

# PR43: Point of Care Testing

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## Applicable To

■ CCP only

## Introduction

The epoc® point of care analyzer is currently used for evaluation of patient blood chemistries by BCEHS critical care paramedics. This includes blood gases, hematology, electrolytes, and lactate. The assay analyzed is at the discretion of the clinician to guide patient care.

## Indications

- Any patient that requires lab data to guide ongoing treatments

## Contraindications

- No specific contraindications for point of care testing
- A negative Allen's test is a contraindication for a radial arterial sample

### Cautions:

- Once the sample has been withdrawn and before injecting it, the sample should be rolled to ensure it has not coagulated and that your hemoglobin values will be accurate
- Ensure the reader always remains horizontal during the analyzing phase
- Ensure the cap on the vented syringe is used to avoid blood gas errors if a prolonged wait interval is experienced

## Procedure

1. Prepare the patient and draw the blood sample.
2. Turn 'ON' epoc® Reader and epoc® Host.
3. Log in to Host software application.
4. Use epoc® Host to establish wireless connection with the epoc® Reader.
5. Begin test sequence.
6. Obtain a new test card and remove from pouch.
7. Insert test card into Reader.
8. The internal motor of the Reader is actuated to start the calibration process. This process releases a calibration fluid in the card that flows across sensors within the card.
9. Enter patient information, select tests, and sample type. This brings up the appropriate values in the menu.
10. If using a non-heparinized syringe, cancel the calcium value.
11. In the syringe, a meniscus is formed at the tip. The sample size is exceedingly small and, if injected, a partial air/blood sample is injected which will then develop a sample size error. Instead, eject 1 drop of blood to get rid of the meniscus and then introduce the blood to the cartridge.
12. Introduce the sample into the test card upon completion of calibration.
13. Introduce the blood sample into test card until an audible beep is heard.
14. If the syringe is withdrawn vertically, a suction will be produced at the card/syringe interface and a partial sample will accidentally be removed. To avoid this, once the sample is injected, roll the syringe off to the side.
15. The Reader sends test results to the Host. Results are calculated and displayed on the Host in approximately 30 seconds.

16. Observe, record, and analyze the results.
17. Remove the test card and discard.
18. Analyze the data and adjust patient care as needed.

## Notes

- If the epoc® is outside of the temperature range, warm or cool both the epoc® and the cartridge until the temperature range is met.

## References

1. Epoc® system manual. (2016). [[Link](#)]
2. Siemens Healthcare. Epoc® system manual. (2021). [[Link](#)]

