



# Every minute and every drop of blood count when caring for the critically ill newborn

Accelerate treatment decisions and minimize sampling for effective neonatal care

## **epoc Blood Analysis System**

Keep critical NICU testing close to your patients

 [siemens-healthineers/epocnxs](https://www.siemens-healthineers.com/epocnxs)





**A child who is under 28 days of age is considered a neonate. This is a critical time in the life of a newborn.<sup>1</sup>**

Neonates may be sent to the NICU if they are born prematurely, experienced difficult delivery, or have challenging conditions in the first few days of life.



Diagnoses vary within the NICU, but there are **common illnesses** that require intensive care.<sup>2</sup>

**Anemia**  
**Apnea**  
**Bradycardia**  
**Chronic lung disease**  
**Respiratory distress syndrome**  
**Sepsis**

Neonatal care can be especially challenging. These patients are very fragile and, in some cases, require prolonged and complex interventions. Patient status can change very quickly, making imperative the need for rapid test results, **However...**

### *Did you know?*

Extreme preterm infants lose almost one-third of their total blood volume in the first month of life as a result of blood loss due to multiple blood draws for laboratory investigations and procedures.<sup>3</sup>

Phlebotomy excess contributes to anemia in NICU and PICU patients and increases the likelihood of red blood cell transfusion, which is associated with risk of adverse outcomes.<sup>4</sup>

*Point-of-care (POC) testing is routinely used in neonatal intensive care units (NICUs) to mitigate these challenges due to its ease of use, rapid availability of results, and small blood volume requirements.*

## Empower caregivers with immediate access to critical, lab-quality test results at the patient's side to transform care delivery in the NICU



**The epoc® Blood Analysis System** is a handheld, wireless solution that provides blood gas, electrolyte, and metabolite results at the patient's bedside in approximately 30 seconds after sample introduction. Streamlining the process provides critical information with the fewest steps, which can lead to clinician efficiencies, staff optimization, and ultimately better patient care.

In the NICU, the epoc system provides immediate access to critical test results.

- Support better patient and staff experience by running a full menu of 13 tests on one test card with one blood draw.
- Minimize sampling with capillary samples for effective neonatal care.
- Reduce blood waste and turnaround time with post-calibration sample application, reducing the need for resticks for difficult-to-obtain patient samples.
- Reduce turnaround time and inventory management costs with a room-temperature storage test card for immediate availability at the patient's bedside.
- Enable faster therapeutic intervention with immediate, wireless access to critical results.
- Simplify quality control so you concentrate on patient testing.

With the epoc system, you can deliver outcomes that matter by spending less time on your process and more time with your patients.

The epoc Care-Fill™ Capillary Tube aids clinicians in the collection of capillary samples. It is designed to work specifically with the epoc system. Additionally, Care-Fill Capillary Tubes give the clinician guidance as to how much blood is needed, unlike a traditional capillary tube.

- 90-microliter sample size
- Heparinized
- Designed to deliver the patient specimen consistently and accurately when used with the epoc system



*Discover the power of an open POC Ecosystem™ solution with point-of-care informatics solutions that can simplify your POCT workflows and dramatically reduce workload for your staff. Electronically send test results from all connected POCT devices directly to electronic patient records. Centrally manage all POCT devices, patient results, operators, reagents, and quality control materials.*



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<sup>1</sup>. <https://www.unicef.org/media/69776/file/Transforming-care-for-every-small-and-sick-newborn-2020.pdf>. Accessed 6.1.22.

<sup>2</sup>. <https://www.hopkinsallchildrens.org/Patients-Families/Health-Library/HealthDocNew/Common-Diagnoses-in-the-NICU>. Accessed 6.1.22.

<sup>3</sup>. Counsilman CE, Heeger LE, Tan R, Bekker V, Zwaginga JJ, te Pas AB, Lopriore E. Iatrogenic blood loss in extreme preterm infants due to frequent laboratory tests and procedures. *J Matern Fetal Neonatal Med*. 2021 Aug;34(16):2660-5. doi:

<sup>4</sup>. Steffen K. Controlling phlebotomy volume diminishes PICU transfusion.

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