

NHANES Open Space

September 11-12, 2003

Session Title: Biomonitoring

Session Headlines:

Criteria for selection of biomonitored chemicals
CHANES and environmentals - regional, urban vs. rural
Expand environmental questionnaire
Link health effects and questionnaire
Environmental questionnaire as surrogate for biomonitoring
Breast milk sampling
Personal (badge and water) monitoring - compare to blood, urine, saliva, and nasal swab
Change HANES design for regional design
NCEH will rank environmentals
Limited information for children for environmentals - response rate problems, small sample of blood, oversample children
Use CHANES for biomonitoring - design, community resources, vs. NHANES
Can we pool blood of sample persons?
Limited capability of state of biomonitoring
Compare to National exposure vs. local exposure
Local environmental concerns – e.g. Mercury
How do longitudinal study of environmentals on local or national level
Limitation of NHANES for low exposure and prevalence or geographical distribution
Link GIS and biomonitoring
Easier specimens for children
Sentinaanl community monitoring
Selection of chemicals - Federal response vs. methods available
How drop chemicals from list - especially for high non-detects
Cycle in analytes in NHANES
Delay in reporting results from NHANES if analyte is cycled
Use of surplus sera for environmentals
How change age groups in NHANES - sample weights design
How biomonitor around waste sites?

Next Steps/Action Items:

- Develop a plan for periodicity of biomonitoring, including developing criteria for defining need for data on a continuous basis.
- In planning community and state NHANES, address laboratory capacity including at the State level and address comparability with national HANES methods.
- Use State efforts and other community-based studies to address specific questions related to biomonitoring to help inform national HANES content.
- Explore innovative ways to conduct biomonitoring (for example, pooling specimens or use of saliva in small children).
- Conduct analyses of current NHANES biomonitoring data to evaluate need for questions to reconstruct exposures (e.g. information on exposure pathways and environmental media).
- Use analyses of NHANES data and studies at the State level to determine if environmental exposures may be identified through questionnaire methods or environmental measures instead of biomonitoring.