

Hemolysis flag for potassium testing

- ❑ Hemolysis can affect the accuracy of testing for many chemistry tests
- ❑ The Chemistry Laboratory analyzer estimates hemolysis level for each sample using a Hemolysis index (H-index)
- ❑ The H-index level is used to determine when the “**hemolyzed**” flag is added to a laboratory test value or when the test value should not be displayed in Epic

Potassium

- ❑ Potassium is concentrated inside cells, including red blood cells
- ❑ Hemolysis may result in a falsely elevated potassium result due to release of potassium into the plasma
- ❑ Currently samples with an H-index **above 20** but **<400** are flagged as “**hemolyzed**” and reported in Epic
- ❑ Samples with an H-index above **400** (grossly hemolyzed) are **NOT** reported due to significant interference to analytical accuracy

Reporting Update

- ❑ **Beginning March 29th, 2022, potassium reported results will be flagged as “hemolyzed” when the H level is >50 but <400**
- ❑ Providers should understand that, at an H level of 50, potassium levels reported in Epic are potentially higher than true values by up to 13.9% (95% CI 9.6-18.2%)



Example patient results and possible error

Potassium

3.9

If there **IS** hemolysis but **H<50**, the patient’s true potassium could be **3.4** and no “hemolyzed” flag

Potassium

5.7

If there **IS** hemolysis but **H<50**, the patient’s true potassium could be **4.9** and no “hemolyzed” flag