Factors Affecting Hemoglobin Measurement.

A review of the literature shows that current "standard" laboratory measurements for hemoglobin are subject to numerous factors that affect both accuracy and reliability. In addition, total hemoglobin concentration measurements are subject to numerous factors that affect the "true" hemoglobin value. This article discusses both the physiologic factors that influence hemoglobin levels and the technical aspects and variability among the different measurement methodologies currently available.