GEHS 7500
Air Sampling & Analysis

- Sampling Method Development & Evaluation

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Ref: Chapter E, NIOSH Manual of Analytical Methods

1. define the analyte
    - chemical identity
    - physical state

2. define the concentration range of interest
    - PEL, TLV, NAAQS, etc.
    - sampling time (8-hr TWA, 15-min STEL, instantaneous peak)

3. define the sampling environment
    - ambient conditions (temperature, RH)
    - potential interferences

4. literature search
    - existing methods
        - OSHA methods (Salt Lake City laboratory) (www.osha.gov/dts/sltc/methods/index.html)
        - NMAM (www.cdc.gov/niosh/nmam/nmampub.html)
        - EPA TO methods (www.epa.gov/ttm/amtic)
        - U.K. HSE methods
        - ASTM
        - journals
    - new methods
        - review chemical reactions
        - adapt methods for other media (water, soil, bulk samples, etc)