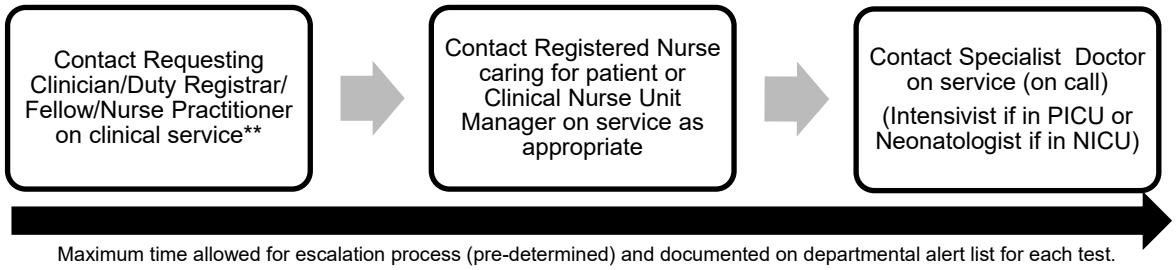
NOTIFICATION OF HIGH-RISK PATHOLOGY RESULTS - CHW

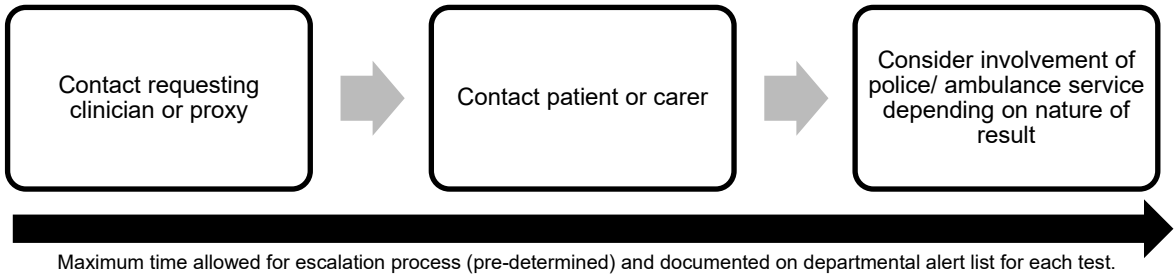
POLICY©

DOCUMENT SUMMARY/KEY POINTS

- This document details the Children's Hospital at Westmead (CHW):
  - Pathology Department process for the management and communication of high-risk (critical) laboratory results.
  - Point of Care Testing (POCT) service process for the management and communication of high-risk (critical) results.
- **Escalation procedures for the notification of high-risk laboratory results for CHW inpatients**



- **Escalation procedures for the notification of high-risk laboratory results for CHW outpatients and external laboratory referrals**



CHANGE SUMMARY

- Not applicable as new policy document.

READ ACKNOWLEDGEMENT

- All users of the CHW Pathology laboratory service, and CHW POCT operators are required to read and acknowledge they understand the contents of this document.

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Purpose and Scope

This document details the Children's Hospital at Westmead (CHW) Pathology Department process for the management and communication of high-risk (critical) laboratory results.

This policy is mandatory and applies to all users of the CHW Pathology laboratory, and Point of Care Testing (POCT) services.

Authorities

The Laboratory Director or their delegate is responsible for ensuring that this policy is established, implemented and maintained.

Department Heads are responsible for ensuring staff are aware of the requirements of this policy.

Trained and competent laboratory staff are responsible for the notification of critical laboratory results and documenting communication of high-risk laboratory results in accordance with this policy.

Trained and competent POCT operators are responsible for the identification and notification of critical results, and for documenting the communication of high-risk results in accordance with this policy.

Background

Ineffective test follow-up is a major source of harm for patients around the world. Unreliable communication from medical laboratories to clinicians of results that represent critical or significant risk to patients (collectively termed "high-risk results") is a contributing factor to this problem.[1]

On 2 December 2015, the NSW Coroner recommended the implementation of a state-wide critical result notification policy including the development of a state-wide guideline for notifiable thresholds for all critical results.[2]

The NPAAC Requirements for Medical Pathology Services (Second Edition 2018) *states:*

S6.2 The Medical Pathology Service must have a policy for the reporting of critical (high-risk) results to the requesting practitioner.

Policy

Alert list of high-risk results

An alert list of high-risk results must be available in each CHW Pathology laboratory department that the tests are performed.

An alert list of Point of Care Testing (POCT) methods must be available in each clinical area that POCT is performed. These POCT alert lists are developed by the Point of Care Testing Committee.

[1] RCPA Consensus Statement for the Management and Communication of High Risk Laboratory Results
[2] Coroners Court of New South Wales. Inquest into the Death of Dr Peter Domachuk, Coroner's Court, Glebe, 2 December 2015.

The alert list must contain:

- Name of the test(s)
- Reporting unit of the test(s)
- Alert thresholds (e.g.: upper, lower and/or delta thresholds) beyond which results require notification.
- Timeframe of notification.

The alert list should be prepared in consultation with the users of the pathology or POCT service, and based on best practice or clinical outcome data, using published literature sources, or expert consensus where available.

Where feasible, separate entries on the list may be created for different patient groups and settings, e.g.: age-specific, ward-specific, inpatient, specialist referrals, etc. Laboratories and POCT sites must not have unique alert lists and/or thresholds for individual clinicians without authorised documented exemption from the Pathology Laboratory Director, as these would add complexity and potentially compromise the process of communication.

The alert list may be divided into categories based on the degree of clinical risk, with each category assigned a clinically appropriate timeframe within which results need to be communicated.

Conditions under which it is decided not to communicate results within the alert limits need to be pre-determined in consultation with users of the pathology or POCT service. These conditions need to be clearly specified, regularly reviewed and a record kept of the reasons for such decisions, e.g.: it may be pre-determined that there is no need to urgently communicate a result which is similar to that obtained previously in the same patient, or where a result is expected for a given diagnosis.

Where more than one method may be utilised for a particular test, the laboratory must include method-specific alert thresholds.

Where practicable, the CHW Pathology laboratories publish their alert lists on the SCHN Intranet.

Reliability of high-risk result identification

A procedure for identifying high-risk results must be available in each CHW Pathology laboratory and in each clinical area that POCT is performed. The system employed should distinguish high-risk results from other results.

The CHW Pathology laboratory and POCT service must have procedures for identifying potential sources of error in the testing process, in order to communicate only valid results. If an initial result is deemed high-risk the laboratory or POCT operator may communicate a preliminary result to facilitate early clinical intervention, in such cases the user of the pathology or POCT service is notified that the result is preliminary and will be confirmed by a final report in the electronic medical record (eMR) for the patient.

Notification of laboratory and POCT high-risk results

Notification of a high-risk result should, where feasible, be made to the clinician immediately responsible for the patient's care.

If there is a failure to notify the clinician immediately responsible for the patient's care due to the contact details not being up-to-date, an IIMS notification must be made. This IIMS notification should include details of any/all members of the escalation process who are unable to be contacted.

The escalation procedures set out below are used to guide laboratory staff and POCT operators in locating a suitable recipient for the result.

For patient safety, reliable modes of transmission (verbal/non-verbal) which enable immediate notification and acknowledgment of receipt are utilised.

Verbal notification is performed only by staff that are adequately trained and assessed as competent. Records of training and competency in communication of high-risk results are maintained and regularly updated.

The information communicated to the recipient of a high-risk result should include the:

- identity of the notifier (name and department)
- identity of the patient tested
- date and time that the sample was collected
- test that was performed
- test result (with the units of measurement where relevant).

Additional information available to a recipient upon request should include the:

- sample type
- reported reference interval or clinical decision limit(s) for the test
- offer of pathologist assistance or explanation as appropriate, especially for unexpected critical results.

Acknowledgment of receipt of high-risk results to confirm accuracy of communication

When providing notification of a high-risk result verbally, the notifier must confirm that the information has been received and understood correctly, e.g.: results (with their units of measurement where relevant) are to be repeated back by the recipient.

When providing notification of a high-risk result via non-verbal modes of communication, e.g.: facsimile, the laboratory must follow-up the recipient with a telephone call to confirm receipt of the faxed report.

Documentation of laboratory high-risk result notifications

Every high-risk result notification by the CHW Pathology Department must be documented in the Cerner PathNet Millennium or LabMaster for Newborn Screening Laboratory Information System (LIS) in real-time as far as practicable for date/time stamping.

The following is recorded in the LIS against the relevant patient accession for the high-risk result:

For verbal notifications

- date and time that the notification was made
- identity of the recipient of the notification (name and department)
- identity of the notifier (name and department)

For non-verbal notifications

- date and time of the acknowledgement of receipt of the result
- identity of the recipient of the notification (name and department)

Any difficulties in meeting the requirements of this policy for result notification should be documented within the record, e.g.: if an escalation protocol was initiated when the clinician immediately responsible for the patient's care was not able to be contacted.

Documentation of POCT high-risk result notifications

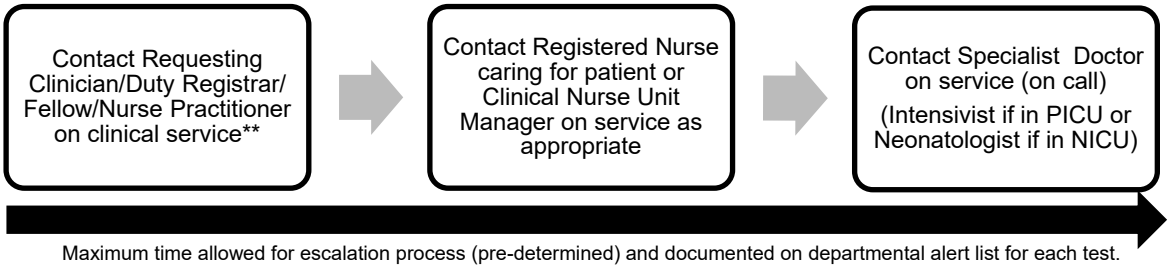
Every high-risk result notification by a POCT operator must be documented in the electronic medical record (eMR) for the patient.

POCT results should be reviewed and actioned prior to the patient leaving the clinical area in which the POCT was performed.

As required, POCT operators may contact a pathologist for assistance or explanation, especially for unexpected critical results.

Escalation procedures for the notification of high-risk results

Laboratory results for CHW inpatients



If no response is received within a clinically appropriate timeframe, then the escalation procedure progresses to the next recipient of the high-risk result.

**Phone numbers for high-risk results notification

Department/Ward	Role	Phone
Emergency	Admitting Officer	02 9845 2454
Grace Centre for Newborn Care (GCNC)	Neonatologist on service	via switch board
Paediatric Intensive Care Unit (PICU)	PICU Team Leader	0409 018 898
Close Observation Unit (COU)	COU Team Leader	0428 431 316
Genetic Metabolic Disorders Service	Metabolic doctor on call	via switch board
General Medicine	Admitting Registrar	Pager 6168
Paediatric Surgery	On Call Team / Evening and weekend SRMOs	82399

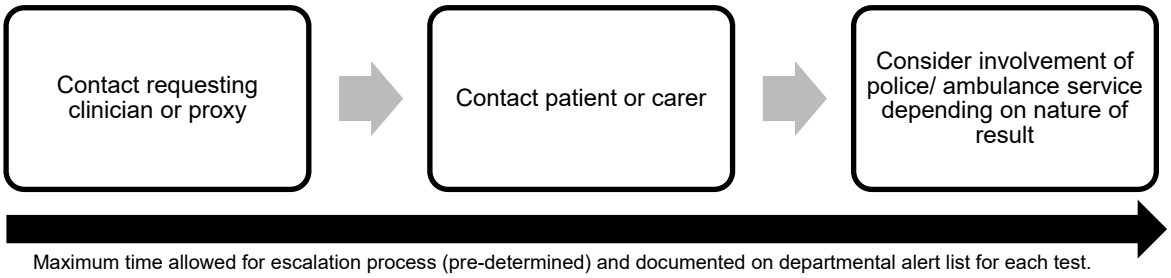
For CHW departments/wards not tabled above, please refer to the CHW Intranet phone listings for the relevant phone/pager number.

Point of Care Testing results for CHW inpatients/outpatients

POCT may be performed where results are required within 30 minutes from specimen collection for the treatment of patients requiring critical care or investigation of clinical deterioration and the alternative testing options cannot meet the time requirement, i.e.: laboratory testing.

The responsibility for the notification of high-risk POCT results rests with the POCT operator to notify the responsible clinician, who will make appropriate clinical decisions.

Laboratory results for CHW outpatients

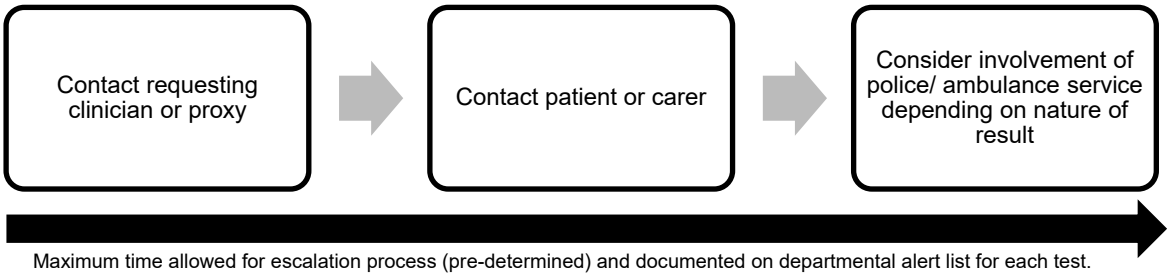


If no response is received within a clinically appropriate timeframe, then the escalation procedure progresses to the next recipient of the high-risk result.

External laboratory referrals

As per the NPAAC Requirements for Medical Pathology Services (Second Edition 2018), *the referral laboratory performing testing on behalf of a referring laboratory must provide the referring laboratory with a copy of the results of the requested testing in a timely manner, this includes the notification of critical (high-risk) results.*

For referred tests, the referral laboratory is responsible for communicating high-risk results to the original requesting practitioner.



If no response is received within a clinically appropriate timeframe, then the escalation procedure progresses to the next recipient of the high-risk result.

The CHW Pathology laboratory must ensure confidentiality of communications however; consideration should be given to situations where patient safety may take precedence over normal confidentiality conventions, e.g.: in situations where clinical staff cannot be contacted and the results are from a child, the parent(s) should be contacted to initiate appropriate action in response to the results.

Maintaining and monitoring high-risk result management

The CHW Pathology laboratories and POCT service must review and update their alert list(s) a minimum of annually or sooner if new information or technology becomes available. Where feasible, this review should be done in consultation with representative users of the pathology or POCT service as appropriate.

Where feasible, quality indicators should be utilised to monitor performance in communicating high-risk results. Parameters monitored should include the percentage of high-risk results that were successfully communicated and the times taken to communicate results (from the time such results became available).

Terms and definitions

Alert list	A list of critical tests and tests with alert thresholds for high-risk results ideally reflecting an agreed policy between the laboratory/POCT service and its users for rapid communication within a pre-specified time frame and according to a procedure.
Alert threshold	The upper and/or lower threshold of a test result or the magnitude of change (delta) in a test result within a clinically significant time period, beyond which the finding is considered to be a medical priority warranting timely action.
Critical risk result	Results requiring immediate medical attention and action because they indicate a high-risk of imminent death or major patient harm.
Critical test	A test that requires immediate communication of the result irrespective of whether it is normal, significantly abnormal or critical.
Escalation procedure	An ordered list of alternative steps to be followed when the appropriate recipient(s) of a high-risk result cannot be reached in a clinically appropriate time frame.
High-risk results	A collective term used to denote results that require communication in a timely manner; i.e. critical risk results, significant risk results and results of critical tests.
Medical Laboratory	A laboratory for the examination of materials derived from the human body for the purpose of providing information for the diagnosis, management, prevention and treatment of disease in, or assessment of the health of, human beings, and which may provide a consultant advisory service.
Point of Care Testing	Point of Care Testing (POCT) is defined as testing that is available near or at the site of the individual within a clinically acceptable timeframe and managed according to the CHW POCT Committee quality framework that requires adherence to NSW Health POCT policy.

Referral laboratory	An external laboratory other than the primary testing laboratory to which a sample is submitted for further examination.
Significant risk result	Results that are not imminently life-threatening but signify significant risk to patient well-being and therefore require medical attention and follow-up action within a clinically justified time limit.
Test result	The result of an examination produced by a laboratory. This may be quantitative, semi-quantitative or qualitative.
Timeframe of notification	Pre-specified time frame agreed upon by laboratory/POCT service and its users for the notification of high-risk results as per relevant departmental alert list.
User of laboratory	Medical Practitioner, nurses and other health care professionals directly involved in patient care

Related documents

AS ISO 15189:2013 Medical laboratories - Requirements for quality and competence

http://www.health.gov.au/internet/main/publishing.nsf/Content/health-npaac-publication.htm

RCPA Consensus Statement for the Management and Communication of High-risk Laboratory Results

Campbell C, Caldwell G, Coates P, et al. Consensus Statement for the Management and Communication of High-risk Laboratory Results. *The Clinical Biochemist Reviews*. 2015;36(3):97-105.

Coroners Court of New South Wales. Inquest into the Death of Dr Peter Domachuk, Coroner's Court, Glebe, 2 December 2015.

http://www.pathology.health.nsw.gov.au/ArticleDocuments/186/NSWHP_PD_010%20-%20High%20Risk%20Laboratory%20Results%20Policy%20V3.0.pdf.aspx

https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2018_028.pdf