What is *normal*?

Parakeet (aka budgerigar) Heart Rate 250 to 600 beats per minute Body Temp 105°F to 108.6°F

Hummingbird Heart Rate 800+ beats per minute Body Temp 108°F to 111.2°F

What is *normal*?

Canine

Heart Rate 80 to 150 beats per minute Body Temp 100°F to 102°F

Feline

Heart Rate 110 to 140 beats per minute Body Temp 100.5°F to 102.5°F

Human

Heart Rate 60 to 100 beats per minute Body Temp 97.6°F to 98.8°F

Why do mammals have a body temperature around 96°F?

How did they come up with the normal range?

by sampling!

go to class heart rate

- •If you take a large enough random sample, you will get a *Normal Distribution*.
- •Plotted on a dot plot, or histogram with small enough classes, you will see a normal curve.
- •Used for continuous numerical data e.g. temperature, volume, time, mg/dl, height
- •Not for discrete data

Formula for the normal curve.

 $e^{-(x-\mu)^2/(2\sigma^2)}$



•Properties of the normal curve.

•Mean, median, and mode are equal land located at the center of the curve.

- •Symmetric about the mean
- •Continuous
- •Never touches the x-axis
- •Area under the curve = 1.00 or 100%

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Go to Normal.ftm