# **ISBT 128 Education and Training**

Feb 23, 2012

The need is constant.
The gratification is instant.
Give blood.™



#### ISBT 128 - Agenda

- A Brief History
- What is ISBT 128?
- Who is ICCBBA?



- The ISBT 128 Label Quadrants
- Label Bar Codes
- Questions and Answers



#### **ISBT 128 – Brief History**

- 1970s Codabar was conceived and implemented
- 1980s Need for an international standard

Effort funded by American Red Cross and aabb

- 1990s ISBT 128 was to fulfill this need
- **2000s** U.S. began to transition to ISBT 128

CBC of Kansas City went live on July 1, 2003

2010s – Remainder of U.S. will add ISBT 128

- FDA allows either Codabar or ISBT 128
- AABB\* accredited facilities must use ISBT 128



#### **ISBT 128 – What is ISBT 128?**

- ISBT = International Society of Blood Transfusion
- 128 = Code 128
- Put them together = an information system that standardizes blood product labeling
- Every blood product has a label that is divided into four quadrants
- ICCBBA\* Administers and manages ISBT 128

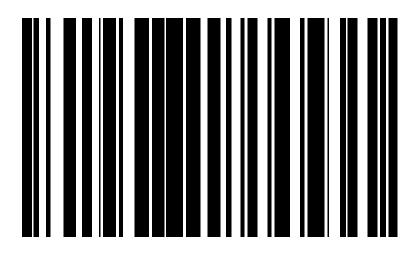


#### **Barcoding**

A barcode is both black BARS and white (blank) SPACES

Scanners reads the bars and spaces and convert them into zeros and ones

The zeros and ones are then converted into meaningful data such as O POSITIVE, CMV Negative, an expiration date or the anticoagulant inside.





#### **Barcoding**

# Simple barcode the characters AB:



- 1 narrow bar,
- 1 narrow space,
- 1 narrow bar,
- 1 wide space,
- 1 wide bar,
- 1 wide space,
- 1 wide bar.

**Code 128** 

the characters AB:



- 1X bar,
- 1X space,
- 2X bar.



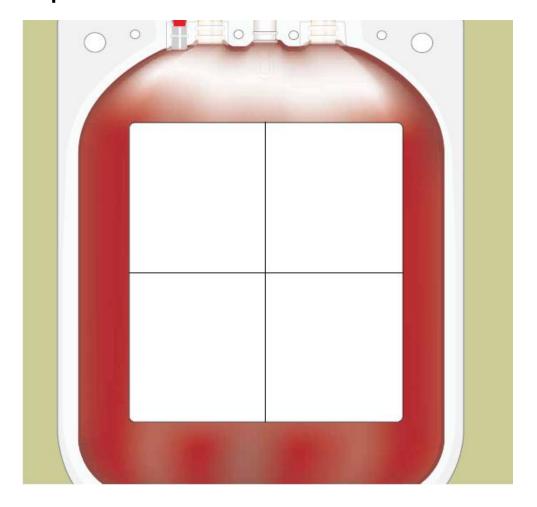
#### **Barcoding**





#### **ISBT 128 – Label Quadrants**

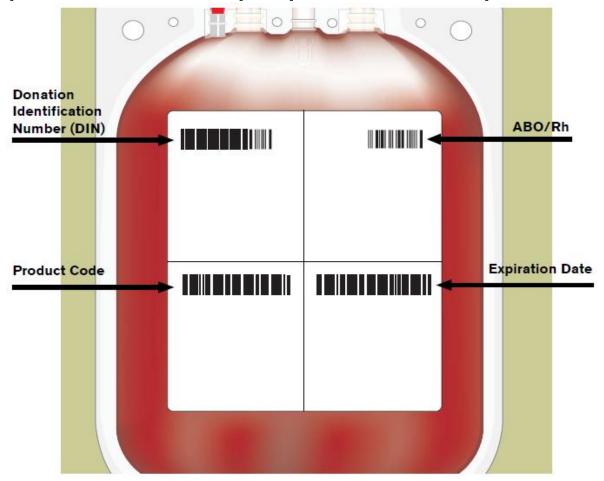
The ISBT 128 product label is divided into four quadrants





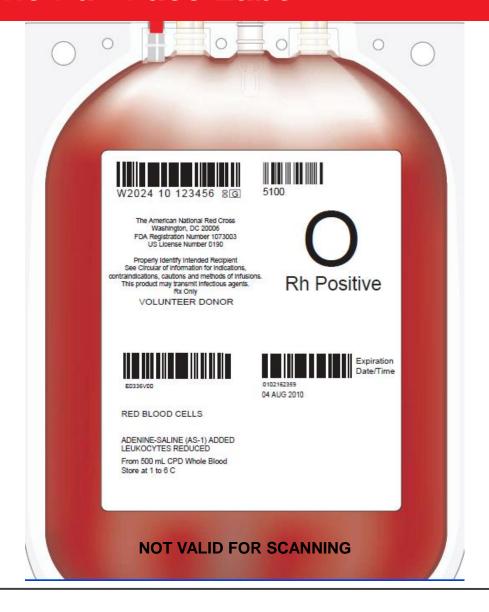
#### **ISBT 128 – Label Quadrants**

Each quadrant has a purpose and required bar codes



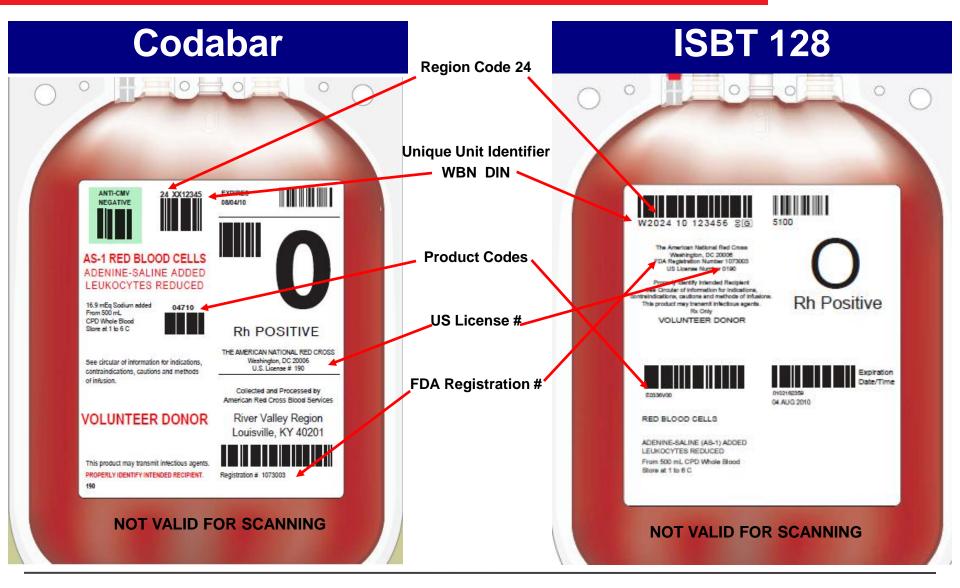


#### **ISBT 128 – The Full Face Label**



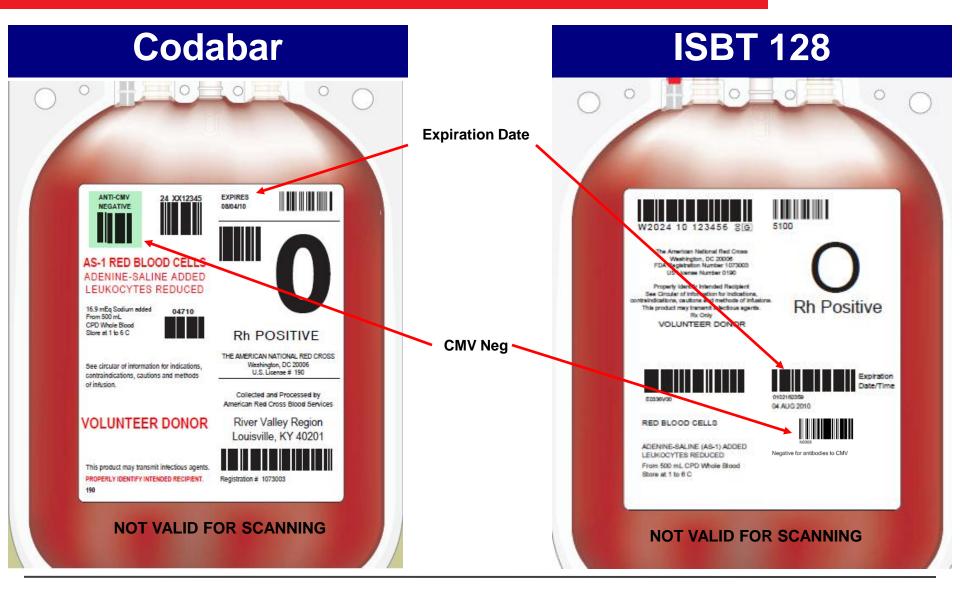


#### ISBT 128 and Codabar Side-by-Side





#### ISBT 128 and Codabar Side-by-Side





#### **ISBT 128 – The Full Face Label**



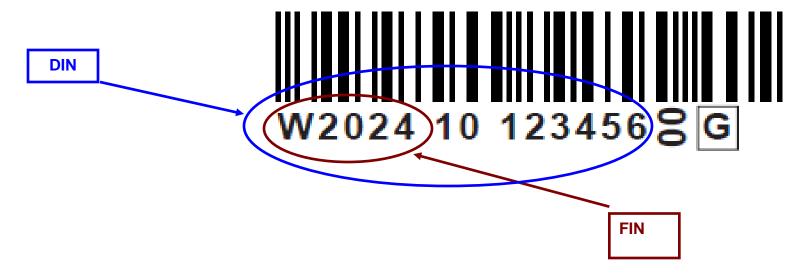


#### **ISBT 128 – The DIN and the FIN**

The DIN is a 13 character alpha-numeric sequence assigned to each and every donation. By embedding the FIN within the DIN the unit and the facility that collected it are forever linked.

The FIN is the first five characters of the DIN. Each registered blood facility is given a unique five character FIN by ICCBBA.

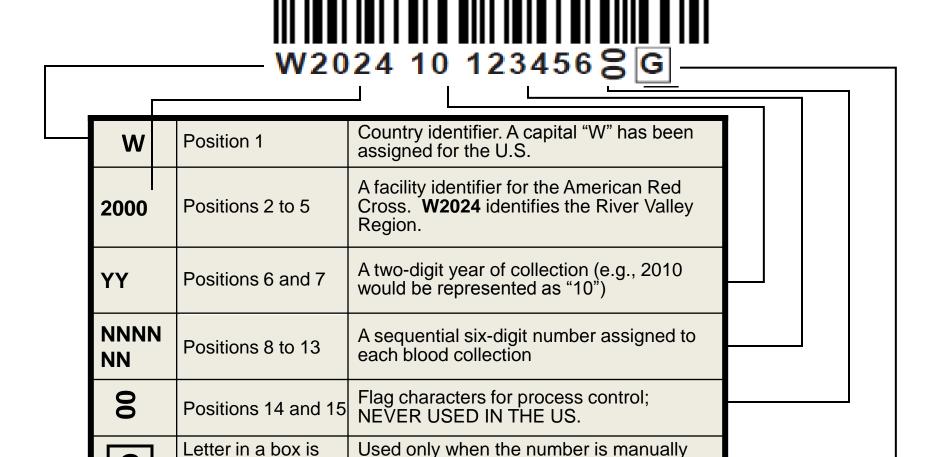
For example, in the diagram below the Red Cross River Valley Region in Louisville Kentucky has been assigned a FIN # of W2024.





#### **ISBT 128 – Donation Identification Number (DIN)**

checksum character





errors

entered into the system as a check against

## **ISBT 128 – Facility Identification Number (FIN)**

ICCBBA FIN	Region	FDA LICENSE NUMBER (ARC HAS 1 LICENSE)	FDA Registration #	
W2001	New York-Penn	190	2438445	
W2002	Central Plains	190	1973042	
W2003	Southern	190	1073000	
W2004	Massachusetts	190	1270026	
W2006	Southern California	190	2072994	
W2007	Arizona	190	2072997	
W2009	Midwest	190	1973037	
W2011	Missouri-Illinois	190	1973035	
W2012	Carolinas	190	1073007	
W2013	Southeastern Michigan	190	1873044	
W2016	Central Ohio	190	1573013	
}	}	}	}	



#### **ISBT 128 – Upper Left Quadrant**

- Barcode and eye readable DIN
- Collection center ID (FIN)
- FDA Registration Number
- US License Number
- Instructions for use
- Type of donor



The American National Red Cross Washington, DC 20006 FDA Registration Number 1073003 US License Number 0190

Properly Identify Intended Recipient
See Circular of information for indications,
contraindications, cautions and methods of infusions.
This product may transmit infectious agents.

Rx Only

VOLUNTEER DONOR



#### **ISBT 128 – Lower Left Quadrant**

- Barcode and eye readable product code
- Product description
- Additional information about the product such as volume, storage temperature, etc.



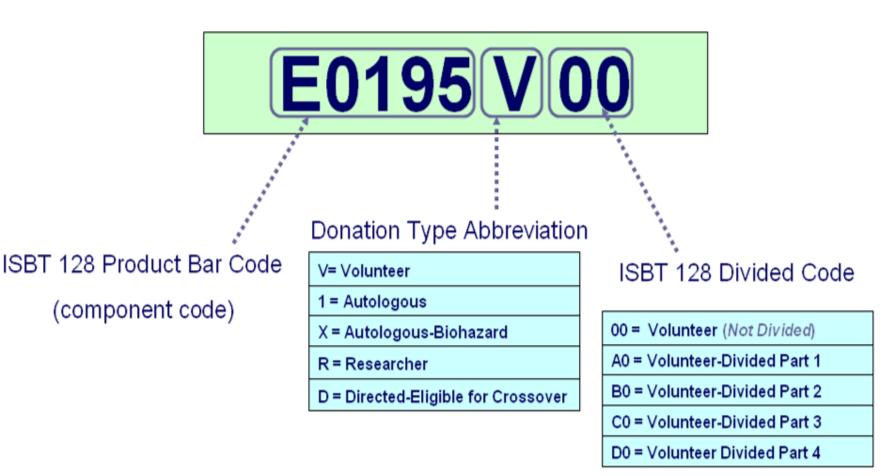
RED BLOOD CELLS

ADENINE-SALINE (AS-1) ADDED LEUKOCYTES REDUCED

From 500 mL CPD Whole Blood Store at 1 to 6 C



#### **ISBT 128 Product Code**



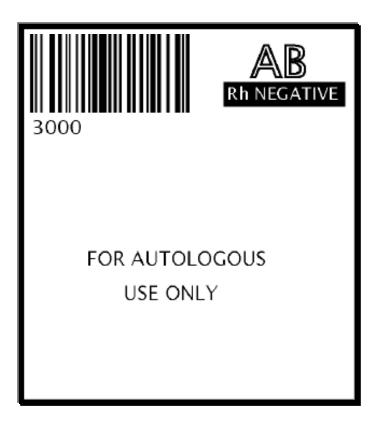


Barcode and eye readable blood type





Autologous label



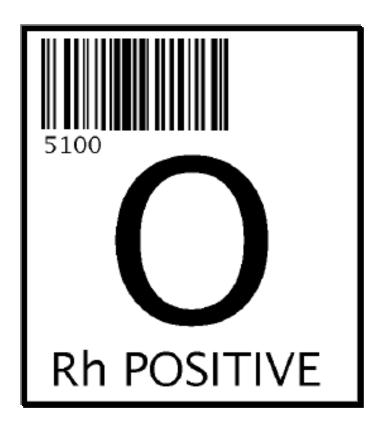


Autologous label

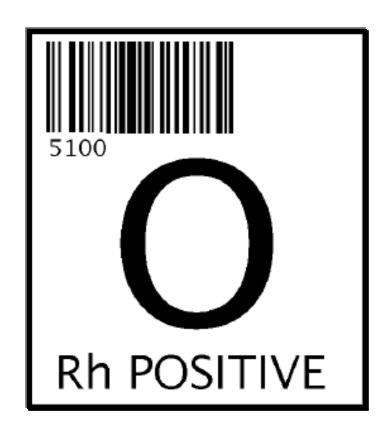


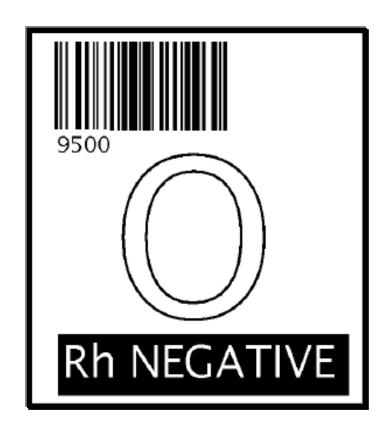


Barcode and eye readable blood type

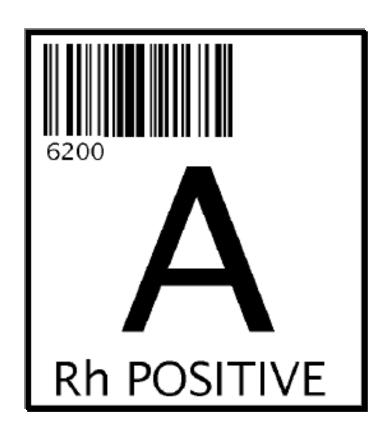


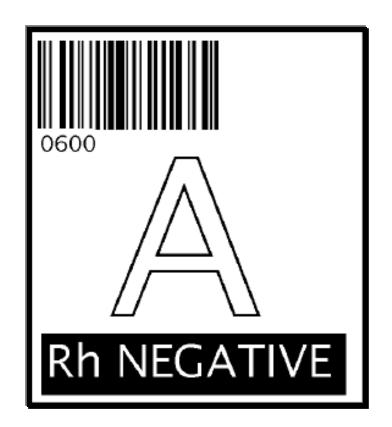






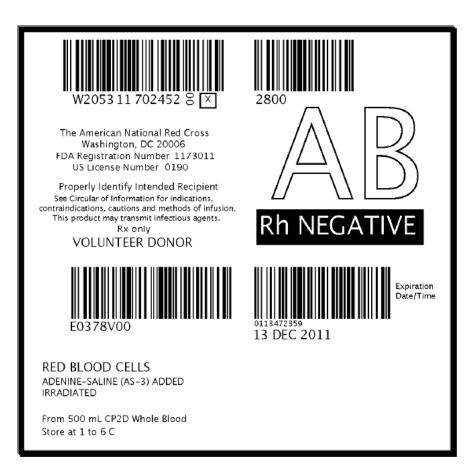


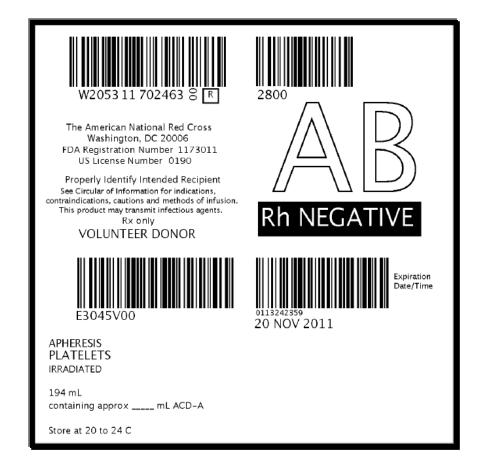






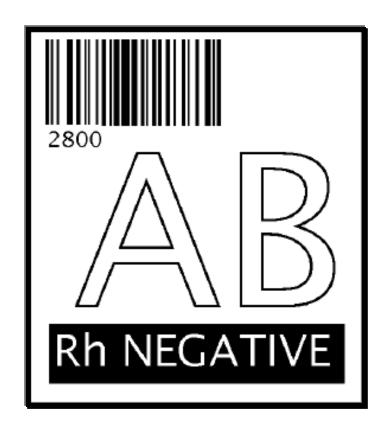
#### ISBT 128 – Blood type







## ISBT 128 – Blood type







#### **ISBT 128 – New Product Code**



The American National Red Cross Washington, DC 20006 FDA Registration Number 1173011 US License Number 0190

Properly Identify Intended Recipient See Circular of Information for indications. contraindications, cautions and methods of infusion. This product may transmit infectious agents. Rx only

**VOLUNTEER DONOR** 



RED BLOOD CELLS

From 500 mL CPDA-1 Whole Blood Store at 1 to 6 C



Rh POSITIVE



20 DEC 2011



The American National Red Cross Washington, DC 20006 FDA Registration Number 1173011 US License Number 0190

Properly Identify Intended Recipient See Circular of Information for indications. contraindications, cautions and methods of infusion. This product may transmit infectious agents. Rx Only

VOLUNTEER DONOR







Rh POSITIVE



13 DEC 2011

RED BLOOD CELLS

IRRADIATED LEUKOCYTES REDUCED

From 500 mL CPDA-1 Whole Blood Store at 1 to 6 C



# **Expiration Date/time**

- 10 characters
- cyyjjjhhmm



0102162359 04 AUG 2010

- c = designates century
- yy = year of expiration
- jjj = is the Julian date (the number of the day in the year) 031 is January 31st. 186 is July 4th.
- hh = hour (00-23)
- mm = minutes (00-59)



#### **Division Code**

- 00-means a unit has not been divided
- A0, B0, C0, D0, E0....Are divide codes for a first level divide
  - If an A0, B0....unit is divided again then it is a secondary level division and indicated by divide codes Aa, Ab, Ac...
- Can only perform two levels of division!
- On each level of division, a product can be divided up to 26 times.



#### ISBT 128 Labels include:

# The product volume will print on:

RBC's and SDP's collected via automated apheresis technology

All plasma and cryo from whole blood

Pooled cryo and platelets from whole blood

Low volume autologous whole blood and RBC's

**Divided (aliquot) components** 

All above get weighed on a scale, weight transferred to eP and eP prints the volume on the label.



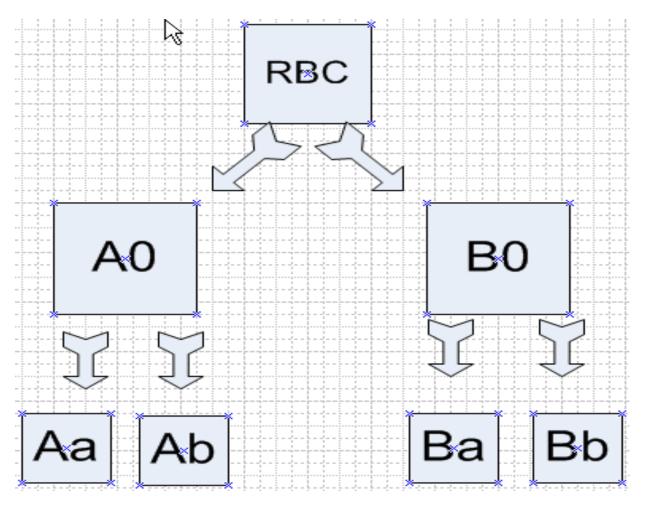
# ISBT 128 ABO Rh Codes:

ABO/Rh Blood Groups	Default: Intended Use Not Specified	Directed Only (Dedicated/ Designated/ Donation)	For Emergency Use Only	Directed Only (Dedicated/ Designated/ Donation) Biohazard	For Autologous Use Only	For Autologous Use Only/ Biohazard
	n	(n-4)	(n-3)	(n-2)	(n+2)	(n+3)
O Rh(D) negative	95	91	92	93	97	98
O Rh(D) positive	51	47	48	49	53	54
A Rh(D) negative	06	02	03	04	08	09
A Rh(D) positive	62	58	59	60	64	65
B Rh(D) negative	17	13	14	15	19	20
B Rh(D) Positive	73	69	70	71	75	76
AB Rh(D) negative	28	24	25	26	30	31
AB Rh(D) positive	84	80	81	82	86	87
0	55	P2	P3	P4	P8	P9
Α	66	A2	А3	A4	A8	A9
В	77	B2	B3	B4	B8	B9
AB	88	C2	C3	C4	C8	C9



#### **Divide Scenarios**

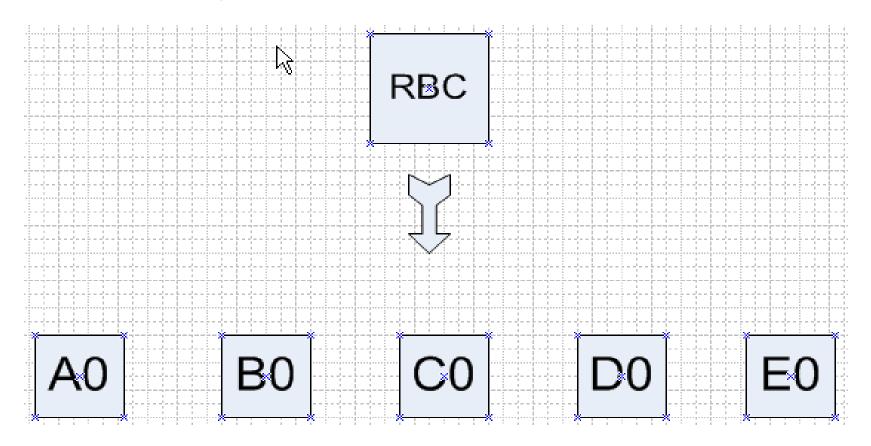
# Regular unit divided on first and second level





# Divide Scenarios

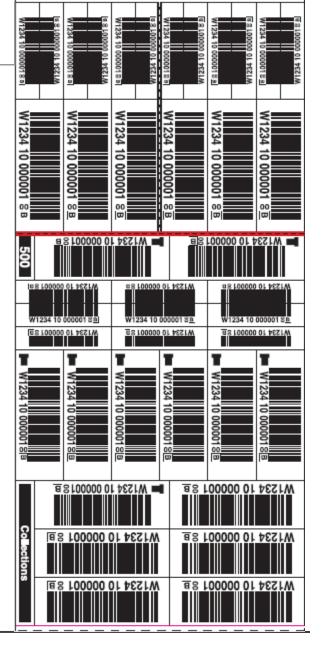
## **Pedi Pack Creation**





#### **ISBT 128 – DIN Labels Sets**

- Initial DIN Label Set provided at collection (See illustration)
- Comes from Computype (No On-Demand Printing)
- Includes a large product DIN, small peel-off for paperwork, and test tube DIN
- Only manufacturing, QC, and the IRL's will have On-Demand Printing capabilities (to re-label a whole blood to a red cell for example)







W2053 11 702449 S **Г** 

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Properly Identify Intended Recipient
See Circular of Information for indications,
contraindications, cautions and methods of infusion.
This product may transmit infectious agents.
Rx only

VOLUNTEER DONOR



E5079V00

FROZEN RED BLOOD CELLS





Expiration Date/Time

0213162359 12 NOV 2021

283 mL Store at -65 C or colder





W2053 11 702455 S R

The American National Red Cross Washington, DC 20006

Properly Identify Intended Recipient See Circular of Information for indications, contraindications, cautions and methods of infusion. This product may transmit infectious agents. Rx Only

FDA Registration Number 1173011 US License Number 0190

**VOLUNTEER DONOR** 



Rh POSITIVE



E4531V00



Date/Time

0113612359 27 DEC 2011

APHERESIS RED BLOOD CELLS ADENINE-SALINE (AS-1) ADDED LEUKOCYTES REDUCED

283 mL containing approx 5 mL ACD-A Store at 1 to 6 C





W2053 11 702458 ⊖ 🗔

The American National Red Cross Washington, DC 20006 FDA Registration Number 1173011 US License Number 0190

Properly Identify Intended Recipient
See Circular of Information for indications,
contraindications, cautions and methods of infusion.
This product may transmit infectious agents.
Rx only

**VOLUNTEER DONOR** 



E5165V00



8400





14 NOV 2012

Expiration Date/Time

CRYOPRECIPITATED AHF

Store at -18 C or colder





W2053 11 702450 S 🔽

The American National Red Cross Washington, DC 20006 FDA Registration Number 1173011 US License Number 0190

Properly Identify Intended Recipient See Circular of Information for indications. contraindications, cautions and methods of infusion. This product may transmit infectious agents. Rx only

VOLUNTEER DONOR



DEGLYCEROLIZED RED BLOOD CELLS



Rh NEGATIVE



16 NOV 2011

283 mL Store at 1 to 6 C





W2053 11 702457 S N

The American National Red Cross Washington, DC 20006 FDA Registration Number 1173011 US License Number 0190

Properly Identify Intended Recipient
See Circular of Information for Indications,
contraindications, cautions and methods of Infusion.
This product may transmit infectious agents.
Rx only

**VOLUNTEER DONOR** 



E0869V00

APHERESIS
FRESH FROZEN PLASMA
FROZEN WITHIN 6 HOURS
AFTER PHLEBOTOMY

194 mL containing approx \_\_\_\_ mL ACD-A Store at -18 C or colder



7300





14 NOV 2012

Expiration Date/Time

