Abstract

Persistent organic pollutants and heavy metals are found throughout the environment, making their way into our dietary sources. Exposure to these environmental contaminants may be associated with increased health risks. This project is a secondary analysis of the Alaska Maternal Organics Monitoring Study. The specific aims of this project included (a) providing descriptive analyses on the distribution of environmental contaminants and nutrients in umbilical cord and maternal blood, and (b) analyzing the relationships between maternal and infant demographic and health characteristics linked to environmental contaminants and nutrients in umbilical cord and maternal blood. Key findings from this study included: significant differences between maternal blood fatty acid levels of coastal and riverine communities, significant associations between fatty acids and environmental contaminants, and significant associations between environmental contaminants and infant anthropometrics. Results from this study present information on public health issues in rural Alaska and assist in the biomonitoring of environmental contaminants and their effect on maternal and infant health in the circumpolar north.