There are many pieces of medical equipment in the Neonatal Intensive Care Unit (NICU). This sheet describes the most common equipment. Your baby may not need every piece of equipment. Depending on the baby’s medical condition, other pieces of equipment may be needed.

**Environment**

Babies in the NICU are usually kept warm using either:

- A clear plastic box called an isolette or incubator
- An open bed with a radiant warmer

**Monitoring**

These machines measure your baby’s vital signs. Common equipment to check vital signs include:

- A sensor on the chest to measure heart rate and breathing rate using a cardiorespiratory (or heart/lung) monitor
- A sensor on the skin to measure temperature
- Cuff on the arm or leg to measure blood pressure
- Cuff on the hand or foot to measure the relative amount of oxygen in the blood (pulse oximeter)

**Breathing**

Some babies need help breathing. How much help depends on the baby’s medical condition. Common ways to help include:

- Extra oxygen delivered through a small tube in the nose (nasal cannula) or through a mask
- Continuous positive airway pressure (CPAP), a treatment that uses mild pressurized air to help keep the lungs open. The air may be delivered through a mask or a special tube in the nose.
- Mechanical ventilation uses a machine to help the baby breathe by moving air in and out of the lungs. Ventilators use endotracheal [en-doh-tray-kee-uhl] tubes (ET), which go through the baby’s nose or mouth and into the windpipe. There are various types of ventilators; the health care team will decide which is right for your baby.
Delivering Fluids

An intravenous (IV) line is a small catheter (tubing) inserted into a baby’s vein. The IV allows the health care team to deliver fluids, nutrients, medicines, and blood to the baby as needed.

- Peripheral IVs deliver their contents into parts of the body that are away from the heart (such as arms, legs, or the head). These IVs are relatively easy to insert and remove but must be changed frequently.
- Central IVs deliver their contents into the central part of the body (near the heart). Central lines can be inserted almost anywhere, then threaded through the blood vessels to a vein near the heart. Central lines inserted in arms and legs are usually called peripherally inserted central catheter (PICC) lines.

Central lines are harder to insert, but they last longer than peripheral lines. Fewer IV changes mean less discomfort for your baby.

Feeding

Some babies cannot feed by mouth. Instead, they receive breast milk or formula through a tube that reaches the stomach. The tube may go through the baby’s:

- Mouth (orogastric or OG tube) or
- Nose (nasogastric or NG tube)

In a few cases, the health care team may recommend a gastrostomy or G tube for feeding. When needed, a G tube is inserted through the wall of the baby’s stomach during a special procedure.

Imaging

The health care team has several ways to take an image (picture) of structures inside the body. The type of imaging used depends on what tissue (for example, lungs, brain, bones) needs to be seen. Common types of imaging equipment include:

- X-rays
- CT (or CAT) scan, which uses X-rays
- Ultrasound, which uses sound waves
- MRI (magnetic resonance imaging), which uses radio waves

Some of these images can be taken in the NICU. Other types may require that your baby go to a different part of the hospital.

Ask the health care team when you have questions about your baby—they are there to help.
Please visit www.nicu-pet.com to download additional copies.