


Name of Policy: <u>Critical Limits and Turn Around Times</u> Policy Number: 3364-136-CBGL-07 Department: Respiratory Care Approving Officer: Chief Pharmacy, Quality and Safety Officer Responsible Agent: Director, Respiratory Care Scope: The University of Toledo Medical Center Respiratory Care Department	 Effective Date: September 20, 2021 Initial Effective Date: 1/1/2008
<input type="checkbox"/> New policy proposal <input type="checkbox"/> Minor/technical revision of existing policy <input checked="" type="checkbox"/> Major revision of existing policy <input type="checkbox"/> Reaffirmation of existing policy	

(A) Policy Statement

The Blood Gas Lab has established turnaround times and critical values for blood gases.

(B) Purpose of Policy

To provide practitioner notification when test results indicate the need for prompt attention and patient care management.

(C) Procedure

1. Turnaround of STAT blood gases
 - a. STAT and ED blood gases should be analyzed within 15 minutes of receipt.
 - b. STAT results with the request “Call Results” are called and sent electronically to the proper station immediately according to instruction. A comment is written with the results indicating they were called and the name of the person receiving the results. Any result that is called must be *read back* by the recipient to ensure accuracy and understanding.
 - c. Significant delays in reporting results should be detailed on the lab variance/error log. When delays are anticipated due to equipment, computer or staffing problems, the appropriate clinician must be notified and the contact documented.
 - d. Turnaround times for STAT blood gases is 15 minutes
 - e. Turnaround times for routine blood gases is 30 minutes.

2. Critical Values
 - a. The following are designated critical limits:

Critical Values for Arterial Whole Blood Samples (Abnormal Results)

<i>Parameter</i>	<i>Lower Limit</i>	<i>Upper Limit</i>
pH	7.25	7.55
pCO2 mmHg	25	55
pO2 mmHg	55	-
Na⁺ mmol/L	121	154
K⁺ mmol/L	2.5	6.0
ICA mmol/L	0.83	1.55
THb g/dL	6.0	18.0

<i>Parameter</i>	<i>Lower Limit</i>	<i>Upper Limit</i>
O2 Sat %	88.0	-
O2 Hb %	88.0	-
COHb %	-	6.0
MetHb %	-	3.0
HHB %	-	6.0

Critical Values for Venous Blood Samples (Abnormal Results)

<i>Parameter</i>	<i>Lower Limit</i>	<i>Upper Limit</i>
pH	7.20	7.55
pO2 mmHg	25	-
pCO2 mmHg	20	65
O2 Sat %	55	-

- b. When reporting critical test results on the phone, you must obtain the identity of the licensed practitioner receiving results, and you must have that person **READ BACK** the results for accuracy and verification of understanding. Document this procedure along with the name and credentials of the care giver who received the critical value results. Place this information in the comments section of the Results Monitor.

<p>Approved by:</p> <p><u>/s/</u> _____ <u>9/7/2021</u> Michael Taylor Director, Respiratory Care Date</p> <p><u>/s/</u> _____ <u>10/6/2021</u> Lauren Stanoszek, MD Blood Gas Lab Medical Director Date</p> <p><u>/s/</u> _____ <u>9/8/2021</u> Fadi Safi, MD Respiratory Care/Critical Care Medical Director Date</p> <p><u>/s/</u> _____ <u>10/6/2021</u> Russell Smith Chief Pharmacy, Quality and Safety Officer Date</p> <p><i>Review/Revision Completed By:</i> <i>Director, Respiratory Care</i></p>	<p>Review/Revision Date:</p> 02/12/2009 04/29/2010 02/23/2011 04/11/2012 03/03/2014 03/01/2017 02/12/2019 09/20/2021
Next Review Date: September 2023	
Policies Superseded by This Policy:	

It is the responsibility of the reader to verify with the responsible agent that this is the most current version of the policy.