



New Mexico Department of Health Biomonitoring Project and State Lab Capacity Building

What is Biomonitoring?	Biomonitoring Steps	Biomonitoring Health Goals	Biomonitoring Project Goals
Biomonitoring is the evaluation of human sample media such as blood or urine to assess chemical exposures	<ol style="list-style-type: none"> 1. Identify the exposed population 2. Collect samples (blood/urine/saliva) 3. Analyze to determine chemical exposure levels 	<ol style="list-style-type: none"> 1. Assess health risk from chemical exposures 2. Treat and/or prevent exposure 	<ol style="list-style-type: none"> 1. Identify NM populations at risk for exposure 2. Develop lab capabilities to analyze samples 3. Conduct Studies

Biomonitoring Aspects

<p>The Biomonitoring Project is a multi-state consortium led by New Mexico</p> 	<p>Uses of biomonitoring data</p> <ul style="list-style-type: none"> ▪ Are exposures to chemicals in the environment occurring? ▪ Are exposure levels associated with disease? ▪ Is the exposure high enough to warrant intervention? ▪ Are toxicant levels above those seen in the general US population? ▪ Do toxicant levels vary across people with different environmental exposures? 	<p>What exposures can be evaluated?</p> <p>Exposures can occur from a variety of sources including -</p> <ul style="list-style-type: none"> ▪ air pollution ▪ drinking water contaminants ▪ pesticides ▪ second-hand smoke ▪ certain plastics ▪ contaminated soil/dust <p>And a variety of exposure routes -</p> <p>Ingestion - Inhalation - Dermal Contact - Food</p>	<p>Many types of chemicals can be evaluated by NM or other Consortium State Labs -</p> <ul style="list-style-type: none"> ▪ Metals ▪ Solvents ▪ Radionuclides ▪ Pesticides ▪ Herbicides ▪ Nicotine metabolites ▪ Phthalates (from plastics) ▪ Chlorinated compounds
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Progress and Products

<div style="border: 1px solid black; border-radius: 15px; padding: 5px; background-color: #e6e6fa; text-align: center;"> <p>Biomonitoring Plan for NM Exposures</p> </div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; background-color: #ffcc99; text-align: center; margin-top: 10px;"> <p>Plan for Pilot Study of Arsenic and Metals in Urine</p> </div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; background-color: #ffcc99; text-align: center; margin-top: 10px;"> <p>Plan for sampling in early 2005</p> </div>	<p>Meetings are being held with environmental health partners and the public throughout the State to identify potential chemical exposures of concern</p> <ul style="list-style-type: none"> ▪ Concerned citizens ▪ Tribal Representatives ▪ NM Environment Dept. ▪ UNM/NMDOH Epidemiologists ▪ Local Health and Environment Agencies 	<p>Initial study will evaluate metals in urine and drinking water:</p> <p style="text-align: center;">Antimony, arsenic Beryllium, cadmium Chromium, copper Lead, Manganese Mercury, Molybdenum Uranium, Vanadium And Zinc</p>	<ul style="list-style-type: none"> ▪ All results are reported to the participant and are confidential ▪ Participants complete an exposure survey and provide a one-time urine sample ▪ Proposed metal pilot study counties: <div style="text-align: center; margin-left: 100px;"> <p>Sandoval</p> <p>Dona Ana</p> <p>Taos</p> </div>
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Biomonitoring Project is funded through a CDC Grant -- Interest in the project should be directed to NM Department of Health Environmental Health Epidemiology Bureau:
888-878-8992

