

3. **Birth Defects in Fallujah, Al-Sabbak et al, 2012.** In late summer, the world media widely reported results of a scientific study that “showed levels of lead in hair were 5 times higher” in hair samples of children with birth defects compared to levels in children without birth defects. The paper also made this statement and provided data that of 44 children with birth defects, the mean lead level was $56454 \mu\text{g/kg}$ with a standard deviation of $217,705 \mu\text{g/kg}$; of 11 children without birth defects, the mean lead level was $11277 \mu\text{g/kg}$ with a standard deviation of $27,781 \mu\text{g/kg}$. Is the statement reported in the media justified? Why or why not?