



DC Fire and EMS LTOWB Program



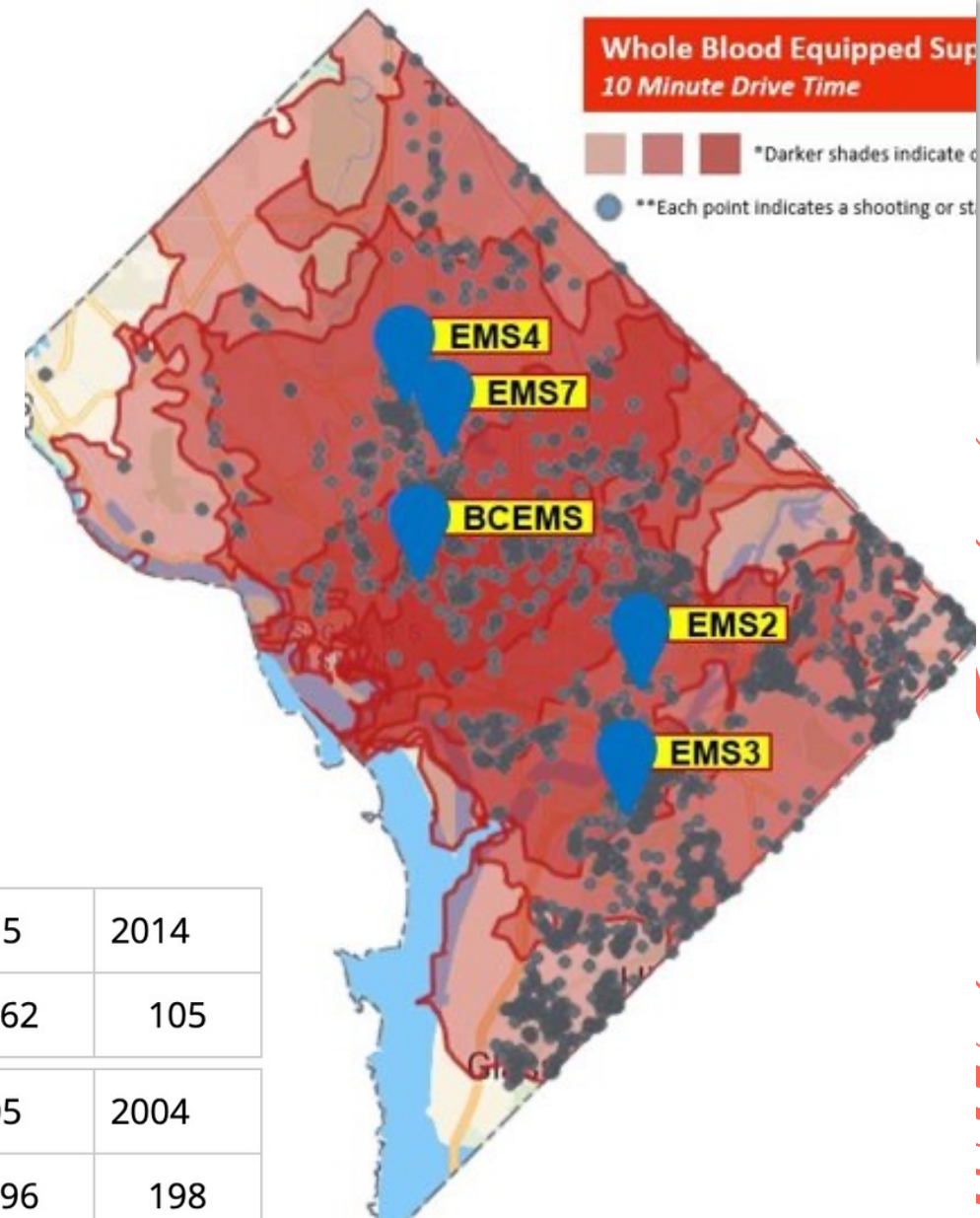
2023 Year End Crime Data

Year-end 2023 data accurate as of January 1, 2024.

Offense	2022	2023	Percent Change
Homicide	203	274	35%

20-Year Homicide Trend

2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
274	203	226	198	166	160	116	135	162	105
2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
104*	88	108	132	144	186	181	169	196	198



222

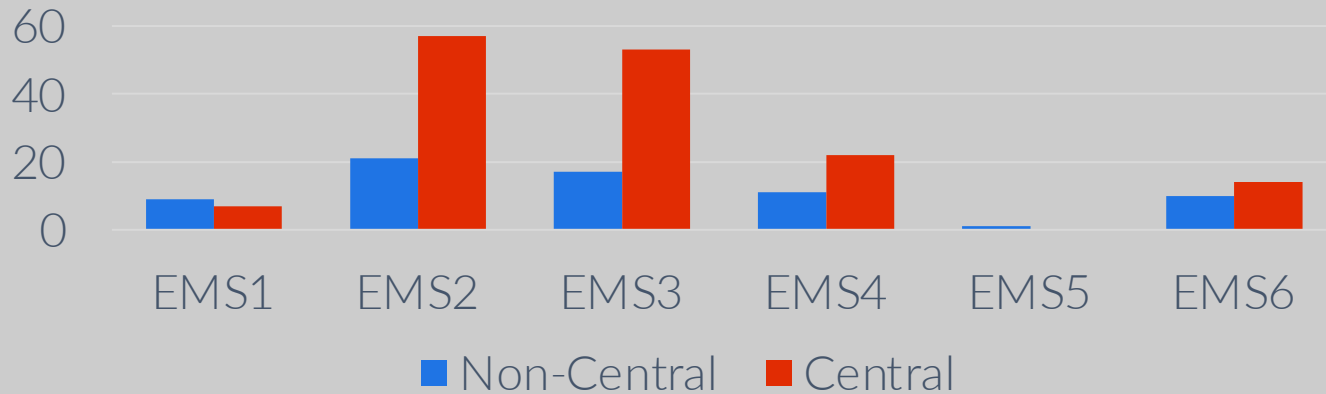
Trauma Cases Meeting Criteria 1/1-6/1/2023

69

Non-Central Trauma

153

Central Trauma



Projected Potential LTO+WB Use

>400 uses per year

Average Times - NCT

Scene

10:43

Transport

14:15

26%

TXA Administered on Central Trauma

Average Time - CT

Scene

6:19

Transport

12:40

DCFD Whole Blood Program Monitor

Select an Event
No data

Units of Blood In Service

Search...

Unit | EMS 4 FRIDGE | IGBT # 182124094499 | Expires in 3 days
Expiry date 11/25 | Assuming Duty - Rosalio Ruiz 11/22/2024, 6:28 AM

Unit | EMS 2 BOX | IGBT # 180124094172 | Expires in 3 days
Expiry date 11/25 | Transfer - Jared Snyderman 11/22/2024, 11:55 AM

Unit | EMS 3 BOX | IGBT # 180124094984 | Expires in 5 days
Expiry date 11/27 | Assuming Duty - Holly OByrne 11/21/2024, 6:15 AM

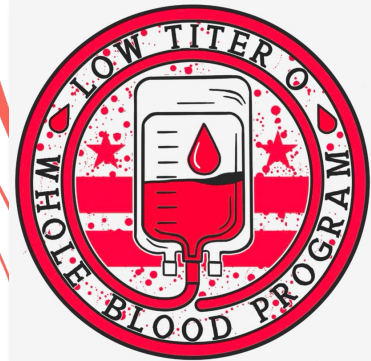
Unit | BCEMS BOX | IGBT # 185324120778 | Expires in 5 days
Expiry date 11/27 | Assuming Duty - Jared Snyderman 11/22/2024, 5:26 AM

Unit | EMS 7 BOX | IGBT # 185324120775 | Expires in 5 days
Expiry date 11/27 | Assuming Duty - Jared Snyderman 11/22/2024, 11:56 AM

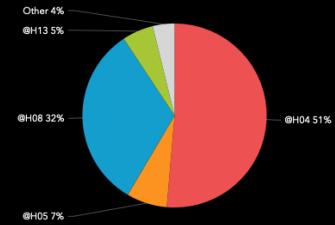
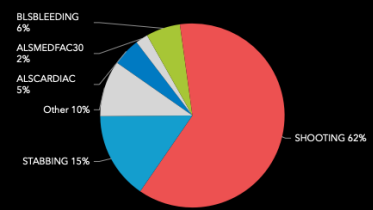
Unit | BCEMS FRIDGE | IGBT # 185324106957 | Expires in 12 days
Expiry date 12/4 | Assuming Duty - Jared Snyderman 11/22/2024, 5:27 AM

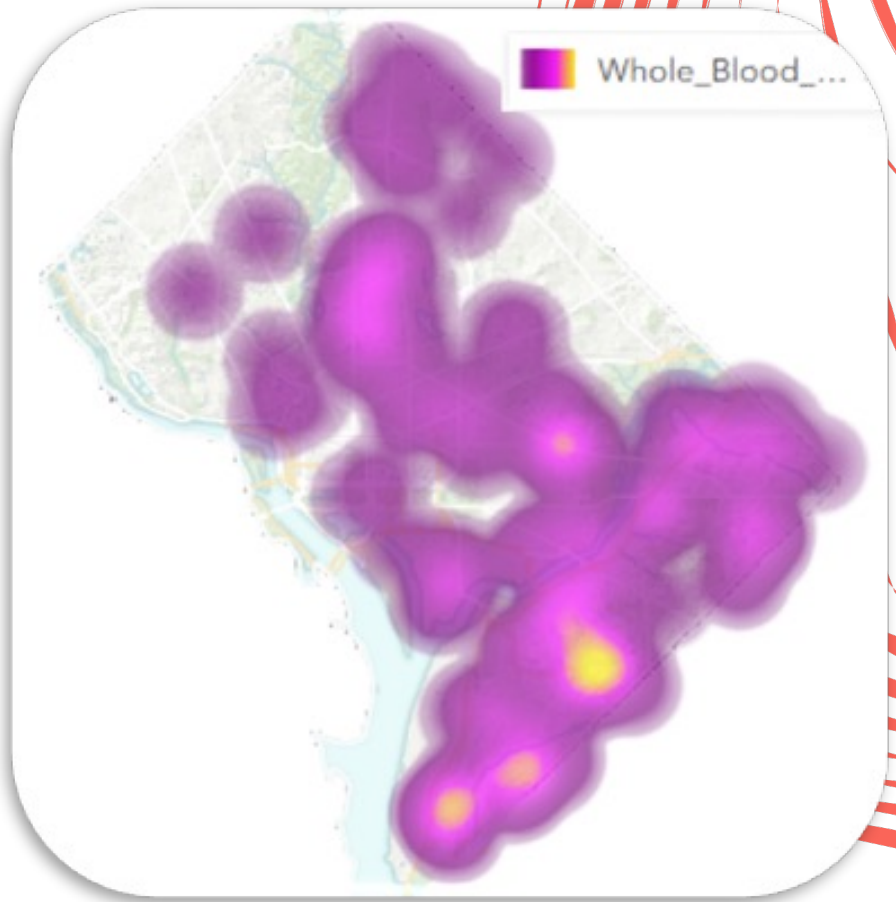
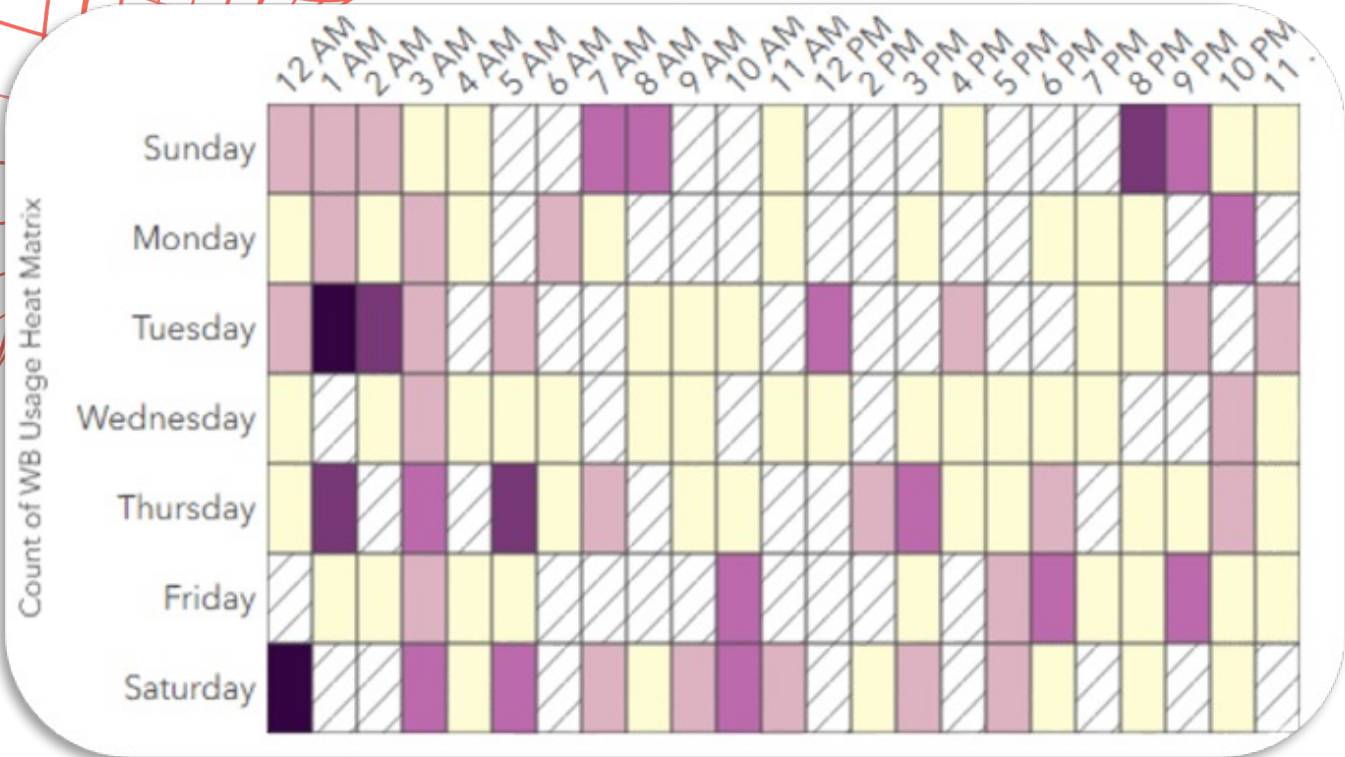
Unit | BCEMS FRIDGE | IGBT # 185324120258 | Expires in 12 days
Expiry date 12/4 | Assuming Duty - Jared Snyderman 11/22/2024, 5:28 AM

EMS2 S81 AQ 15m	No data
EMS2 BOX Normal 4.5 2.79V Reported 40s ago	EMS2 FIREHOUSE Online Reported 3m ago
EMS2 FREEZER Normal -19.3 2.65V Reported 50s ago	EMS2 VEHICLE GATEWAY Offline Reported 19m ago
EMS2 FRIDGE Normal -2.3 2.84V Reported 8s ago	EMS2 FIREHOUSE BAY Online Reported 4m ago
EMS3 S82 AM 17m	No data
EMS3 BOX Above 5.6 2.92V Reported 32s ago	EMS3 FIREHOUSE Online Reported 5m ago
EMS3 FREEZER Normal -12.0 2.65V Reported 43s ago	EMS3 FIREHOUSE BAY Online Reported 1m ago
EMS3 FRIDGE Normal -1.2 2.75V Reported 22s ago	
EMS4 S83 AM 13m	No data
EMS4 BOX Normal 5.0 2.88V Reported 1s ago	EMS4 VEHICLE GATEWAY Online Reported 3m ago
EMS4 FREEZER Normal -17.1 2.61V Reported 19s ago	EMS4 FIREHOUSE Online Reported 4m ago
EMS4 FRIDGE Normal 0.7 2.88V Reported 21s ago	EMS4 FIREHOUSE FLR 1 Online Reported 1m ago
EMS7 S74 AQ 1h 35m	No data
EMS7 BOX Normal 4.4 2.92V Reported 48s ago	EMS7 FIREHOUSE Online Reported 1m ago
EMS7 FREEZER Normal -9.5 2.75V Reported 38s ago	EMS7 VEHICLE GATEWAY Offline Reported 8d 21h 34m ago
EMS7 FRIDGE Normal 5.1 2.88V Reported 47s ago	
BCEMS S279 AQ 2h 13m	No data
BCEMS BOX Normal 4.8 2.93V Reported 30s ago	BCEMS VEHICLE GATEWAY Online Reported 1m ago
BCEMS FRIDGE Below -0.6 2.87V Reported 38s ago	BCEMS FIREHOUSE Online Reported 2m ago
BCEMS STORAGE FRIDGE Normal 3.2 2.87V Reported 48s ago	



WB Units
186
Utilized







Clinical

Care Bundle

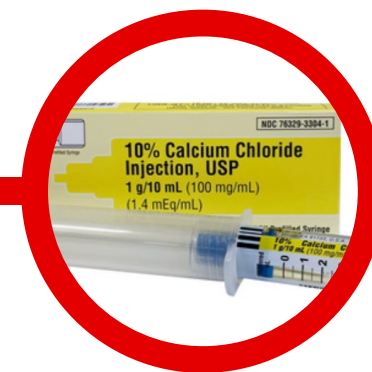
Science



LTO+WB



TXA



Calcium Chloride

Standardization: ARC Bundle For Whole Blood

FRONT POCKET

PENS, SHARPIES AND
TRANSFUSION RECORD
FORMS (5)

MAIN POCKET

SUPPLIES DETAILED ON
PAGE 15



MIDDLE POCKET

IO DRIVER DEVICE, IO
NEEDLES, STABLIZERS
AND COBAN



Whole Blood Bundle Bag Inventory

Front Pouch	
Item	Quantity
Sharpie	2
Pens	3
Whole Blood Transfusion Triplicate Documentation Form	5

Middle Pouch	
Item	Quantity
Coban	3
EZ-IO Drill	1
45mm Yellow IO Needle	2
25mm Blue IO Needle	1
15mm Pink IO Needle	1
EZIO Needle Stabilizer	1

Large Pouch	
Item	Quantity
LifeFlow Plus Infusion Device	2
QinFlow CDU	1
1000mL Normal Saline	1
Pediatric Nasal Cannula ETCO2	1
Adult Nasal Cannula ETCO2	1
In-Line ETCO2	1
Calcium Chloride 1g	1
TXA 1g	1
10cc Syringe	1
Twinpack Syringe	1

Tips and Tricks



LTO+WB



TXA



Calcium Chloride

Standardization for Procedural Drop-Down Narrative Format and Transfusion Documentation



[EMS Unit Call Sign] responded for [EMD Card Number]. [EMS Unit Call Sign] [was initially dispatched, requested by a unit on scene, or added themselves to the response]. Arrived on scene to find [Patient Age & Units] [Patient Gender] [insert where the patient was found (medic unit, on scene, etc.)]

Patient presented to EMS [Describe patient presentation (A&O? GCS?), visible bleeding]. [Insert history of present illness (what happened to the patient, what created the need for blood, description of injuries, etc)]

Vitals signs immediately prior to transfusion: [HR], [BP], [RR], [ETCO2], [SPO2].

The patient met the following criteria for whole blood administration: [SBP < 70 mmHg, < 90 mmHg with HR >= 110/min, SBP < 90 mmHg with ETCO2 < 25 mmHg, witnessed trauma arrest < 5 min duration with CPR, or Age >= 65 years with SBP <= 100 mmHg and HR >= 100/min OR describe other reason for LTOWB administration] [Type of Access: IV or IO] access secured in the [insert access site] by [insert unit that secured access].

Patient was given one unit of low titer O [insert + or -] whole blood via LifeFlow Plus hand-operated rapid infuser. Transfusion began at [insert transfusion start time] and ended at [insert transfusion end time]. [No complications occurred during transfusion OR insert complications experience during transfusion (ex. IV access lost)].

[No transfusion reactions were observed OR insert transfusion reaction symptoms/treatment].

[XX mL] of normal saline were administered during the EMS encounter.

Medications administered [prior to / following] whole blood included: [insert medication (TXA?) (Calcium?), (Oxygen? Route?)]

Following transfusion patient [insert patient status following transfusion (mentation, response, etc.)].

Vitals following transfusion: [HR], [BP], [RR], [ETCO2], [SPO2].

Additional Treatments Included: [12-lead, needle decompression, pain management, etc.].

Patient was transported to [Destination/Transferred To, Name] with radio pre-notification and continuously monitored enroute. A full report was provided to the receiving facility upon arrival. The LTOWB bag and a copy of the triplicate form were provided to the receiving facility.



PLACE PATIENT STICKER HERE
PLACE A STICKER ON EACH COPY

Prehospital Blood Product Transfusion Record

Patient Name: (Last, First, MI)	Date of Birth:	DCFEMS Incident #:

ISBT Donation Number (Affix sticker below)	Product Type (Circle + or -)	Transfusion Start/End	Transfusion Status (Circle One)	Transfusion Reaction (Circle One)	WBT Initials
1. Affix ISBT Sticker Here or Write Unit #	LTOWB Pos Neg	Date: _____ Start: ____:____ End: ____:____	Completed Ongoing	Yes No	
2. Affix ISBT Sticker Here or Write Unit #	LTOWB Pos Neg	Date: _____ Start: ____:____ End: ____:____	Completed Ongoing	Yes No	
3. Affix ISBT Sticker Here or Write Unit #	LTOWB Pos Neg	Date: _____ Start: ____:____ End: ____:____	Completed Ongoing	Yes No	
4. Affix ISBT Sticker Here or Write Unit #	LTOWB Pos Neg	Date: _____ Start: ____:____ End: ____:____	Completed Ongoing	Yes No	

Transport Unit:	EMS Sup Unit:	Field Transfusionist (WBT) (Printed Name and DC Health Cert #)	Field Transfusionist Assistant (Printed Name and DC Health Cert #)
	EMS		

Receiving Facility (Check One):

<input type="checkbox"/> H02 – CHILDREN'S NATIONAL MED CNTR	<input type="checkbox"/> H08 – GEORGE WASHINGTON UNIV HOSPITAL
<input type="checkbox"/> H04 – MEDSTAR TRAUMA	<input type="checkbox"/> H12 – SIBLEY MEMORIAL HOSPITAL
<input type="checkbox"/> H05 – HOWARD UNIVERSITY HOSPITAL	<input type="checkbox"/> H13 – WASHINGTON HOSPITAL CENTER
<input type="checkbox"/> H07 – GEORGETOWN UNIVERSITY HOSPITAL	<input type="checkbox"/> _____

Receiving Hospital Staff (Print Name and Title):

Receiving Hospital Staff Signature:

White Copy: DC Fire and EMS
Yellow Copy: ED/Trauma Center
Pink Copy: Blood Bank/Transfusion Services

EVENT DETAILS

Procedure	Attempts
Transfusing whole blood	
Pertinent Negative	
Response	
*	
Vascular Access Location	Successful
*	*
Complication	

WHOLE BLOOD TRANSFUSION

Indication	Type of Consent
* Indication	* Type of Consent
Transfusion Start	Transfusion End
* Transfusion Start Date	* Transfusion End Date
- * Transfusion Start Time	+ * Transfusion End Time
ISBT Donation Number	Transfusion Reaction?
* ISBT Donation Number	* Transfusion Reaction?
Field Transfusionist (WBT)	
Field Transfusionist (WBT)	
Field Transfusionist Assistant (Full Name)	
* Field Transfusionist Assistant (Full Name)	

DC Fire and EMS LTOWB April – December 2024



Variable	Data
Average Age	36
Male	79.9%
Black/African American	86.8%
Penetrating Trauma	79.3%
Blunt Trauma	5.7%
Medical	15.0%
TCA before/after contact	35
Total Mortality	25.3%
Mortality excluding TCA	6.3%
Dispatch to Blood Admin	25:41
Transport Time	13:04
Scene Time	16:28*

*Includes Special Operations, incidents requiring staging and rendezvous with an LTOWB EMSS

Administration Data	
Total Patients	174
Total Units	186
Patients >1 Unit	11
Unit per hour	1 unit every 31.8 hours
TXA Administration	86.9%
Calcium Administration	85.3%

Vital Sign	Pre Admin	Post Admin	Change
Systolic BP	81	112	Δ +31
Heart Rate	103	96	Δ -7
ETCO2	22	28	Δ +5
Shock Index	1.35	0.92	Δ -0.43



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<https://linktr.ee/DCFEMSWholeBlood>

