

# Abstract

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### **Use of GIS in Population-Based Human Health Risk Assessment**

**Track:** Health and Human Services

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Human health risk estimates often assume that hypothetical human receptors are present and exposed all across a study area. Using actual population data in a risk assessment enhances the usefulness of the risk estimates by indicating how many people are located where particular exposure concentrations occur. In addition, land use data can augment population data to draw conclusions about exposure pathways of specific demographic groups such as rural residents, farmers, and urban gardeners. This type of refined risk analysis allows both risk estimation for specific population subgroups and the number of individuals in different age cohorts at specific risk levels.

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