

## Summary Results for Cortisol for Participants Stratified by Age, Gender, and Time of Day

### Reader's Guide to Understanding This Information:

Normal cortisol levels vary by both age and gender. Within individuals, cortisol levels also vary throughout the day, normally peaking in the morning and again in the evening. The diurnal cycle of cortisol levels are influenced by individual circadian rhythms as well other factors such as stress.

As normal cortisol levels are dependent upon several factors not measured as part of the C8 Health Project, observed cortisol levels are presented in the table below stratified by age, gender, and the time of day that the blood was drawn. While expected normal ranges and the percent of participants with cortisol levels within and outside these ranges are presented, caution in interpreting these results is required as information regarding the diurnal cortisol cycle of participants is unknown.

Age Group	Gender	Blood Drawn	Expected Normal Range	n	Mean	Median	Standard Deviation	1st Percentile	1st Quartile	3rd Quartile	99th Percentile	% Within Expected Range	% Not Within Expected Range
<14	Female	AM	2.4-22.9	989	10.08	9.20	4.51	3.2	6.8	12.4	23.6	98.58%	1.42%
<14	Female	PM	2.4-22.9	1927	7.35	6.40	4.13	1.7	4.5	9.2	21.3	96.47%	3.53%
<14	Male	AM	2.4-22.9	1069	10.48	9.70	4.38	3.7	7.3	12.8	24.6	98.41%	1.59%
<14	Male	PM	2.4-22.9	2078	7.60	6.80	3.92	1.6	5	9.5	21.1	96.15%	3.85%
14-15	Female	AM	2.5-28.6	327	12.07	11.00	6.13	4.3	7.6	14.5	35.3	96.64%	3.36%
14-15	Female	PM	2.5-28.6	569	7.70	6.70	4.20	2.1	4.8	9.3	22.4	98.07%	1.93%
14-15	Male	AM	2.5-22.9	315	11.06	10.30	4.54	4.1	7.8	14	23.5	98.41%	1.59%
14-15	Male	PM	2.5-22.9	663	8.77	8.00	4.54	1.9	5.5	11.2	22.1	96.23%	3.77%
16-18	Female	AM	2.4-28.6	524	16.63	14.75	9.08	2.8	9.9	21.4	43.5	88.17%	11.83%
16-18	Female	PM	2.4-28.6	971	10.11	8.80	5.47	2.5	6.1	12.7	25.9	98.56%	1.44%
16-18	Male	AM	2.4-28.6	548	13.98	13.50	5.02	4	10.2	17.25	26.6	99.82%	0.18%
16-18	Male	PM	2.4-28.6	965	10.51	9.90	4.64	1.8	7.2	13.2	22.9	98.65%	1.35%
>18	Female	AM	4.3-22.4	13671	14.42	13.10	6.72	4.1	9.9	17.5	37.7	88.45%	11.55%
>18	Female	PM	3.1-16.7	15287	10.21	9.30	5.07	2.3	6.7	12.7	26.5	87.45%	12.55%
>18	Male	AM	4.3-22.4	12837	15.09	14.50	5.28	4.9	11.4	18.3	29.6	90.22%	9.78%
>18	Male	PM	3.1-16.7	13406	11.25	10.50	5.03	2.5	7.6	14.1	25.6	84.60%	15.40%