

**Acceptable Tube Types**



**Estradiol**

<b>Alternate Name:</b>	<b>None</b>
<b>Performing Lab:</b>	<b>New Hanover</b>
<b>Specimen Container:</b>	Yellow serum separator tube, green top tube (lithium heparin), or a red top tube.
<b>Minimum Volume Required:</b>	1.0mL
<b>Testing Availability</b>	<b>Routine:</b> 24 hours/day <b>Stat:</b> Yes
<b>Turnaround Time:</b>	Routine: 4 hours Stat: < 1 hour
<b>Special Handling:</b>	None
<b>Patient Preparation:</b>	None
<b>Specimen Stability:</b>	1 day at room temp, 2 days at 2-8C, or 14 days frozen.

**Reference Range:**

**Normally Menstruating Females:**

<b>Follicular phase:</b>	21.4 – 164.8 mIU/mL
<b>Midcycle:</b>	49.9 – 367.2 mIU/mL
<b>Luteal phase:</b>	40.2 – 259.0 mIU/mL

**Post-menopausal on MHT:** <11 – 462.1 mIU/mL

**Post-menopausal not on MHT:** <11 – 58.3 mIU/mL

**Males:** <11 – 52.5 mIU/mL

<b>Critical Value:</b>	<b>None</b>
<b>CPT Code:</b>	<b>82670</b>
<b>Testing Methodology:</b>	Homogeneous, sandwich chemiluminescent immunoassay

based on LOCI technology.

**Causes for Specimen Rejection:**

**Improper labeling**

**Other Comments:**

**Clinical Significance:**

Measuring the circulating levels of estradiol is important for assessing the ovarian function and monitoring follicular development for assisted reproduction protocols. Estradiol plays an essential role throughout the human menstrual cycle.

Elevated estradiol levels in females may also result from primary or secondary ovarian hyperfunction.

Very high

estradiol levels are found during the induction of ovulation for assisted reproduction therapy or in

pregnancy. Decreased estradiol levels in females may result from either lack of ovarian synthesis (primary ovarian hypofunction and menopause) or a lesion in the hypothalamus-pituitary axis (secondary ovarian hypofunction).

Elevated estradiol levels in males may be due to increased aromatization of androgens, resulting in gynecomastia.