

## Estradiol (E2) Reference Interval Update - Amended

**Audience:** Internal and External Clients  
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Due to a recent change in reagent formulation, the reference intervals for serum estradiol (E2) concentrations are revised as follows, effective Mar 2, 2016:

	E2, pmol/L
<b>Adult Males</b>	<b>&lt;223</b>
<b>Adult Females</b>	
<b>Follicular phase</b>	<b>&lt;854</b>
<b>Ovulation phase</b>	<b>151-1461</b>
<b>Luteal phase</b>	<b>82-1251</b>
<b>Postmenopausal</b>	<b>&lt;505</b>

Each reference limit/interval above represents either the 97.5<sup>th</sup> centile (limit) or the 2.5<sup>th</sup> and 97.5<sup>th</sup> centiles (interval) of a population of healthy Caucasian adults. Reference limits/intervals for postmenopausal women have been verified locally. A more detailed summary of the manufacturer's data is appended below (see Appendix). Given the large variability and uncertainty (grey zone) of reference limits, results should be interpreted with caution and due attention to the clinical context.

If you have further questions or comments, please contact the Sunnybrook Laboratories directly.

**Appendix:**

Reference intervals for Serum Estradiol Concentrations (pmol/L) in Caucasians

	<b>2.5<sup>th</sup> centile (90% CI)</b>	<b>97.5<sup>th</sup> centile (90% CI)</b>	<b>N</b>
<b>Adult Males</b>	-	<b>223</b> (194-232)	146
<b>Adult Females</b>			
<b>Follicular phase</b>	<b>45</b> (23-61)	<b>854</b> (633-1154)	146
<b>Ovulation phase</b>	<b>151</b> (105-158)	<b>1461</b> (1162-1925)	150
<b>Luteal phase</b>	<b>82</b> (28-127)	<b>1251</b> (1077-2759)	151
<b>Postmenopausal</b>	-	<b>505</b> (189-1150)	142
<b>Pregnant Females</b>			
<b>1<sup>st</sup> trimester</b>	<b>563</b> (467-636)	<b>11902</b> (9891-15271)	136
<b>2<sup>nd</sup> trimester</b>	<b>5729</b> (4173-7457)	<b>78098</b> (69143-92227)	140
<b>3<sup>rd</sup> trimester</b>	<b>31287</b> (27151-34175)	<b>&gt;110100</b> (107164->110100)	138

Note: Reference intervals for individuals under the age of 18 were not available.