# MAYO UNIVERSITY HOSPITAL PATHOLOGY LABORATORY BLOOD TRANSFUSION Document Identification BT/LI/073 Edition 4 Effective Date 24th November 2023

## **Critical Alerts Values for Communication to Clinicians**

Critical alert values are laboratory results that indicate a possible clincially significant situation for the patient.

Alert the clinician to the critical alert value. Record the details of the communication to the clinician as detailed below, dependant on the type of critical alert.

## **Critical Alerts Associated with Test Results**

Critical alerts are documented on either the hardcopy Telephone Log PATH/MF/004 or the LIS Telephone Log associated with the relevant SID number.

#### 1. FMH Rh D negative woman

If an FMH of **4ml or greater** is detected the clinician should be notified and alerted to the possible need for additional anti-D immunoglobulin prior to discharge and /or to the requirement for a follow-up maternal sample for KBT to check for clearance of fetal cells.

#### 2. FMH RhD positive woman (Trauma)

If greater than 2ml fetal cells is detected the clinician should be notified.

#### 3. DAT (Direct Antiglobulin Test)

A **Positive DAT** result on a newborn sample should be phoned to the relevant ward/clinician. This does not include a DAT positive on the cord sample of the newborn of a woman who has recently received anti-D immunoglobulin. However, if a DAT positive result is suspected of being due to ABO incompatibility (Mother Group O, Baby group A or B) the DAT should be phoned, even when Anti-D immunoglobulin has been administered.

## Critical Alerts associated with Blood Stocks and Availablility

If there is difficulty in providing crossmatched compatible blood for a patient due to the presence of red cell antibodies or to a reduced supply of blood/components/ blood products, the clinician will also be contacted. Refer to BT/LI/072, *Turnaround Times for Blood Transfusion Tests and Blood Products*.

These Critical Alerts are documented on the Critical Alert Report Form [BT/LF/135].

#### **Miscellaneous Critical Alerts**

# Rejected Samples or Samples requiring Amendment prior to Processing

The rejection of a sample must be communicated to the requesting doctor or a member of staff who is responsible for his/her care. The communication of these Critical Alerts are documented on HV/MF/033 and/or the hardcopy or LIS Telephone Log.

#### Transfusion Reaction Investigations

The result of <u>all</u> transfusion reactions must be communicated to clinical staff as soon as results become available.

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