix F)
• develop methods and options so that serviced hospitals know how to obtain blood during a disaster
• have phone lines with unlisted numbers to bypass facility main lines
• plan to be self-sufficient for at least 6 days or more if isolated
• accelerate collection and processing activity to supply blood for their own areas or other affected areas
• determine if blood is available for elective surgery (other than emergencies) for the duration of the disaster • **Note: Outside support may include networking with other organizations as appropriate**
• assure back-up power supply to maintain water supply pumps for testing, bathrooms, air conditioning
• develop utility vendor contacts for **priority status** for fuel, water, phone, including unlisted contact phone numbers

Section 1 – Continued

• develop primary and alternate means of communication between blood centers so that accurate and timely information is available for disaster response decision making
• prepare disaster media responses

Note: It is understood that many emergencies do not require more than the usual amounts of blood and donors typically respond to reports of any emergency. Accurate media communication is essential to informing the public of appropriate response to disaster situations and needs for blood and blood components.

Section 2

Activation The table below lists information for activation of the disaster response plan

Who can activate the plan	How can it be activated	When should it be activated
Federal, State, or Regional authority (FEMA, CAL-EMA, EMSA, and/or OES Mutual Aid Region)	Through contact with BloodSource, Sacramento Emergency Operations Center whenever there is a disaster requiring the need for blood and blood components.	Normal means of acquiring blood and blood components are not available or overloaded
Key personnel of a regional blood center	Through contact with CBBS Area Emergency Operations Centers whenever normal means of obtaining blood are exhausted	The degree of implementation will depend on the situation
BloodSource, Sacramento, deemed by CBBS as Northern Area Emergency Operations Center (NAEOC) **Houchin Community Blood Bank**, Bakersfield, deemed by CBBS as Central Area Emergency Operations Center (CAEOC) **San Diego Blood Bank,** deemed by CBBS as Southern Area Emergency Operations Center (SAEOC) Note: **1. It is helpful if the affected blood center(s) initiates contact with Houchin, San Diego, or Sacramento so that statewide communication can occur to exchange pertinent information.** **2. What may seem a minor event locally may be creating a large donor or media reaction in other parts of the State.**	Whenever a known or reported emergency/disaster situation affects Northern California and the BloodSource link to the State EOC in Sacramento.	The degree of implementation will depend on the situation and will include sharing of disaster information as well as coordination of blood resources with the Inter-Agency Task Force (AABB National Blood Exchange, American Red Cross, etc.) liaisons identified in this plan

Section 2 – Continued

Deactivation

Response to the emergency and deactivation of the plan will commence when the activating official determines that the emergency requirement no longer exists

Coordination

In a disaster situation, requests for blood will usually come from hospitals to their servicing blood centers, but may be channeled through local government (county) Emergency Operations Center (EOC) or communications center. In case of National emergency, requests and/or coordination of resources may come through FEMA, or other National Agencies (such as, but not limited to, American Red Cross, AABB National Blood Exchange for the Inter-Agency Task Force for Domestic Disasters and Acts of Terrorism).

- The Northern AEOC is located at BloodSource in Sacramento. Besides coordinating the movement of blood and blood components to and from Northern California, it will serve as the State Disaster Control Center for blood and will liaison with the Duty Officer of OES.
- The Central AEOC is located at Houchin Community Blood Bank, Bakersfield**,** and the Southern AEOC is located at San Diego Blood Bank, San Diego. Together with the Northern AEOC, they will help coordinate all movement of blood to and from Central and Southern California in a disaster situation.

Note: Regional Blood Centers may not be able to rely on routine means of transportation and delivery into the affected area(s). Therefore, each Blood Center should be prepared to coordinate with its County Public Health and communications Directors and their Regional Disaster Medical Coordinators so that at all levels blood delivery is coordinated and not delivered to locations where it is not needed. (See Appendix F)

Section 2 - Continued

AEOC actions The "**If -- Then**" table below lists AEOC actions to be taken in the event of a disaster

IF	Then
A disaster occurs in California	Northern, Central, and Southern AEOCs will activate the CBBS Disaster Response Plan (to an appropriate level of response) and contact each other, AABB National Blood Exchange (NBE), and American Red Cross Headquarters to share intelligence, information, convey status, and blood component needs.
A small or localized disaster occurs	All AEOCs will activate and contact each other to encourage good communication between centers
Normal communication is down	All AEOCs will: • activate the CBBS Amateur Emergency HAM Radio network • establish RadioNet Control for coordinated transmission of Emergency messages • determine and communicate needs and coordinate blood component transportation through EMSA to the affected area
Blood centers are unable to communicate with any AEOC	They should contact AABB Disaster Task Force (800-458-9388), American Red Cross National Headquarters, (619-531-0686) or ABC (202-3993-5725)

Section 3

Communications - Key element in a disaster

The "**If - Then**" table below lists directives for disaster communications

If	Then
Normal means of communication (telephone, cellular phone, fax, internet, e-mail etc.) are intact	Use them for communication
Normal means of communication are unusable or overloaded	• Activate Northern, Central and Southern AEOCs and establish Amateur (HAM) Radio communications and "Net Control" **Note:** **1. AEOCs will come "On Air," establish HAM Radio Net Control and attempt to contact each Blood Center in roll call succession** **2. "Net Control "will gather status and disaster intelligence to be shared with blood centers and EMSA officials.** • Contact your respective Northern, Central, and Southern AEOCs using HAM (Amateur Radio) on either the 40 meter and/or 75 meter high frequency bands or 2 meter relay bands • Follow standard Ham Radio Net Control Procedures when sending or receiving messages • **See Appendix G** **Note: Authorized personnel may activate GETS/WPS system**
Unable to make direct contact with any of the AEOCs via HAM radio	Establish contact via an Amateur (HAM) radio relay and share appropriate information and needs.
Amateur Radio contact cannot be established	Amateur Radio operators will continue to monitor blood center frequencies trying to establish contact with Net Control every 15 minutes until a blood center representative is reached.
Still no response after reasonable attempts	Local blood center officials should contact AABB Disaster Task Force, American Red Cross National Headquarters, ABC, or any other blood center that can assist them.

Section 4

Transportation

Once areas affected by a disaster are known, transportation between blood centers will be coordinated locally first, then through each AEOC with EMSA. Blood will not be transported until the need is determined by competent authority to prevent duplication and/or loss of scarce resources. It is expected that each blood center will develop emergency transportation contacts. Institutional members see Appendix A.

The table below lists transportation options for URGENT or EXTREME need only.

Who	Contact Number
Angel Flight West (HSEATS Program)	0830 – 1630h: 888-426-2643 310-390-2958 1630 – 0830h: 800-413-1360
CA Hwy Patrol – Aero Division	911
OES (State) Emergency Media communication	916-845-8911 916-845-8400
Salvation Army SATERN Territorial **(Natl Disaster**) Disaster Services—Kevin Ellers Western Territory (CA) Disaster Services—Ken Cavallero	847-294-2000 (Chicago) 847-795-3293 562-491-8341 (Long Beach) ken.cavallero@usw.salvationarmy.org
USAF Civil Air Patrol (May require 3-5 days to assign mission)	CalEMA Sacramento 916-845-8911

Be aware that the Civil Air Patrol scheduling may require 5 working days ahead of need as they receive orders from the military. Angel Flight is dependent on volunteer pilots. Pilots may cancel without notice due to illness, mechanical problems, weather, etc. Larger centers may wish to establish prior contracts so that there is not a delay in time of need.

Section 4 - Continued

Angel Flight West

Worksheet for Requesting a Blood Mission

Please make copies of this form and use one for each referral.

Pick-Up Date _____ Pick-Up Time _____

Pick-Up Airport / City _____ Destination Airport / City _____

Pick-Up Contact Name _____ Phone # _____ Cell # _____

E-mail _____

Delivery Contact Name _____ Phone # _____ Cell # _____

E-mail _____

Additional Contact Person _____ Phone # _____ Cell # _____

E-mail _____

Shipment Description: Coolers containing donor blood:
Size: (EXAMPLE: 4 small coolers @ 24" x 14" x 18" – 50 lbs., and/or 2 large coolers @ 27" x 16" x18" – 50 lbs)

Pieces / Weight: _____

Blood Center Contact Person _____ Phone # _____ Cell # _____

E-mail _____

Mobile # _____ Collection Site Name: _____

Comments: _____

_____

_____

PLEASE CALL 310-390-2958

3161 Donald Douglas Loop South, Santa Monica, CA 90405
Toll Free 888-426-2643 Phone 310-390-2958 Fax: 310-397-9636
www.angelflightwest.org

Section 5

Donor Processing

If a blood center is in a disaster area, it may not be able to operate at all or only partially be able to take care of its own area of responsibility. If it is operating, in or out of an affected area, it must be able to accommodate greater than normal numbers of donors. Procedures for special drives and limited emergencies should be refined so that normal procedures will be used, but at a greatly accelerated pace. Each donor center should have 6 days drawing supplies, ABO and Rh processing kits, and infectious disease testing kits available. Prior arrangements for emergency transport to NAT laboratories should be in place.

Inventory

CBBS AEOCs will:

- coordinate and communicate needs as determined from direct requests of EMSA officials or blood centers affected by the catastrophic event;
- share all blood center to AEOC requests for blood and pertinent information (disaster intelligence) with EMSA officials;
- coordinate requests with AABB Disaster Task Force , American Red Cross, or ABC to reduce the possibility of duplication of effort;
- expect blood centers with the ability to commit resources to notify their respective AEOC of quantity, product, cubic volume of packing, and weight of the shipment(s);
- direct responding blood centers (committed suppliers) to designated staging areas as established by county EOCs; confirm shipping arrangements made by centers. (See Appendix F)

Section 5 - Continued

Shipping – volume, size, weight	Cubic volume (size) and weight of each shipment should be pre-calculated (example: 1 box 12" x 12" x 12" weighing 20 pounds). Information regarding the size and weight of the shipment should be conveyed to EMSA officials (or other carriers) prior to transportation to the designated staging area(s).

Section 6

Record Keeping	It is important that complete records be kept during a disaster. All records and shipments will be marked —"DISASTER RESPONSE" so that when the disaster situation has been terminated, proper accounting and compensation can be implemented. Billing and reimbursement will be handled through normal means between shipping and receiving blood centers.
Media Contact	All media contacts should be handled by the Community Relations Coordinator/Director (or equivalent) of the blood center. An agreement should be made with area media to refrain from calling for donors without being requested to do so either directly by the blood center or through the Emergency Broadcast System (EBS). Community Relations should be informed regarding each disaster status passed between area Emergency Operations Centers (EOC) and EMSA to ensure correct dissemination of information to the media.

After Action Report: **File an After Action Report (Appendix H) with the CBBS Central office so that procedures can be improved.**

CBBS DISASTER RESPONSE PLAN
Attachment 1 - BASIC ACTIVATION DECISION TREE

Disaster and/or Terrorist

EVENT

- Local
- California
- National

Blood Center

Assess Inventory to determine:

- Component needs (as affected by the event)
- Ability to provide those components

Hospitals

Communicate needs and/or ability to support others or your Blood Center

Blood Center – Contact any CBBS

Emergency Operations Center (AEOC) via:

- **Telephone, FAX,e-Mail**
- **Satellite phone**
- **Text message**
- **Amateur (HAM) radio**

Primary HF frequencies 7245 KHz (40m) Day/night
Alternate night frequency 3880 KHz (75m)
If no contact or wavelength is busy, move up until contact is made.

Contact your local County Emergency Operations Center if Event is local.(see Appendix F), communicate Status, Progress.

CBBS AEOC Actions (not all inclusive)

- Determine level of response and use appropriate communication modality (telephone, fax, e-mail etc.)
- Communicate component resource needs, and/or ability to fill requests to
  -**Affected Blood Center**
  -**County EOC,** REOC, DHS/EMSA, JEOC, SOC
  -**AABB Disaster Task Force NBE (1-800-458-9388**)
  1 .Prevent loss/duplication of component resources
  2 .Coordinate shipment locally through county EOC, EMSA JEOC, SOC…..,other

Deactivate/close AEOC Operations when Emergency ends and complete/send After Action report to CBBS Central Office.

Key to Abbreviations:

AEOC – Area Emergency Operations Center

EMSA – Emergency Medical Services Authority

EOC- Emergency Operations Center

JEOC – Joint Operations Center

SOC – State Operations Center

AABB- NBE InterAgency Disaster Task Force

ABC- America's Blood Centers

NBE- National Blood Exchange

CBBS DISASTER RESPONSE PLAN

Appendix A

2010-2011 EMERGENCY PREPAREDNESS COMMITTEE MEMBERS

Appendix A is a separate document distributed separately and only to CBBS Institutional Members.

CBBS DISASTER RESPONSE PLAN

Appendix B

GLOSSARY

AABB	American Association of Blood Banks
AAR	After Action Report
AEOC	Area Emergency Operations Center (North, Central and South)
ARES	Amateur Radio Emergency Service
BC	Blood Center
CalEMA	California Emergency Management Agency
CAP	Civil Air Patrol
CARES	California Amateur Radio Emergency Service
CBBS	California Blood Bank Society
CDHS	California Dept of Health Services
CHP	California Highway Patrol
CNG	California National Guard
DHCS	Department of Healthcare Services
DMAT	Disaster Medical Assistance Team
EBS	Emergency Broadcast System
ED	Emergency Department (hospital)
EMSA	Emergency Medical Services Authority
EOC	Emergency Operations Center
ERT	Emergency Response Team
FEMA	Federal Emergency Management Agency
FFP-J	Fresh Frozen Plasma-Jumbo
GETS	Government Emergency Telecommunications Service
HCC	Hospital Command Center
HEAR	Hospital Emergency Administrative Radio
HF	High Frequency

Appendix B - Continued

HSEATS	Homeland Security Emergency Air Transport System
ICP	Incident Command Post
JEOC	Joint Emergency Operations Center
MARS	Military Affiliated Radio System
MHOAC	Med. Health Operational Area Coordinator
NIMS	National Incident Management System
NBE	National Blood Exchange
POC	Point of Contact
RACES	Radio Amateur Civil Emergency Service
RDMHC	Regional Disaster Medical and Health Coordinator
SEMS	Standard Emergency Management System
VHF	Very High Frequency
WPS	Wireless Priority Service

CBBS DISASTER RESPONSE PLAN

Appendix C

CHECKLIST FOR REGIONAL BLOOD CENTERS

Each Blood Center should have a disaster response plan that includes at least the following:

1. **Emergency communications capabilities and alternatives:**
    - Establish emergency incoming and outgoing direct phone lines (switchboards may be overloaded).
    - Coordinate with telephone providers to ensure placement on emergency phone service priority lists for local and long distance service.
    - Be prepared to utilize cell phones (in case land lines are down).
    - Consider utilizing a satellite phone (in case landlines and cell phone towers are down).
    - Utilize Ham radio network.
    - Consider utilizing ReddiNet EMS, EMsystems or local hospital/ambulance/EMS emergency communication networks
    - Utilize email/text messaging/wireless technology.
    - Establish switch board/reception overflow process and script.
    - Update recorded messages and website.
    - Develop emergency contact list with alternate ways to contact: CARES, CAP, MARS, RACES.
    - Establish GETS/WPS card/system for emergency use during phone system overload or Federal shut down.

2. **Emergency transportation and fuel agreements and alternatives:**
    - Maintain priority emergency air and ground courier contacts (Fed Ex, UPS, Civil Air Patrol, Angel Flight, 4 wheel drive clubs and flying clubs).
    - Maintain emergency services and law enforcement contacts (Sheriff, California Highway Patrol).
    - Maintain emergency vehicle leasing agreements.
    - Ensure emergency and after hours fuel access for emergency staff, and transport vehicles.
    - Maintain security identification process for staff & vehicles to be able to cross security checkpoints at Blood Centers, major hospitals, airports, etc.

3. **Emergency power and utilities:**
    - Coordinate with utility services (electricity, telephone, water, natural gas, fuel oil) providers to ensure placement on emergency service priority restoration list. Ensure availability of back up generator and fuel delivery.
    - Ensure availability of bottled water.
    - Ensure availability of flashlights and batteries.

Appendix C - Continued

4. **Emergency donor drawing location agreements and alternatives:**
    - Maintain disaster/emergency collection plans.
    - Predetermine alternate or emergency collections sites (schools, convention centers, churches, union halls)

5. **Back up and alternate hospital communication methods:**
    - Maintain up-to-date direct inside hospital/lab phone numbers and emergency contacts (bypassing switchboards which may be overloaded)
    - Maintain hospital/lab direct cell phone numbers, fax numbers and email addresses.
    - Have a list of hospitals that can be reached on the Ham radio network or by satellite phone.
    - Predetermine best method for gathering emergency information from hospitals.

6. **Emergency refrigeration and HVAC:**
    - Maintain 24-hour refrigeration and HVAC repair/service agreements.
    - Ensure 24 hour dry and wet ice access.
    - Maintain extra shipping/storage boxes.

7. **Alternate storage/distribution sites.**
    - Predetermine alternate blood storage and distribution plans/sites. (sub centers, alternate facilities, overstocked hospitals)

8. **Primary and alternate command and communication center sites**
    - Predetermine primary and alternate/back up command and communication center sites.
    - Ensure that key leadership will be located at command and communication center sites.

9. **Staff alert/notification/recall process**
    - Ensure availability of a current staff- on- call schedule for after-hours situations/notification.
    - Maintain process for notifying/recalling staff. (call in or call out phone numbers, phone tree, pre arranged radio station, pre arranged staging area)

10. **Emergency security plans:**
    - Maintain staff and volunteer personnel identification process with local law enforcement recognition.
    - Maintain vehicle identification process.
    - Maintain emergency Law enforcement contacts
    - Maintain prearranged primary and emergency temporary supplemental security agreements.
    - Create an emergency response team.(ERT)
    - Maintain building evacuation plans.

Appendix C - Continued

11. **Plans for crowd (donor) control**
    - Maintain plans for crowd control, reception and seating.
    - Maintain plans for security, traffic control and overflow parking.

12. **Emergency supply/restock agreements with critical vendors.**
    - Maintain list of critical supplies and required quantities.
    - Ensure emergency reorder/resupply and delivery arrangements with vendors.

13. **Communications strategies for working with the media**
    - Maintain updated media contact lists including after-hours and emergency contact numbers.

14. **Staff health, safety and security concerns.**
    - Ensure plans for feeding of staff as necessary.
    - Ensure plans for in-place sheltering of staff as necessary.
    - Ensure plans for providing staff with disaster mental health services and assistance if they are personally affected by the disaster.

15. **Accelerated laboratory procedures**

16. **Accelerated donor processing procedures**

17. **Coordinate disaster response plans with hospitals served and conduct periodic tests/disaster drills.**

Each Blood Center should:

1. **Coordinate their Plan with CBBS AEOC.**

2. **Coordinate plan with local, County, and State EMSA** through Regional Disaster Medical Health Coordinator or Medical Health Operational Area Coordinator (MHOAC). (Appendix F). Know location and communication methods of EMSA staging/command centers.

3. **Coordinate disaster response plan with hospitals and other community blood banks.**

4. **Ensure that plan is communicated as necessary to staff and is practiced and updated at least quarterly.**

CBBS DISASTER RESPONSE PLAN

Appendix D

AEOC OPERATING PROCEDURE

PURPOSE

CBBS Northern, Central and Southern Area Emergency Operation Centers must have basic procedures in place for initiating operations during practice exercises and actual disaster situations while following the CBBS Disaster Response Plan. This procedure is intended as a basic guideline for AEOC staff to follow and does not replace the CBBS Disaster Response Plan. It may be adapted or varied by those in authority at AEOCs depending on situations that develop in actual disasters. It is recommended there be 2-3 other responsible employees to support the lead person.

STEPS

1. Each Area Emergency Operation Center (AEOC) will have a Disaster Preparedness Officer familiar with the CBBS Disaster Response Plan in charge of AEOC operations.
2. The AEOC Disaster Preparedness Officer will report to the AEOC upon indication of a disaster affecting any Blood Center. If the Disaster Preparedness Officer has not reached the AEOC for any reason, then the most senior member of the Blood Center's Distribution or Laboratory staff should assume the responsibility and carry out the functions of the AEOC.
3. Northern, Central and Southern AEOCs will activate the CBBS Disaster Response Plan, establish communications, gather intelligence and assess needs utilizing any or both of the following:
    3.1. Normal means of communication (telephone, cellular phone, FAX, etc.) if intact.
    3.2. Activating the CBBS Emergency Amateur Radio Net utilizing previously coordinated amateur radio frequencies to establish contact. (CBBS Disaster Plan Section 3 and Appendix G).
    3.3. Establish RadioNet control, coordinate requests for blood, direct product commitment, transportation and transfer of product to EMSA staging areas. If required, AEOCs will communicate with AABB Disaster Task Force, American Red Cross, or ABC as needed. AEOCs will communicate with CalEMA Duty Officer in Sacramento if State assistance is needed for transportation, personnel, or other resources.

Appendix D - Continued

AEOC CONTACT LIST

AEOC NORTH: BloodSource, Sacramento 916-731-7100
Emergency Operations Officer: Don Fipps
bus: 916-453-3780
cell: 916-207-3392
don.fipps@bloodsource.org
KI6DLS

AEOC CENTRAL: Houchin Community Blood Bank, Bakersfield 661-327-8544

Emergency Operations Officer: Randy Greenlee
bus: 661-327-8541
cell: 661-340-2232
rgreenlee@hcbb.com

AEOC SOUTH: San Diego Blood Bank 619-298-5535
Emergency Operations Officer: Rick Dickson
bus: 619-400-8200
cell: 619-571-3838
rdickson@bloodbank.org

Note: The AEOCs should only be contacted by Blood Centers. Transfusion Services should contact an AEOC during *urgent or extreme need* when no contact with a Blood Center can be made.

National Emergency Contact List for Blood Centers Only

AABB Disaster Task Force: 800-458-9388
ARC National Headquarters: 888-884-7623 (in CA 619-531 0686)
ABC (America's Blood Centers): 202-393-5725

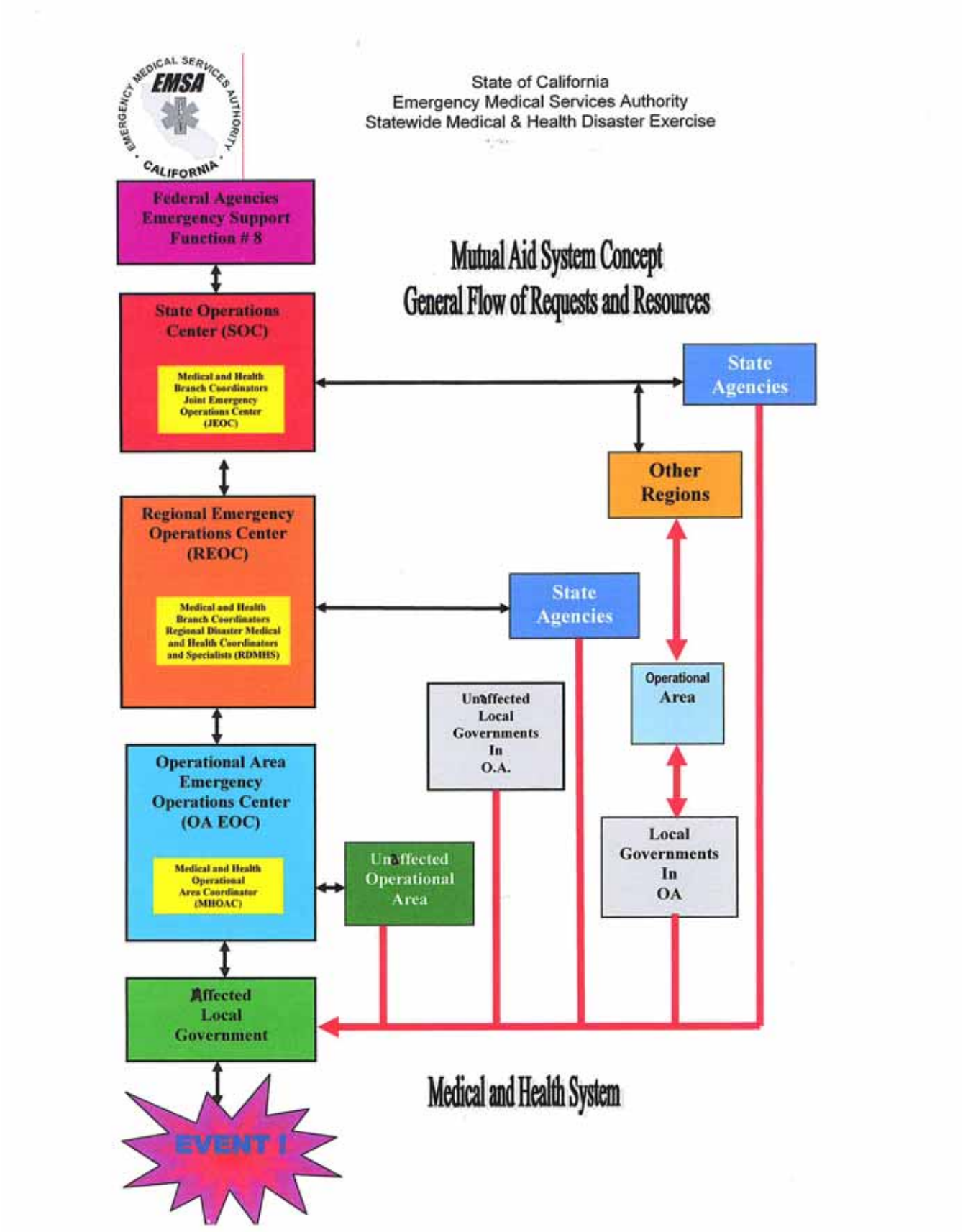
Note: These agencies should only be contacted by Blood Centers and only when no AEOC can be reached. Transfusion Services (TS) should contact their Regional Blood Center as a first step. An AEOC is contacted when the TS cannot reach a Blood Center.

CBBS DISASTER RESPONSE PLAN

Appendix E

MUTUAL AID SYSTEM

The CBBS cooperates with State Agencies in times of extreme emergency. The State in turn interacts with Federal Agencies, the AABB, American Red Cross, and America's Blood Centers. CalEMA coordinates all serious events from an advanced center in Sacramento. CalEMA works in tandem with Emergency Medical Services Authority (EMSA). CBBS works with EMSA because the State in the past had little knowledge of the products and services offered by California's Blood Centers. Our Blood Banks and Blood Centers are invited to network with this medical arm of the State emergency services on a regional and local level. **Appendix E** shows a Flow Diagram outlining the Mutual Aid System Concept. In the far left column is the major disaster EVENT involving any of our communities. Assistance in distributing our blood products links to the Medical Health Operational Area Coordinator, one for each county. For a county as large as Los Angeles this may be several MHOACs. Assistance moves up the column only as far as needed from Local to County to State. Non-affected agencies are on the right and contribute aid only when requested.


State of California
Emergency Medical Services Authority
Statewide Medical & Health Disaster Exercise
Mutual Aid System Concept
General Flow of Requests and Resources
Federal Agencies Emergency Support Function # 8
State Operations Center (SOC)
Medical and Health Branch Coordinators Joint Emergency Operations Center (JEOC)
State Agencies
Other Regions
Regional Emergency Operations Center (REOC)
Medical and Health Branch Coordinators Regional Disaster Medical and Health Coordinators and Specialists (RDMHS)
State Agencies
Operational Area
Unaffected Local Governments In O.A.
Operational Area Emergency Operations Center (OA EOC)
Medical and Health Operational Area Coordinator (MHOAC)
Unaffected Operational Area
Local Governments In OA
Affected Local Government
EVENT !
Medical and Health System

CBBS DISASTER RESPONSE PLAN

APPENDIX F

REGIONAL DISASTER MEDICAL HEALTH COORDINATORS AND SPECIALISTS

RDMHC	RDMHS
Region I Cathy Chidester Los Angeles County EMS 10100 Pioneer Blvd #200 Santa Fe Springs, CA 90670 (562) 347-1500 cchidester@dhs.lacounty.gov	Bryan Hanley Los Angeles County EMS 10100 Pioneer Blvd., #200 Santa Fe Springs, CA 90670 (562) 347-1500 bryanhanley@dhs.lacounty.gov
Region II Muntu Davis, MD, MPH Public Health Officer Alameda County 1000 Broadway, Ste 500 Oakland, CA 94607 (510) 267-8010 muntu.davis@acgov.org	Fred Claridge Alameda County EMS 1000 San Leandro Blvd. Ste 100 San Leandro, CA 95577 (510) 618-2050 fred.claridge@acgov.org
Region III Vacant. To report medical or health disaster page: EMSA Duty Officer at (916) 553-3470 or CDPH Duty Officer at (916) 328-3605	John Lord (interim) Sierra-Sacramento Valley EMS 5995 Pacific Street Rocklin , CA 95677 (530) 410-6008 john.lord@ssvems.com
Region IV Dan Burch, EMS Administrator San Joaquin Co Emergency Med Svc Agency PO Box 220 French Camp, CA 95231 (209) 468-6818 dburch@sjgov.org	Shellie Lima San Joaquin Co. EMSA PO Box 220 French Camp, CA 95231 (209) 468-6818 slima@sjgov.org

RDMHC	RDMHS
Region V	
Edward L Moreno, MD,MPH Director Health Officer Fresno County Dept Community Health PO Box 11867 Fresno, CA 93775 (559) 445-3202 edmoreno@co.fresno.ca.us	Vince Pierucci Kern County EMS 1800 Mount Vernon Ave Bakersfield, CA 93306 (661) 868-5218 pierucciv@co.kern.ca.us
Region VI	
Bruce Barton (Interim) EMSAdministrator Riverside Co. EMS 4065 County Circle Dr. Riverside, CA 92503 (951) 358-5029 bbarton@rivocha.org	Britta Barton (Interim) Riverside Co Public Health Dept 3900 Sherman Way, Ste H Riverside, CA 92503 (951) 358-7100 brittabarton@rivocha.org

EMSA Program Liason	**CDHS Program Liason**
RDMHS	RDHMS
Jody Durden, MPH Disaster Med. Svc. Auth EMS Authority 10901 Gold Center Dr., Ste 400 Rancho Cordova, CA 95670 (916) 255-4702	Thomas Ahrens, Pharm D Chief, Emerg. Pharmaceutical Services, Planning & Response Section, Emerg. Preparedness Office CA Dept Public Health 1500 Capitol Ave., 2nd flr Sacramento, CA 95899-7413 (916) 650-6438 tom.ahrens@cdph.gov

CBBS DISASTER RESPONSE PLAN

Appendix G

BLOOD BANK COMMUNICATIONS AMATEUR RADIO FREQUENCIES

	Kilohertz
Primary – Day or Night	7245 (40 meters)
Alternate – Night	3880 (75 meters)

If no contact or if wavelength busy, move up until contact is made.

Alternate Net Frequencies:

	Kilohertz
Western Public Service Net	952 Emergency: Western US
Mission Trail Net	928 Emergency traffic: AZ, CA, ID, NV, OR
RACES- San Bernardino County	3987.5
RACES – Riverside County	3945

Practice sessions are held on the **2nd Wednesday evening of the month at 1830 hrs as CBBS Net or Blood Banks Net on 3880 KHz**. BloodSource Sacramento acts as Net Control. Roll Calls should use the Blood Center name rather than the HAM Call letters since the Amateur Operators (HAMS) change from time to time and the AEOC needs to know to which Blood Center they are talking. At the end of communication or after the first 10 minutes the Amateur (HAM) should identify with their call sign to satisfy FCC rules. Only once is necessary per session, not every transmission.

Appendix G - Continued

AMATEUR RADIO LICENSE WITHOUT MORSE CODE

In keeping with an expanding international trend, the Federal Communications Commission (FCC) has dropped the Morse Code requirement for all Amateur Radio license classes. All Technician licenses are now equivalent removing the difference between Technician and Technician Plus. This change encourages Amateur Radio operators to advance their skills and participation. In the future it may also allow Technician Class licensees to use radio frequencies below 30 MHz.

By not requiring Morse Code there is increased access for Emergency First Responders. For example, hospitals and blood centers with personnel holding Technician licenses can initiate communication at previously restricted wavelengths. Hospitals and blood centers should encourage some of their employees to obtain Technician Class licensing, and develop a relationship with local General Class licensees in their communities.

Technician Class license requires passing a 35 question multiple-choice written exam with a score of 70% or better. The exam covers basic FCC rules, operating procedures, and electronics theory. Technician Class operators are authorized to use all VHF or UHF frequencies above 30 MHz. Technician Class operators can upgrade to General Class by passing a 30 question multiple-choice exam.

General Class license permits use of all amateur frequencies including HF (shortwave) whose range can extend cross-country or worldwide.

Amateur Extra Class requires a General Class license and a 50-question exam, but no Morse code testing.

Exams are given locally by Volunteer Examiners. The examiner may even come to your blood center. A test session and the exam are very reasonably priced. All the exam questions and answers for Technician Class are offered on-line by the American Radio Relay League at www.arrl.org, and in their book Now You're Talking!, (current edition), available from Barnes and Noble, Amazon.com and other book sellers.

When Amateur Radio operators are assisting blood centers during emergencies, the following document may provide an organized summary of blood products that will be provided, by which institution and by what transportation means. This may also assist in preparation of After Action Reports in the days that follow a disaster. Use one such sheet for each institution with whom you make contact.

Appendix G - Continued

CBBS EMERGENCY COMMUNICATIONS FORM

Message No. ____ Date/Time:_____/_____ Routine Priority Emergency
(circle one)

TO: _____

ADDRESS: _____

FROM: _____

CONTACT INFORMATION: Phone: _____ Cell: _____ Pager: _____

Fax:_____ E-mail:_____

Message (in 25 words or less)

_____	_____	_____	_____	_____	5
_____	_____	_____	_____	_____	10
_____	_____	_____	_____	_____	15
_____	_____	_____	_____	_____	20
_____	_____	_____	_____	_____	25

(Check appropriate box) □ Components Needed □ Components being Shipped □ Inventory Report Only

RBCs	Platelets	FFP	FFP-Jumbo
O+ _____ **O-** _____ **A+** _____ **A-** _____ **B+** _____ **B-** _____	**O+** _____ **O-** _____ **A+** _____ **A-** _____ **B+** _____ **B-**_____	**O Type** _____ **A Type** _____ **B Type** _____ **AB Type** _____	**O Type** _____ **A Type** _____ **B Type** _____ **AB Type** _____
Cryo_____			

Transportation Mode

Airline: _____ Flt No. _____ FedEx #:_____
CHP: _____ Angel Flight: _____ CalEMA/EMSA: _____
POC: _____ Airport:_____ ETA & Date: _____
No. of Boxes: _____ Size of Boxes: _____ Wt:_____ Dry Ice:_____lbs
Comments:_____
_____
_____
_____

Authorizing Blood Bank Representative: _____
(Required for all Communications)

CBBS DISASTER RESPONSE PLAN

Appendix H

AFTER ACTION REPORT (AAR)

The After Action Report form (AAR) is a suggested standardized form to aid AEOCs, Blood Centers, and Transfusion Services in summarizing the problems and successes experienced during actual disasters or practice exercises. The AAR allows organizations to keep track of what is happening chronologically, to keep primary team members functioning as a unit, and to integrate with other organizations when help has been requested. Information collected from the AAR can be used to update your institutional Disaster Plan and can help improve the CBBS Disaster Response Plan. In true disasters or acts of terrorism as declared by the Federal Government such reports can support requests for funds.

Many institutions may already have such a document. The following example form can be used if one is needed. An AAR form should be used during local and regional exercises and a copy submitted to the CBBS Central office so information can be shared.

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CBBS DISASTER RESPONSE PLAN

Appendix H

AFTER ACTION REPORT (AAR)

Event Description

Describe the event briefly in the box below.

Date:_____ Time:_____:

Timeline of Event Responses

Document brief bullets of events as they transpire.

- __ __: __ __ hr:_____
- __ __: __ __ hr:_____
- __ __: __ __ hr:_____
- __ __: __ __ hr:_____
- __ __: __ __ hr:_____
- __ __: __ __ hr:_____

Blood Center(s) Involved

List the Blood Center(s) involved in the box below.

Continued on next page

Appendix H – AFTER ACTION REPORT (AAR), continued

AEOC Notified Upon initial notification, check the box and record date, time and Point of Contact (POC)

☐ Northern Area Emergency Operations Center: BloodSource – Sacramento

Date:_____ Time:_____ POC:_____

☐ Central Area Emergency Operations Center: Houchin Blood Bank – Bakersfield

Date:_____ Time:_____ POC:_____

☐ Southern Area Emergency Operations Center: San Diego Blood Bank – San Diego

Date:_____ Time:_____ POC: _____

Types of Injuries Briefly list the types of injuries caused by the event in the box below.

Note: Use back of form if necessary

Continued on next page

Appendix H – AFTER ACTION REPORT (AAR), continued

Anticipated Need Document the **anticipated** need for blood products in the table below.

Product	O+	A+	B+	AB+	O-	A-	B-	AB-
RBC								
Apheresis								
Cryo								
FFP								
FFP Jumbo								

Actual Need Document the **actual** need for blood products in the table below.

Product	O+	A+	B+	AB+	O-	A-	B-	AB-
RBC								
Apheresis								
Cryo								
FFP								
FFP Jumbo								

Source of Supply (Check box)

☐ In House ☐ CBBS ☐ NBE ☐ ARC ☐ ABC

☐ Other _____

Continued on next page

Appendix H – AFTER ACTION REPORT (AAR), continued

Levels of Contact (Check box and list contact name)

☐ City _____ ☐ County _____

☐ State _____ ☐ NBE _____

☐ FEMA _____

Comments (if any): _____

Communication (Check box)

☐ Phone ☐ Cell Phone ☐ Fax ☐ E-mail ☐ Blackberry ☐ Ham Radio

Other:_____

Transportation Modes (Check box)

☐ EMSA ☐ CHP ☐ Commercial Carrier ☐ Angel Flight

Other:_____

Media Was media response: (Circle one or more)

Coordinated Timely Appropriate Informational Helpful

Continued on next page

Appendix H – AFTER ACTION REPORT (AAR), continued

Successes Describe briefly what went well in the box below.

Note: Use back of page if necessary

Problems Describe briefly any problems that were encountered in the table below.

(Check box)

☐ Vendor _____

☐ Media _____

☐ Other _____

Note: Use back of page if necessary

Continued on next page

Appendix H – AFTER ACTION REPORT (AAR), continued

Improvements Describe briefly what could be improved and how in the table below.

What needs improvement	Suggested Improvements

Submitted By	Date	E-Mail	Phone

CBBS DISASTER RESPONSE PLAN

Appendix I

HOSPITAL SUPPLEMENT

The CBBS Disaster Response Plan is primarily directed at the Institutional members of CBBS, the blood suppliers. However, there must be coordination between recipient hospitals and the blood suppliers in times of major disaster or acts of terrorism so that blood product demands are met, product transported, and efforts and product are not wastefully duplicated. Your specific disaster plan depends on your hospital level of Trauma Care.

In this day and age Transfusion Services (TS) may have more than one supplier. Assuming the primary supplier is local, when disaster strikes, the hospital TS needs to communicate anticipated blood requirements to that blood center. The blood center (BC) should advise the AEOC, and if the disaster is far-reaching, the AEOC will notify the NBE to alert the AABB Inter-Agency Task Force for Domestic Disasters and Acts of Terrorism. (See the Basic Activation Decision Tree at the beginning of this Plan – Attachment 1 on page 14).

Although the Hospital may have a general Emergency Management Plan and Incident Command Center as required by JCAHO, the TS should have a specific operational plan for disasters with many injured requiring blood. In such events the TS has specific requirements and will need to activate their blood supply emergency network to be effective. It is suggested that the following objectives be covered, and those objectives should be in place before the Event.

DOES YOUR TS HAVE:

1. A Transfusion Service specific disaster plan?
2. A communications system with your blood supplier and critical vendors for reagents, generator fuel that avoids switchboards at the hospital and the BC in favor of direct lines? Are there back-up phone numbers or alternate communication methods (E-mail, Blackberry, Amateur radio) if phone lines were to be shut down by the utility due to overloaded circuits? These numbers and methods should be validated periodically during the year.
3. Is there a named Key contact and backup contact (with phone numbers)? Is this information shared with the Blood Center?
4. A communications relationship with Emergency Department personnel? The TS and Emergency Department (ED) should practice communication so that there is rapid sharing of anticipated patient numbers, types of injuries, anticipated blood product needs, and estimated time of arrival. This information should be shared with the BC. As the injured arrive in the ED there should be an organized follow-up communication to the TS from a single source to prevent duplicate and conflicting ordering of product.

Appendix I - Continued

5. A plan of action and agreement for Group O blood requirements vs. type specific red cells and product needs for Disaster related admissions?
6. Emergency power sufficient to perform basic blood bank functions and run equipment?
7. A back-up source for fuel?
8. A plan of evacuation for the TS in cases where the hospital is damaged or is threatened, and a plan for minimal volunteer personnel to provide emergency staffing?
9. Staffing plans for efficient callback of qualified blood bank personnel, if needed, and to cover reasonable length shifts? Consider number of personnel available, workloads to accommodate fatigue, fear, and family concerns.
10. A relationship with "sister" hospitals for additional reagents, refrigeration, etc., if needed?
11. Locations to provide facilities for the BC to set up mobile donor sites if needed? Avoid becoming an ad hoc donor center. The FDA does not look favorably on such activities.

Finally, larger hospitals may want to attend meetings of Regional Disaster Medical Health Coordinators and Specialists (Contact information in Appendix F this Plan). During major disasters, the Public Health coordinators need to know the blood system capabilities.

<u>WHEN THE EVENT OCCURS, ARE YOU PREPARED TO</u>

1. Immediately inventory all blood products? Inventory Group O products?
2. Share this information with Hospital Incident Command Center, your Blood Center, and, if requested, County Disaster Agencies?
3. Immediately assess the number of patients in surgery, ICUs and ED currently requiring blood, and estimate supplemental needs of the incoming trauma patients? Is communication with ED functioning? If not, do you have a system of "runners"?
4. Notify BC of expected products required?
5. Establish where products will be delivered if not routine? Verify delivery mode? Does BC personnel have adequate identification to permit their entry?
6. Establish schedule for follow-up communication with the BC?
7. Evacuate blood bank if necessary with a list of necessary reagents, equipment, etc to carry out basic testing –and a plan to notify Nursing and ED where you are?

Appendix I – Continued

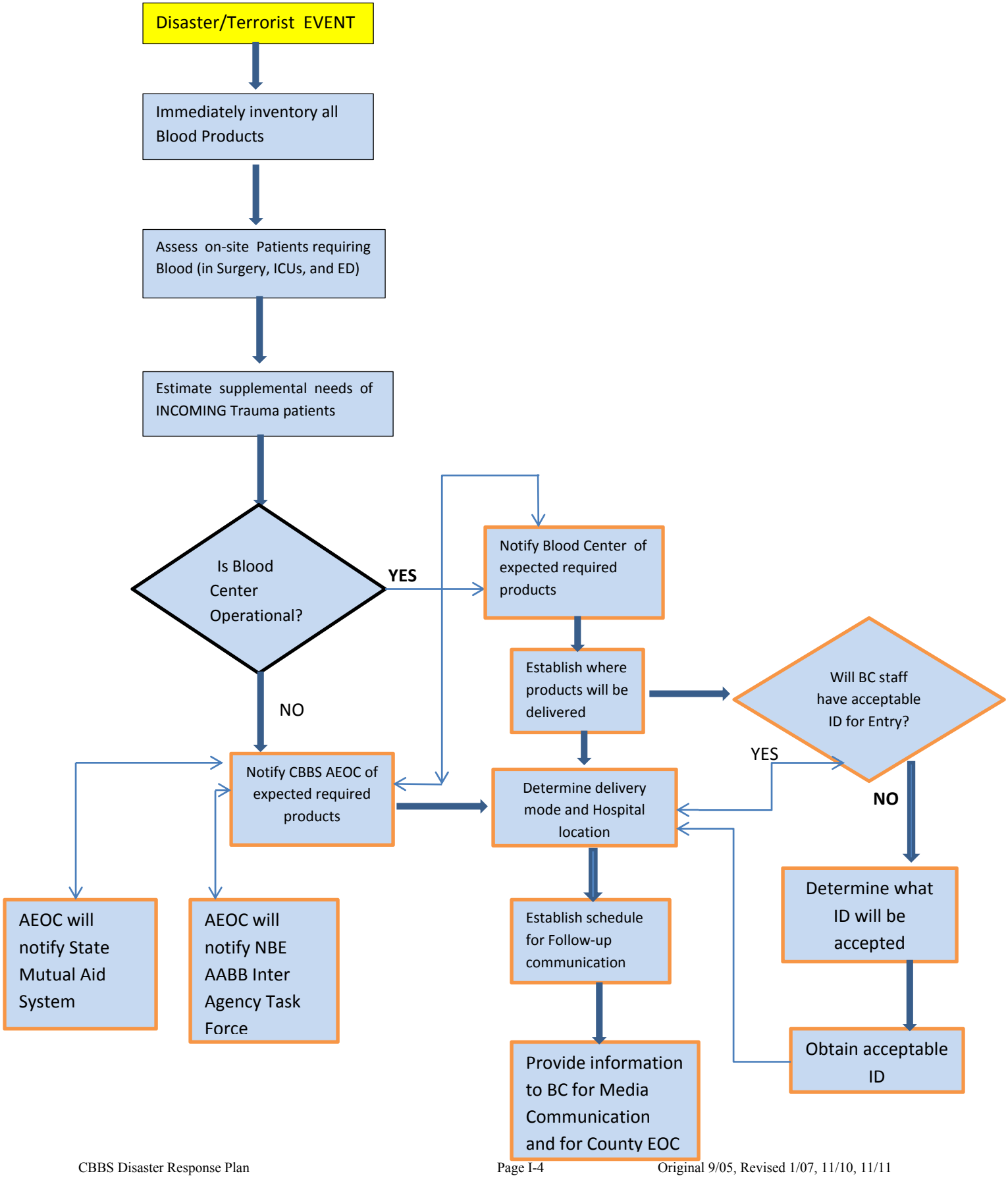
8. Provide information to BC for media communication? Your BC should contact AABB Disaster Task Force if necessary. (See Decision Tree).

AFTER THE EVENT, PREPARE AN AFTER ACTION REPORT (APPENDIX H). SEND A COPY TO CBBS CENTRAL OFFICE.

In times of disaster and terrorist acts there **will** be donors. The most deadly result following an Event is the loss of infrastructure - the systems for communication, transportation, water, fuel, electrical power for refrigeration - that deliver blood products where they need to go and quickly. Every institution and every individual in the chain counts.

Appendix I - Continued

Disaster / Terrorist Event Transfusion Service Decision Flow



CBBS DISASTER RESPONSE PLAN

Appendix J

RESPIRATORY PANDEMIC PLAN

This supplement to the Disaster Response Plan is intended for the specific hazard of pandemic respiratory viruses. A pandemic can start when three conditions have been met: emergence of a disease new to the population; the agent infects humans causing serious illness; the agent spreads easily and sustainably among humans. Significant infectious respiratory disease can impact donor availability because of illness and because mass gatherings are curtailed. The normal operation of blood centers is affected when employees as well as their families become ill.

The source of the pandemic varies. Recent threats have included Influenza A subtype H5N1 (Avian) – 2004-2005, influenza A, subtype H1N1 (Swine flu) -- 2009 - 2010, and SARS. Flu viruses are seasonal, but can be epidemic and with a new strain for which there is no vaccine, potentially pandemic. The risk diminishes as vaccines are developed. The circulation of respiratory viruses in a community usually lasts for several weeks as the population becomes ill and then recovers.

The risk of spread of bacterial agents such as pneumonic plague by terrorist activity is unpredictable in duration and course depending on the agent used. However they are often more easily controlled because they are treated with readily available antibiotics.

A Pandemic Program should begin with a specific Plan followed by Education, Training, and Practice. The Plan should be specific for your institution – blood center or transfusion service; the community served – urban or rural; and the breadth of the services provided.

The Pandemic Plan is influenced by information from the State of California, aaBB Inter-Organizational Task Force, the FDA, and the CDC over long periods of time and may be modified as new information is available. As a result the **Plan** should:

- identify a **Pandemic Coordinator**
- select a **Committee** specific for a pandemic, and
- make a **Checklist** of actions to be taken, actions under review, or that need necessary revision, and that are approved. It should be monitored for progress over ensuing weeks or months.

The Committee membership is benefited by someone from Human Resources (HR) since prevention of the spread of illness through your institution may need a liberal non-punitive sick leave policy and re-definition of work responsibilities. A medical consultant with infectious disease experience may also be helpful. For hospitals such an individual is probably a member of the medical staff. Blood Centers may want such a consultant on the Board of Directors.

Appendix J - Continued

The **Coordinator** should

- establish communication with intra-organizational departments
- communicate with county EOC/EMSA for information to monitor risk (See Appendix F for County Health Officer contact information)
- monitor CDC, AABB Disaster Task Force, state DHS, and county Emergency Operations Centers (EOC) as they develop their pandemic plans. As the pandemic unfolds these sources also provide information on the progress of community illness.
- establish a continuing relationship with the state and county organizations.
- share information with Committee members and lead employees.
- provide information to media, EMSA, AABB NBE on your status as needed.

The **Committee** should create policies that

- establish institutional status as "critical operation" eligible for vaccines and anti-viral agents.
- encourage annual flu vaccination for staff and monitor compliance.
- develop skeleton operation protocols determining activities that could be suspended for several weeks.
- cross train personnel to cover functions when others are ill and staff limited.
- establish a system of flexible work hours when staff is limited due to heavy absenteeism.
- prepare a list of critical supplies and their vendors.
- consider a triage plan for component inventory in the event of shortage, and alternatively decreasing production if elective surgeries decrease.
- create a communication system so that sick or prodromal employees do not come to work.
- establish to whom employees should report and how information on staffing will be consistently shared.

Determine who will make the decision to use these protocols and when.

When the Pandemic Plan is developed, **Educate staff**

- on signs and symptoms of the disease
- on infection control for themselves and their families.
- on methods of disease control
- on proper assessment of donors to determine who may be ill and need to return home.

TRAIN staff on

- proper ways to control spread of infection through sneeze droplets
- cough etiquette
- standard surface sterilization
- proper use of hand sanitizing gels and hand washing
- location of masks, gloves, and gowns and when to use them
- social distancing

Appendix J - Continued

PRACTICE protocols throughout the development phase to see what works and what does not. Practice makes more perfect performance.

RESPONSE PHASE
When the pandemic is bearing down on your community and your institution, the designated coordinator should

- **Activate** the Pandemic Plan, limiting face-to-face exposure and improving social distancing.
- **Monitor** the number of cases as the pandemic begins, peaks, and ends. Follow criteria from FDA and CDC for recruiting recovered donors.

A major function of the Coordinator and Committee is to monitor the event, share information with employees, donors, and the public to prevent unnecessary worry or fear. This allows staff to carry on with efficient collection and processing of blood products under difficult circumstances.

Checklists for Plan preparation are available on-line:

- www.AABB Inter organizational Task Force on Pandemic Influenza and the Blood Supply. Planning Checklist version 2.0
- Mortality and Morbidity Weekly Report. www.cdc.gov/mmwr.flurates
- State of California Emergency Plan (2009). www.dhs.ca.gov/pandemic