JCAHO temperature standards, JCAHO tissue standards, tissue storage temperatures

**JCAHO Standards**

The Joint Commission of Accreditation of Healthcare Organizations, issued a new standardized procedures on storing tissue samples. This new standard, PC.17.10 applies to organizations that store or issue tissue, which may include areas outside of the clinical laboratory, for example, surgery and outpatient centers and tissue banks. Examples of tissue specimens that might be found in an organization include bone, cornea, skin, heart valves/conduits, tendons, fascia, dura, bone marrow, veins, arteries, cartilage, sperm, embryos, eggs, stem cells, cord blood, synthetic tissue (artificially prepared, human and non-human based), and other cellular- and tissue-based transplant or implant products. It says in part that the organization must:

**B 6.** Maintain continuous temperature monitoring for storage refrigerators and freezers.

**C 7.** Maintain daily records to show that tissues were stored at the required temperatures.

**Note:** Main types of tissue storage used are: “ambient” room temperature (for example, freeze-dried bone), refrigerated, frozen (for example, deep freezing colder than –40 °C), and liquid nitrogen.

**B 8.** Storage equipment has functional alarms and emergency back-up.

**How to comply?**

The easiest way to comply with this standard, without purchasing a commercial laboratory freezer with a built-in monitoring system, is by adding on a stand-alone temperature system that is capable of monitoring, documenting and alarming.

One such system is the **Master Thermometer**, manufactured by 2di. It uses a probe to sample temperature every few minutes and draws an electronic chart on its display which complies with provision B6 and C6 of the standard. It also has a built-in relay that triggers an auto dialer or strobe/siren alarm, which complies with B8 of the JCAHO standard. It stores over 1.5 years of temperature history and can be downloaded into a computer to generate a paper copy of the graph or an archived copy.

An added benefit of this device is that its chart is constantly being updated and always displayed so that each person in the vicinity of the freezer is always aware of the temperature.