

Policy #:	805 (PLH-805-05)	Effective Date:	9/30/2004	Reviewed Date:	2/4/2011
Subject:	BLOOD COLLECTION FOR AMINOGLYCOSIDES & VANCOMYCIN LEVELS (TROUGH/PEAK & RANDOM ORDERING PROCEDURE)				
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BLOOD COLLECTION FOR AMINOGLYCOSIDES & VANCOMYCIN LEVELS

TROUGH/PEAK & RANDOM ORDERING PROCEDURES

Aminoglycosides antibiotics (gentamicin, tobramycin, and amikacin): trough should be collected 30 minutes prior to do (IM or IVPB). Peak should be drawn 1 hour post IM injection and 30 minutes post 30-60 minute IV infusion. Call Pharmacy at 16232 if the dose is given more than one hour after time due. The yellow flow-sheet for aminoglycoside blood collection should be placed on the patient's door (B tower) or magnetic board in patient's room (A tower).

Laboratory monitoring of Aminoglycoside (gentamicin, tobramycin, amikacin) Therapy

Table 2: Serum Concentration Sampling Times for Traditional and Extended-Interval Dosing of Aminoglycosides

	Peak Sample Time	Trough Sample Time	Comments
For traditional Dosing ¹	1 hour post IM injection 30 Min post 30-60 Min IV infusion	≤ 30 Min before dose (IM and IVPB)	Obtain levels after 3-4 doses. Most patients should be at steady-state at this time.
For Extended Interval (Once-daily) Dosing ^{5,6}	Not indicated	Not indicated	Obtain random level before the second dose to ensure clearance.

Reference: Aminoglycoside Overview-Pharmacy 2010

Vancomycin: (tricyclic glycopeptides antibiotics): trough levels should be collected 30 minutes prior to dose unless contraindicated by patient's condition. Peak levels should be collected 1 hour after end of infusion. The lilac flow-sheet for Vancomycin blood collection should be placed on the patient's door. Call Pharmacy at 16232 if the dose is given more than one hour after due.

Physician:

Orders: Gentamycin, Tobramycin, Amikacin, or Vancomycin (random or trough/peak levels).

Clinical Record Specialist:

1. Pulls the pharmacy copy of the physician orders and sends it to pharmacy for the trough/peak collection date/times to be determined.

Note: If a single stat, random, or "now" level is ordered, the order can be immediately entered into the computer by the unit secretary.

2. When paperwork is returned from pharmacy, the Clinical Record Specialist places the orders in Cerner, with specific trough/peak collection dates/times provided by pharmacy, and writes order number on yellow or lilac collection sheet.

Note: If the physician discontinues the medication after the pharmacist has written the order for the specific times, the unit secretary is to cancel the pending trough/peak orders in the computer and contact Lab to confirm canceled order.

Pharmacist:

1. Determines when trough/peak is to be done.
2. Writes order specifying trough/peak collection dates/times.
3. Places yellow or lilac collection sheet in chart with the order.
4. Gives chart to unit secretary for processing.

Nurse:

1. Checks off orders.
2. Gives medication as scheduled being sure to document on the yellow or lilac collection sheet.
3. Hangs yellow or lilac sheet on patient's door (B tower) or magnetic board in patient's room (A tower).
4. Calls lab only if phlebotomist is more than 15 minutes late to collect specimen (with the exception of nurse draws.)