



# Improving the use of O Negative units at Fairfield Pathology

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FAIRFIELD PATHOLOGY

# Fairfield Sector Laboratory

- ▶ Fairfield Sector Laboratory provides pathology support to Fairfield Hospital (a 200 bed facility) and the surrounding community.
- ▶ The laboratory is part of the state wide service and provides a limited range of testing on site which is supported by a courier network for the transfer of specimens and blood products to the Area laboratory (Liverpool Hospital) in a timely manner.
- ▶ Our hours of operation are 0600 to 0000 every day and provide an on call service from 0001 to 0700.

- ▶ One of the areas we do onsite is Blood Banking.
- ▶ We perform Blood group and Antibody screen, Ab identification (Pre transfusion and Antenatal), crossmatching and Direct coombs testing.
- ▶ The laboratory requires a maximum daily level of six “O” Negative units (4 stocks plus 2 predisposed Emergency bloods).

## Blood Banking

GROUP	STOCK LEVEL
O POSITIVE	12 <b>(Including 2 CMV Neg)</b>
A POSITIVE	<b>6 (Including 2 CMV Neg)</b>
B POSITIVE	2
O NEGATIVE	<b>4</b> Stock plus 2 predisposed Emergency
A NEGATIVE	2

#### **FRESH FROZEN PLASMA**

O	4
A	16
B	4
AB	0

#### **CRYOPRECIPITATE**

O	5
A	20
B	5
AB	0

### **ALBUMEX /PROTHROMBINEX**

Albumex 4%, 500 ml	10
Albumex 20%, 100 ml	20
Prothrombinex	16


### **IMMUNOGLOBULINS**

Prophylactic anti D (625IU)	15
Prophylactic anti D (250IU)	10
Hepatitis B IgG, Paediatric 100IU	4
Hepatitis B IgG, Adult 400IU	1
Tetanus IgG	1
Zoster IgG *	As required
Normal IgG, 2 ml *	As required
Intragram / Flebogamma / Octagam / Privigen / Kiovig *	As required

# O Negative RBCs

- ▶ We previously stock 8 units of O Negative but due to the area demographics there are not a lot of O Neg patients admitted needing blood in the hospital.
  - ▶ That is the reason why we cut down the number of units to 6 at the moment and this is to be reviewed again for the possibility of cutting down the O Negative stock to 4.
- ▶ Since our red cells stock is minimal in number (26 units all together) a unit or 2 discarded will be equivalent to almost 10% of our supply.
  - ▶ A study done in 2014 by our Lab manager confirmed the O Neg discard of 9.3%. This was the time too that we were transfusing the O Neg units to O Pos patients.



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- ▶ AS of January 2018, the number of O neg patients admitted at Fairfield Hospital and transfused 1 or 2 units of red cells is averaging 1 to 1.5 units per month

O Neg	4	9.3%	0
O Pos	2	4.7%	0

Our O Neg discard might not be a significant number but when Red Cross requires 266-482 O negative units for at least 3 days' supply (data from NSW Strategic Blood Forum-Sydney), a zero discard is better.

# What we do now:

- ▶ Fairfield pathology started transferring short expiry units (at least 14 days prior to expiry) to our Area Laboratory (Liverpool Hospital) on the initiative of Tony Greenfield, Liverpool Blood Bank principal scientist and our then new Manager, Steven Lamb.
  - ▶ the latest audit done May to August, 2018, all (8) O negative units transferred were transfused.
- ▶ As of 2017, we have zero units discard.
  - ▶ These numbers might just be “a drop in the ocean” but this is our own little way of trying to help make practical and effective use of this precious gift from donors.



# Thank you

► Any Questions?

