A Legacy of Contaminated Sites and Possible Links to Health and Lifestyles in Alaska Native Communities

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ABSTRACT:

Introduction: Contaminated sites exist across Alaska, many within or proximal to Alaska Native villages. Available literature shows the incidence and mortality rates of different cancers, Parkinsonism, Lupus, fetal and neonatal birth defects vary throughout Alaska, most are much higher among Alaska Native populations when compared to non-Alaska Natives. Some communities experiencing higher and multiple disease rates have concerns about environmental contamination and request health assessments. Due to such small populations, national public health reports typically aggregate data of Alaska Natives with all American Indians to establish sample sizes large enough for robust findings, sometimes masking findings.

Methods: Authors used GIS to look at potential associations between known contamination sites and health disorders experienced in Alaska.

Results: In December 2018, authors presented preliminary findings, including maps at the Alaska Tribal Conference on Environmental Management in Anchorage Alaska. Cards were dispersed with a simple questionnaire to gain feedback on communities’ concerns and interest in developing participatory community-based studies. Four different community representatives completed cards.

Conclusions: Environmental contamination is a concern in many Alaska Native communities. Authors are developing an approach utilizing a Tribal Participatory Research (TPR) framework coupled with participatory community-based studies for better understanding of environmental health in several communities. We plan to use TPR to identify the appropriate criteria for aggregating health data on small populations. Combining data from several communities with similar concerns can help create a more statistically, culturally significant, and representative dataset. Outreach to interested communities to address concerns with qualitative participatory knowledge and input is planned.