

## Department of Nursing Policy and Procedures Regarding Temporal Artery Thermometry

**TITLE:** TEMPORAL ARTERY THERMOMETER (EXERGEN TEMPORALSCANNER)

**KEY WORDS:** Thermometer, temperature, arterial temperature assessment

**LEVEL OF PERSONNEL:** RN, LPN, Critical Care Patient Care Associate, Patient Care Associate

**DESIGNATED CLINICAL UNITS:** All units having the Temporal Artery Thermometer

**PURPOSE:** To measure temperature at the temporal artery. The temporal artery thermometer uses infrared technology to detect the heat naturally emitting from the skin surface. The thermometer emits nothing, detects only, assuring safety for all patients.

### APPLICABLE POLICY STATEMENT ON CLEANING BEFORE USE ON PATIENTS:

- The Temporal Artery Thermometer that is dedicated to a patient room must be cleaned before use on an incoming patient, or periodically as needed.
- The Temporal Artery Thermometer that is used in areas that service transient patients (ED, PACU, Ambulatory, etc), the probehead must be wiped with an alcohol swab between patients or used with disposable caps.
- Refer to cleaning and maintenance below for further details.

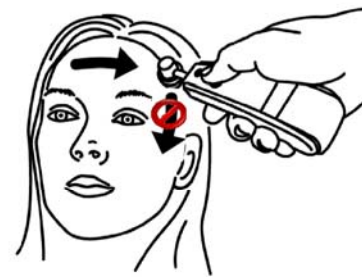
### 5 STEPS TO ACCURATE TEMPERATURE MEASUREMENT:



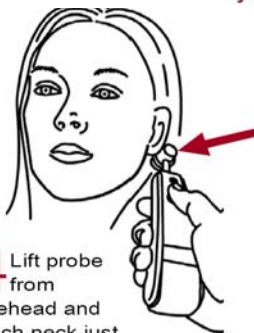
**1** Brush hair away if covering the forehead or ear



**2** Place probe **FLUSH** on forehead, depress button & **keep depressed until you are done**



**3** Slide **STRAIGHT** across forehead, **NOT** down the side of the face



**4** Lift probe from forehead and touch neck just behind the ear lobe

**5** Remove, read and record temperature



**CRITICAL ELEMENTS:**

- Take temperature measurement on the area that is exposed to the environment.
  - Coverings such as hair, bandages, or clothing would insulate the area and cause falsely high readings.
  - Measure only the up-side on a patient in a lateral position. The down-side will be insulated preventing the heat from dissipating, resulting in falsely high readings.
  - A fan blowing on the face, an icepack or cold/wet compress would cause falsely low readings.
  
- If all sites are wet from diaphoresis.
  - The patient's temperature will be rapidly dropping if all sites are wet and fever is not an issue. Return in about 15 minutes when the patient should be dry and take a standard temporal artery temperature.
  - Wiping the sweat will not work as the sweat glands secrete too quickly and the area will still show the effect of evaporative cooling.

**NURSING ACTIONS****TEMPERATURE MEASUREMENT**

1. Brush hair away if covering the forehead or ear.
2. Place probe flush on forehead, depress button & keep depressed until done.
3. Slide STRAIGHT across forehead NOT down the side of the face.
4. Lift probe from forehead and touch neck just behind the ear lobe.
5. Release the button, read and record the temperature.
6. Document as Temporal Artery (TA) Temperature (or Core (C) Temperature).

**ALTERNATE SITES FOR MEASUREMENT****The neck behind the earlobe:**

- If the forehead is inaccessible because of bandages due to head trauma, vasodilation in the neck is assured. To make the measurement, touch the neck behind the earlobe, press and release the button. If that area is not accessible, keeping the button depressed until scan is completed, scan laterally for about 3-4 inches across the part of the neck that is accessible.

**The femoral artery area:**

- The femoral artery is a strong artery and has a long history as a temperature measurement site, to make the measurement, keeping button depressed until scan is completed, scan across the femoral artery following the crease of the groin.

**Lateral thoracic artery area**

- Scan in a zigzag pattern about 4 inches wide from an imaginary line in between the axilla and the nipple, scanning down to the waist and back up to the level of the nipple, keeping the button depressed until the scan is completed.

**CLEANING AND MAINTENANCE**

- **A dirty probe lens can cause a low reading, and it should be cleaned on a bi-weekly basis.**

To clean lens:

- Dampen the cotton tip of a cotton tipped stick applicator with an alcohol swab.
- Twirl cotton tip on the lens deep in center of probe,
- Dry the lens with a dry cotton tipped stick applicator.



- **The thermometer housing can be cleaned with any hospital-approved disinfectant, alcohol, or even diluted bleach solution.**

- Do not clean the probe head with any solution other than alcohol, as the solution may drip on the lens and cause damage.
- Do not submerge thermometer in solution.

- **The message “BATT” on the display screen is an indication the battery is low.**

- Replace the battery by unscrewing the one screw of the battery compartment, removing cover and replacing existing battery with a 9-volt alkaline battery.
- Replace cover and tighten screw.

**DOCUMENTATION**

- Record temperature on Clinical Record and Vital Signs Sheet.
- Record temperature as Temporal Artery Temperature - (TA)
- Core temperature is about a degree F (0.5°C) higher than an oral temperature, close to a rectal temperature.

**CONTACT PERSONS/PRACTICE AREA****RESEARCH**

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