Objectives

1. Explain the importance of having a quality control program for laboratory analyses.
2. List at least six elements of a total quality control program for the laboratory.
3. Define "standard" and "control".
4. List at least three types of clinical errors possible in laboratory analyses.
5. Differentiate between random and systematic errors.
6. Define and differentiate between "accuracy" and "precision".
7. Sketch a Gaussian curve and label on it the mean, 1 SD, and 2 SD.
8. Define mean and SD.
9. Given the SD and mean for a set of values, develop a Levey-Jennings chart, labeling it with the mean of the values and ± 2 SD.
10. Correctly identify values on a Levey-Jennings chart that are out of ±2 SD.
11. Define "shift" and "trend" as relates to quality control values on a Levey-Jennings chart.
12. Correctly identify values on a Levey-Jennings chart that exhibit a shift and a trend.
13. List the corrective measures to be taken if the control values fall outside the acceptable control range.