

# Emergency Preparedness Medical Counter Measures: Blood Support

Jerry A. Holmberg, Ph.D., MT (ASCP)SBB Senior Advisor for Blood Policy www.hhs.gov/bloodsafety

Figure HP-2. Allogeneic Whole Blood and Red Cell Collections and Transfusions, 1989 - 2004

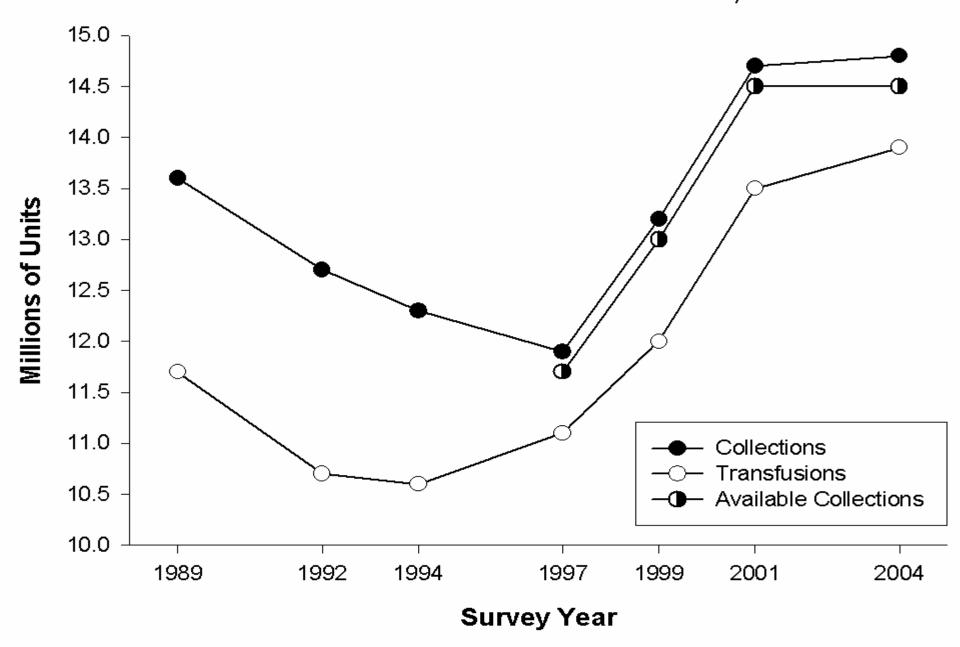
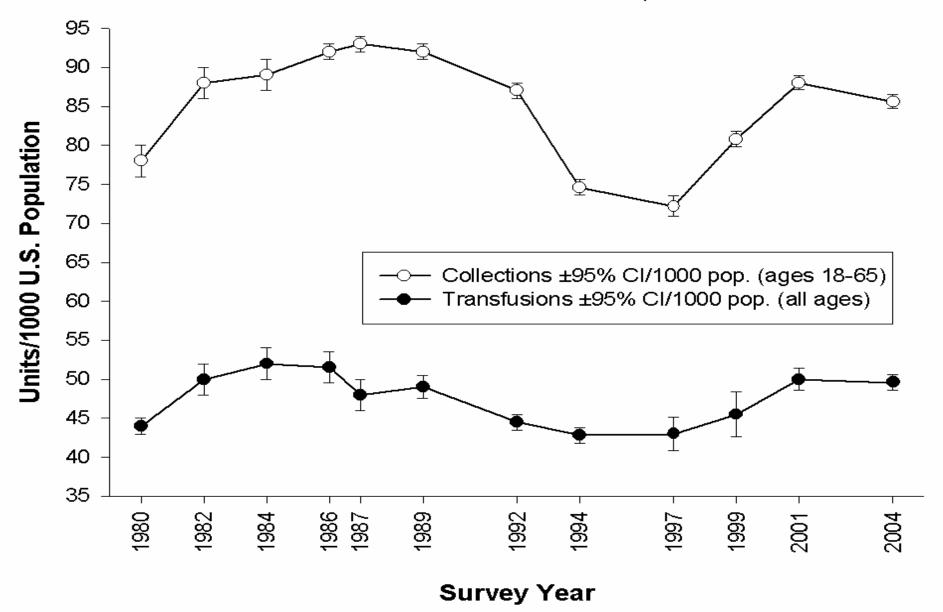


Figure HP-4. Trends in Estimated Rates of U.S. Blood Collection and Transfusion, 1980 - 2004



# ESF #8 Public Health and Medical Services Annex

ESF Coordinator: DHHS

Primary Agency: DHHS

Support Agency: Departments and

Federally Chartered

Agencies

- Blood mentioned
  - Page 5
  - Page 7
  - Page 14

# ESF #8 Public Health and Medical Services Annex

- Support Agency:
  - Dept of Agriculture
  - Dept of Defense
  - Dept of Energy
  - Dept of Homeland Security
  - Dept of the Interior
  - Dept of Justice
  - Dept of Labor
  - Dept of Transportation
  - Dept of Veterans Affairs

- US Agency for International Development
- Environmental Protection Agency
- General ServicesAdministration
- US Postal Service
- American Red Cross

# **ESF** #8

ESF #8, when activated, is coordinated by the Assistant Secretary for Preparedness and Response (ASPR) through the HHS Secretary's Operation Center

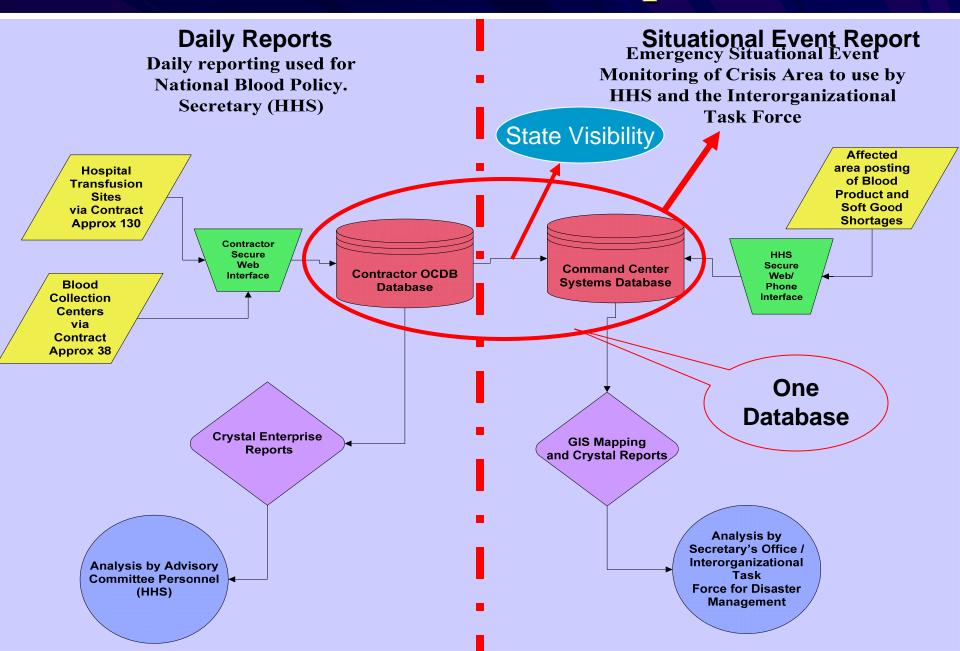
# ESF #8 Public Health and Medical Services Annex

- Blood support is responsibility of ASH
- Coordination with AABB
   Interorganizational Task Force on
   Domestic Disasters and Acts of Terrorism
  - Level I Participants
  - Level II Participants
- ARC is for disaster response and blood activity is coordinated with AABB TF through HHS

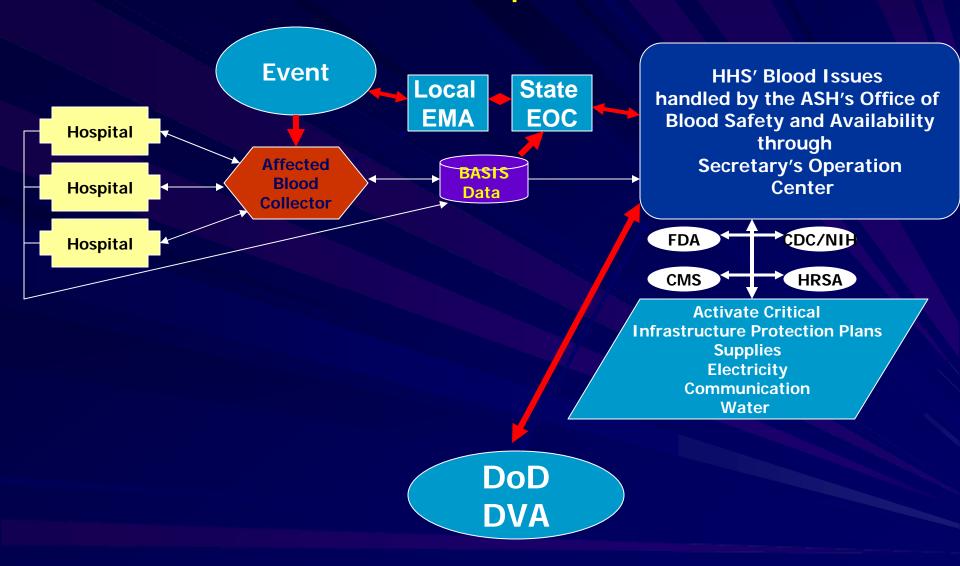
# ESF#8 Blood and Blood Products

- "HHS monitors blood availability and maintains contact with the American Association of Blood Banks Interorganizational Task Force on Domestic Disasters and Acts of Terrorism and, as necessary, its individual members to determine:
  - The need for blood, blood products, and the supplies used in their manufacture, testing, and storage.
  - The ability of existing supply chain resources to meet these needs; and
  - Any emergency measures needed to augment or replenish existing supplies.

# Critical Incident Response

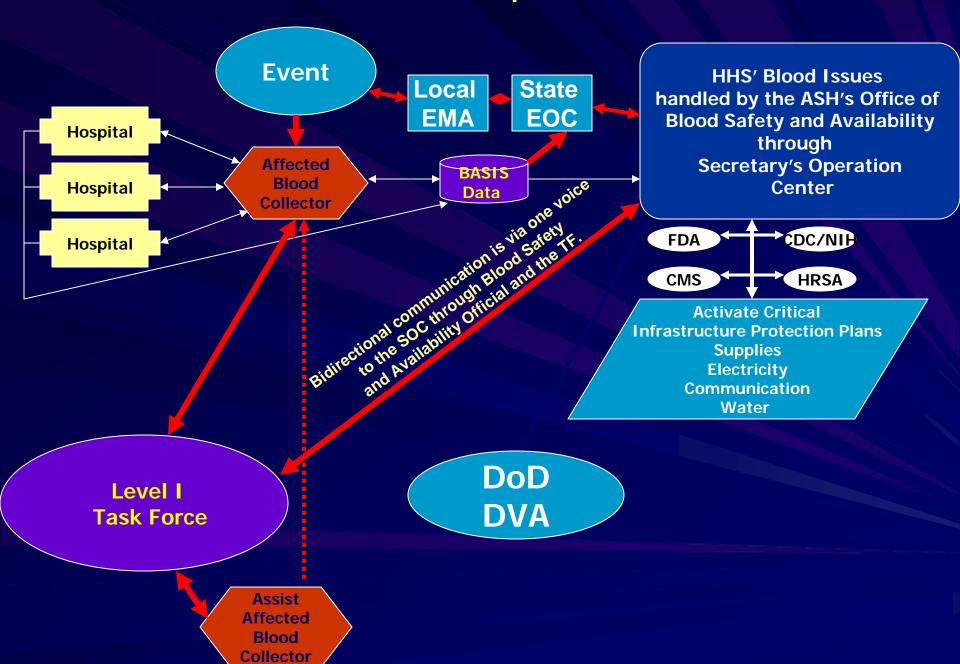


### **DHHS** Response



#### **AABB TF Event** Hospital l laamital **Affected** Blood Hospital Collector Haanital Hospital **Level 2 TF Members** Hespital HHS (OS. FDA, AABB **AATB** CDC) Liaison Message to AdvaMed **Public** Message AABB AHA To **Blood** Level I **CAP** ARC **ASBPO** Community Task Force **PPTA** ABC BCA Level 2 **Task Force HRSA Assist Affected Blood** Collector

### DHHS Response



# Blood Availability and Safety Information System (BASIS)

**Monitors Supply & Demand** 

### NOT

to interfere with day-to-day operations and decisions of blood centers, hospitals and/or community transfusion centers.

# **BASIS**

- BASIS tracks:
  - Quantitative data on blood supply/demand
  - Quantitative data on platelet supply/demand
  - Qualitative supply and demand chain events
- BASIS uses weight values:
  - Hospital (DOS, platelet therapeutic dose)
  - Blood Centers (DOS)
  - Statistical sampling
- BASIS design being validated with HHS funded national survey tool (NBCUS)
- Hardware / Software at HHS (SOC)
  - GIS component

# **Qualitative Data Elements**

- Was surgery delayed?
- Was an order not filled completely?
- Was blood product purchased from an alternate supplier?
- Was a non-standard protocol used in patient care because of the shortage?
- Was a routine transfusion practice ignored or altered because of a shortage?
- Was a surgery or therapy canceled?

### **BASIS**

#### Blood Availability and Safety Information System

The **BASIS** program is designed to be a tool for local blood centers and hospitals to track their inventory while providing a unique ability to monitor the supply and demand by States' Emergency Operation Centers and Public Health Regions during a disaster. Each facility's identity is secure and not visible by other participants enrolled in the system unless designated by a local memorandum of understanding. Your participation in **BASIS** is critical to the State Department of Health and the Department of Health and Human Services to monitor the Nation's blood inventory in light of national disasters and patient/donor safety policies.

Accreditation and certification of data maintained in **BASIS** is pending protection under the Protection of Critical Infrastructure Information (PCII) act.

Please contact the Department of Health and Human Services (<a href="http://www.hhs.gov/bloodsafety">http://www.hhs.gov/bloodsafety</a>) for more information about BASIS.

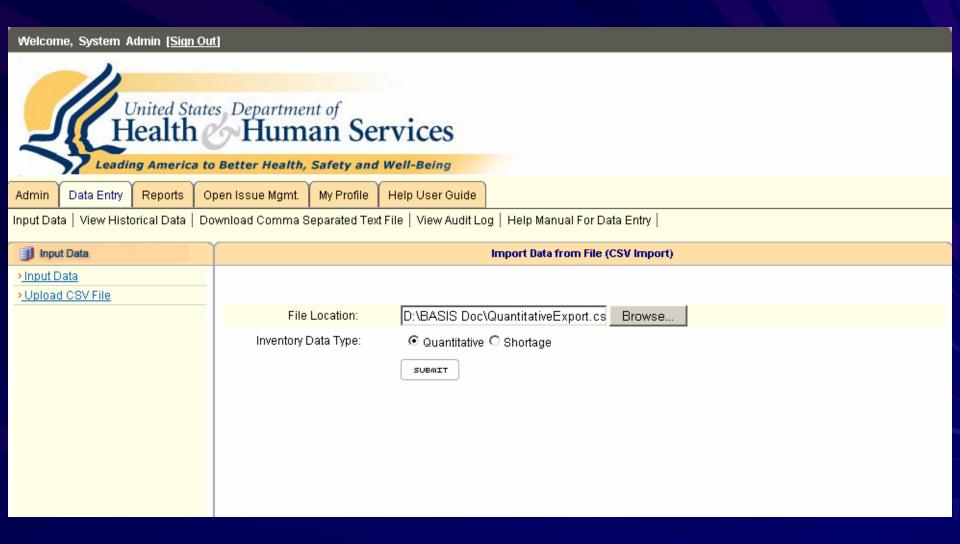
# **Blood Center Input**

	Leadin	ng America	to Better Health,	Safety and	Well-Being							
Admin	Data Entry	Reports	Open Issue Mgmt.	My Profile	Help User Guide							
Input Dat	a   View Histo	orical Data	Download Comma S	Separated Tex	t File   View Audit Lo	g   Help Manu	al For Data Er	ntry				
] Inpu	t Data		Y			lr	nput Data					
> Input D	ata				× × ×							
> <u>Upload</u>	CSV File		Facility: ESIBC	1 Test Blood	Center				Inp	ut/Edit Data	For:  7/30/	2007
						QUANT	ITATIVE DAT	Α				
			Category			WBU		Red Blo Total All	ood Cells		10/40/05/97/04	telets
			Category			Total	Apheresis	Types	0+	0-	WBD	Apheresis
			Collections			750	0	and the	17	air VV	53 VV	0
			Inventory				20	450	75	85	0	0
			Production					0	0	0	0	0
			Distribution to I	Hospitals		<u> </u>		41	О	0	0	0
			Wastage					0	О	0	0	0
			Outdating					0	0	0	0	0
			Returns					0	0	0	О	О
			Exports to Othe	r Locations				0	О	0	0	0
			Imports from O	ther Location	S			0	0	0	0	0
						SHOR	TAGE DATA					
				Action	Taken Because of S	Shortage		R	ed Blood C	ells	Plate	lets
			Was a delivery	entra inches					V			
					oducts below minim	al established	levels?				V	
			Was an order i		-							
Was blood product purchased from an alternative supplier?				e supplier?								
						SUBMIT DATA	DELETE	DATA				
					,							

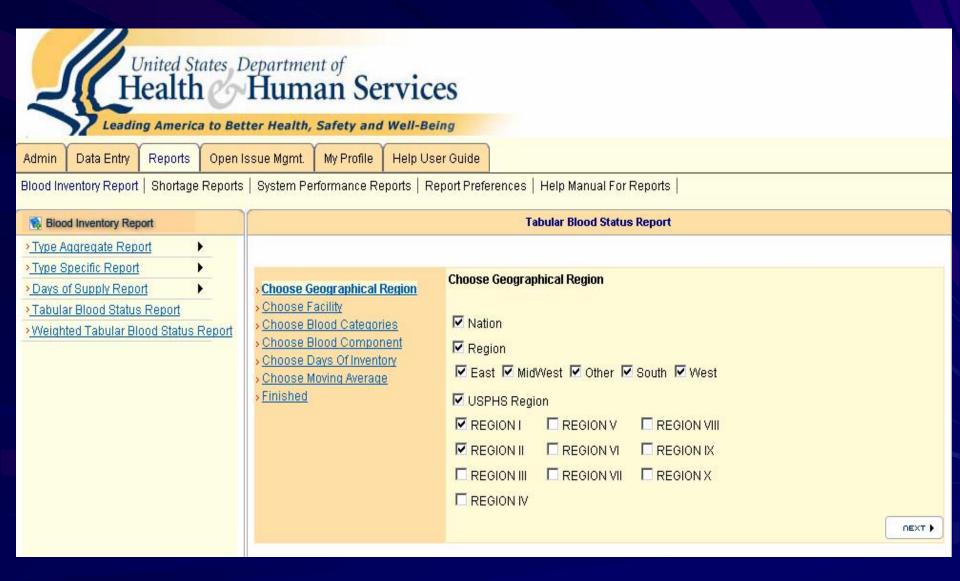
# DATA DOWNLOAD

Welcome, System Admin [Sign Out]							
United States Department of Health Human Services  Leading America to Better Health, Safety and Well-Being							
Admin Data Entry Reports Open Issue Mgmt. My Profile	Help User Guide						
Input Data   View Historical Data   Download Comma Separated Text	File   View Audit Log   Help Manual For Data Entry						
	Export Data						
To download data please fill out the following details. Fields marked v	with (*) are required						
Enter the date range for downloading inventory data.							
From (mm/dd/yy):*	6/30/2007 💌						
To (mm/dd/yy):*	7/31/2007						
Inventory Data Type:*	Quantitative C Shortage						
	SUBMIT						

# DATA DOWNLOAD



# GEOGRAPHIC REPORTS



# TADIII AD DEDODT

Shortage Report (with Historical Avg.)

٠

List of Facilities with Shortages

Shortage Trends

IADUL	4K	KLI		
Input/Change Data For:  7/31/2007		<u> </u>	_	

#### Shortage Report for 7/31/2007

of 1 ▶ ▶∥ Select a format ▼ Export 100%

#### Nation

Indicator of Possible Shortage Action taken because of Shortage	Facilities with Shortages (Total Facilities Reported = 2)					
	Red Blood Cells	Red Blood Cells (%)	Platelets	Platelets (%)		
Was a delivery delayed?	0	0%	0	0%		
Were inventories of blood products below minimal established levels?	1	50%	0	0%		
Was an order not filled completely?	1	50%	0	0%		
Was blood product purchased from an alternative supplier?	0	0%	0	0%		
Was a non-standard protocol used in patient care because of the shortage?	0	0%	0	0%		
Was a routine transfusion practice ignored or altered because of a shortage?	0	0%	0	0%		
Was a surgery, procedures, or therapy delayed or cancelled due to shortage?	0	0%	0	0%		

#### **USPHS REGION I**

Indicator of Possible Shortage Action taken because of Shortage	Facilities	Facilities with Shortages (Total Facilities Reported = 1)					
	Red Blood	Red Blood	Platelets	Platelets			

# TABULAR REPORT

Input/Change Data For: 7/31/2007

II ■ II ■ III ■ III

#### **Nation**

Indicator of Possible Shortage Action taken because of Shortage	7 day Average Shortages on 7/31/2007 (Average number of Facilities Reported = 0.9)			7 day Average Shortages on 7/24/2007 (Average number of Facilities Reported = 0.6)			7 day Average Shortages on 7/3/2007 (Average number of Facilities Reported = 2.3)				7 day (Averaç		
	RBC	RBC (%)	Platelets	Platelets (%)	RBC	RBC (%)	Platelets	Platelets (%)	RBC	RBC (%)	Platelets	Platelets (%)	RBC
Was a delivery delayed?	0.29	33.33%	0.29	33.33%	0.43	75%	0	0%	0.57	25%	0.57	25%	0.29
Were inventories of blood products below minimal established levels?	0.29	33.33%	0.29	33.33%	0.29	50%	0.29	50%	1	43.75%	0.86	37.5%	0
Was an order not filled completely?	0.29	33.33%	0.14	16.67%	0.14	25%	0.29	50%	0.71	31.25%	0.86	37.5%	0
Was blood product purchased from an alternative supplier?	0.14	16.67%	0.14	16.67%	0.29	50%	0.14	25%	0.86	37.5%	0.43	18.75%	0
Was a non-standard protocol used in patient care because of the shortage?	0	0%	0	0%	0	0%	0	0%	0.14	6.25%	0.14	6.25%	0
Was a routine transfusion practice ignored or altered because of a shortage?	0	0%	0	0%	0	0%	0	0%	0.14	6.25%	0.14	6.25%	0
Was a surgery, procedures, or therapy delayed or cancelled due to shortage?	0	0%	0	0%	0	0%	0	0%	0.14	6.25%	0	0%	0

#### **USPHS** Region I

Indicator of Possible Shortage Action	7 day Average Shortages on 7/31/2007	7 day Average Shortages on 7/24/2007	7 day Average Shortages on 7/3/2007	7 day
taken because of Shortage	(Average number of Facilities Reported =	(Average number of Facilities Reported =	(Average number of Facilities Reported =	(Averag
	0.67	0.43	0.67	

# SHORTAGE REPORT BY NON-PARTICIPANT

Home Page	ì
United States Department of Health Human Se	
To create a new user, please fill out the following details. Fields mark	ed with (*) are required
Select Login ID: *	
Select Password: *	
First Name:*	
Last Name:*	
Facility:	
Office Address:	
Contact Phone:	
E-mail:	
Affiliation Type:	Select Affiliation Type 🔽
SUBMIT	
	About

# Current Status as of August 17

	On-board	Goal	Per Cent
Blood Centers	9	85	10%
Hospitals	101	156	65%