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Understanding Common NICU Equipment

Checked against current guidelines by the Juniper Foundation editorial team. Not yet reviewed by a clinician.

The NICU is full of machines, tubes, and sounds. This sheet explains, in plain words, what common equipment does. Not every baby needs every item. Always ask the nurse before you touch equipment.

Monitors

Equipment	What it does
Cardiorespiratory monitor	Sticky pads on the chest track heart rate and breathing. It alarms if either is too fast or too slow.
Pulse oximeter	A small sensor wrapped on a hand or foot measures oxygen in the blood. It does not hurt. It helps the team decide if your baby needs more or less oxygen.
Blood pressure cuff	A tiny cuff on an arm or leg checks blood pressure at set times.
Arterial line	A thin tube in an artery, sometimes in the umbilical cord, measures blood pressure all the time and lets the team check blood gases (oxygen and carbon dioxide levels).

Breathing support

Equipment	What it does
Nasal cannula	Soft prongs in the nose give extra air and oxygen.
CPAP	Gentle, steady air pressure, usually through small tubes or a mask on the nose, helps keep the lungs open while the baby breathes on their

Equipment	What it does
	own.
Breathing tube (endotracheal tube)	A tube placed through the mouth or nose into the windpipe carries air and oxygen to the lungs.
Ventilator	A breathing machine gives breaths through the breathing tube, from a few extra breaths to all of them. Some types, called high-frequency ventilators, give breaths at a much faster rate.

Warmth, lines, and feeding

Equipment	What it does
Incubator	A clear, closed bed that keeps the baby warm. You can reach in through side portholes.
Radiant warmer	An open bed with a heater above, used when the team needs easy access to the baby.
IV line	A thin tube in a vein gives fluids, nutrition, or medicine.
Umbilical catheter	A thin tube placed in the belly button stump gives fluids and medicine and lets the team draw blood.
Central line or PICC line	A longer, thin tube in a large blood vessel, used for fluids, nutrition, and medicine when a baby needs them for a longer time.
Feeding tube (NG or OG tube)	A soft tube through the nose (NG) or mouth (OG) into the stomach for breast milk or formula.
Bili lights (phototherapy)	Special blue lights treat jaundice, a yellow color from a substance called bilirubin. Eyes are covered for protection.

About alarms

Alarms are part of daily life in the NICU. Nurses watch the monitors closely and respond. If an alarm worries you, it is always fine to ask what it means and what the nurse checked.

Questions to ask at the bedside

- What is each piece of equipment doing for my baby today?
- Which numbers on the monitor matter most for my baby?
- How can I touch or hold my baby safely with this equipment?
- What would need to happen for this equipment to come off?

Where to learn more

- Understanding the NICU
- Respiratory care
- Feeding and nutrition
- March of Dimes: Common NICU equipment, marchofdimes.org

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