What could go wrong?

Minimize risks to premature infants

- Hyperthermia, heat stroke, death
- Hypothermia, shaking, shivering
- Hyperoxia
- Blindness
- Heat loss
- Brain damage
- Apnea
- Hypoxia
- Elevated Intracranial Pressure (ICP)
- Misdiagnosis
- Skin burns
- Respiratory difficulties
- Retinopathy of prematurity
- Hypernatremia dehydraion
- Ear damage
Minimize risks by testing with the

INCU II Incubator/Radiant Warmer Analyzer

Infants cannot tell you what is wrong, which is why they need a very stable, safe environment to grow, heal, and develop. Incubators are designed to nurture fragile infants by controlling the temperature, humidity, sound, oxygen, and air flow, and also measuring skin temperature.

Parameters that are inaccurate or not within a safe range could have severe and life threatening consequences to a baby. Learn how the INCU II Incubator/Radiant Warmer Analyzer can help minimize these risks:

**Incubator temperature**

If an incubator is too hot or cold, even by just 2 °C, it can be harmful or even deadly (i.e. hyperthermia, dehydration, heat stroke) to a fragile newborn, causing the baby to expend unnecessary energy to stay warm or cool off. The INCU II (T1-T5) can test temperature from 0 °C to 50 °C with ± 0.05 °C accuracy, using five sensors, located 10 cm above a mattress, the space typically occupied by a newborn.

**Humidity**

Humidity helps support proper respiratory function and minimize heat and water loss. The INCU II (D) can test relative humidity from 0 to 100% with ± 3 % accuracy.

**Airflow**

An air velocity above 0.35 m/sec increases water loss, which can result in a baby dehydrating. Air flow also helps maintain a consistent temperature throughout an incubator. The INCU II (C) can test airflow from 0.2m/sec to 2.0 m/second with ± 0.1 m/sec accuracy.

**Sound**

To avoid hearing damage, the sound level inside an incubator should be below 60 dbA, and the alarms loud enough to hear over ambient noise. The INCU II (B) can test sound pressure from 30 dbA to 100 dbA with ± 5 dbA accuracy.

**Oxygen**

While too little oxygen can result in brain damage, too much could lead to retinopathy of prematurity or blindness. Babies with heart or lung problems may need increased levels of oxygen, ranging from 21 % to 65 %. Test by using a tool like the Fluke Biomedical MAX02 PLUS AE Oxygen Analyzer.

**Contact temperature**

Anything that is too cold or too hot, which an infant can touch or lie on, can exacerbate medical issues. The INCU II (E) can test surface temperatures from 0 °C to 60 °C with ± 0.05 °C accuracy.

**Skin temperature**

Newborn babies can’t modulate their body temperature in response to their environment. A skin temperature probe, taped to the abdomen or other part of an infant’s body, enables medical staff to determine a baby’s temperature. The INCU II (A) can test skin temperature from 0 °C to 50 °C with ± 0.05 °C accuracy.

The INCU II can simultaneously measure environmental parameters, increase productivity, and verify the proper functioning of an incubator. Complying with IEC 60601-2-19, 2-20, and 2-21 standards, the INCU II is portable, accurate, and easy to use. Test today to help ensure the best outcomes for tomorrow’s patients.