

Update on Research Needs

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Barriers

- Success - Accomplishments
- Funding – NIH, DOE, NIOSH
- Interest – 2008 Call for projects

Accomplishments

- Develop and validate improved screening and diagnostic tests, including the identification of genetic factors that relate to risk.
- development of high volume personal pump.
- **Select technologies, further develop, validate, and deploy real-time monitoring methods**, including aerosol and particle reference materials.
- Develop an animal model of human CBD.
- Characterize and determine the health significance of the physico-chemical properties of beryllium aerosols in the workplace as they relate to risk.
- Develop a method for quantifying skin, **mucous membrane exposure and their role in disease progression**.
- Develop an intermediate near real-time monitoring instrument / method / analytical method.
- Characterize operations and particle size distribution in terms of health risk.
- Determine the relationship between surface contamination and health risk.
- Develop standardized and validated sampling methods for general and porous surfaces, bulk samples, vacuuming, and other relevant media.



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Number One Priorities

- Basic Research

Develop and validate improved screening and diagnostic tests, including the identification of genetic factors that relate to risk.

- Health Effects

Determine the dose-response relationship for beryllium sensitization and disease for different exposure parameters, i.e. mass, number, size fraction, chemistry of particle surface.

- Exposure Control

Develop improved engineering and administrative controls for maintenance, construction or demolition activities

- Exposure Assessment

Develop a sampling method that characterizes beryllium particle exposure by mass, number, size fraction, chemical form and surface area



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Hierarchy of Controls

