Guidelines for 24-Hr Dialysate Collection

CAPD

- Have the patient drain and discard dialysate.
- Collect all dialysate for the next 24 hours. Dialysate does not require refrigeration OR a preservative.
- Draw a blood sample in close proximity to the 24-hr collection period. Send blood sample to lab for creatinine and urea nitrogen (BUN) measurement.
- Two methods are common for dialysate collection:

Batch method

- Pool the entire volume of dialysate and mix thoroughly.
- Measure the 24-hr. dialysate volume.
- Draw a final sample of mixed dialysate.
- Send dialysate sample to lab for creatinine and urea nitrogen (DUN) measurement.

or

Aliquot Method

- Empty each dialysate bag into a measuring container.
- Record the individual bag volume.
- Move the decimal point 3 places to the left. Draw this amount in mL from that sample of effluent and place in a red top test tube. (i.e., if effluent volume is 2350 mL, 2.35 mL are placed in the test tube).
- Repeat the process for all bags.
- Mix all dialysate samples in single container.
- Send dialysate sample to lab for creatinine and urea nitrogen (DUN).

APD

- Begin the cycler treatment by draining the patient and saving the drained volume.
- Collect all dialysate during the cycler treatment using a 15-liter drain bag. If a daytime exchange is performed, it must be included in the total collection.
- Instruct the patient to mix the solution thoroughly and obtain a sample.
- Record the total volume drained.
- Draw a blood sample in close proximity to the 24-hr collection period. Send to lab for creatinine and urea nitrogen (BUN) measurement.
- Send dialysate sample to lab for creatinine and urea nitrogen (DUN) measurement.

Note: When performing 24-hr. collections, standard precautions should be taken when handling blood or drained dialysate.

Guidelines for 24-Hr Urine Collection

Twenty-four-hour urine collection requires either a preservative be added to the collection (thymol *is the recommended preservative) or refrigeration to inhibit the growth of bacteria that can break down urea. Check with your laboratory for its protocol.*

To perform **the *24-hr collection:***

- First, have the patient empty his/her bladder and discard urine.
- Collect all urine for the next 24 hours. Refrigerate urine OR add thymol to prevent bacterial breakdown of urea
- End the test by having the patient empty his/her bladder. Save the urine to complete the 24-hr collection
- Draw a blood sample in close proximity to the 24-hr collection period. Send blood sample to lab for creatinine and urea nitrogen (BUN) measurement
- Measure 24-hr urine volume
- Send urine sample to lab for creatinine and urea nitrogen (UUN) measurement

Note: For patients who void infrequently (less than 3 times per 24 hours), a 48-hr collection is recommended. If the sample is a 48-hr collection, the total volume collected should be divided by 2 to create a 24-hr volume result.