Suggested Maximum Blood Draw Volumes for Neonates/Pediatrics

Note: There may be exceptions based on patient condition

Consider iatrogenic blood loss which can cause anemia:

- Is blood test necessary?
- > Check if test can be added to blood already collected by the lab
- Draw minimal volumes use microtainers
- Refer to flush grid for discard volume prior to central line draws

TABLE FOR SUGGESTED MAXIMUM AMOUNTS OF BLOOD TO BE DRAWN ON PEDIATRIC PATIENTS

| Patient Body Weight | Maximum allowable per draw | Maximum 5% in 30 Day period |
|---------------------|----------------------------|-----------------------------|
| (Kg) | (mL) | (mL) |
| <1 | 1 | 2 |
| 1 | 2.5 | 5 |
| 2 | 5 | 10 |
| 3 | 6 | 12 |
| 4 | 8 | 16 |
| 5 | 10 | 20 |
| 6 | 12 | 24 |
| 7 | 14 | 28 |
| 8 | 16 | 32 |
| 9 | 18 | 36 |
| 10 | 20 | 40 |
| 11-15 | 22-30 | 44-60 |
| 16-20 | 32-40 | 64-80 |
| 21-25 | 42-50 | 84-100 |
| 26-30 | 52-60 | 104-120 |
| 31-35 | 62-70 | 124-140 |
| 36-40 | 72-80 | 144-160 |
| 41-45 | 82-90 | 164-180 |
| 46-50 | 92-100 | 184-200 |
| 51-55 | 102-110 | 204-220 |
| 56-60 | 112-120 | 224-240 |
| 61-65 | 122-130 | 244-260 |
| 66-70 | 132-140 | 264-280 |
| 71-75 | 142-150 | 284-300 |
| 76-80 | 152-160 | 304-360 |
| 81-85 | 162-170 | 324-340 |
| 86-90 | 172-180 | 344-360 |
| 91-95 | 182-190 | 364-380 |
| 96-100 | 192-200 | 384-400 |

References:

Howie, Stephen. "Blood Sample Volumes in Child Health Research: Review of Safe Limits." Bulletin of the World Health Organization 2011;89:46-53.

<u>UC Davis – Maximum Allowable Total Blood Draw</u>

Bishop ML, Fody EP, Schoeff LE. Clinical Chemistry, Principles, Techniques, and Correlations. 7th Ed. Lippincott Williams & Wilkins; 2013:722

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