Abstract

The purpose of the Fish and Human Mercury Biomonitoring thesis project was to provide additional data to support and/or modify the current Alaska Division of Public Health (ADPH) recommendation for consumption of Alaska fish. Volunteer recruitment techniques acquired a total of 273 hair samples and 110 fish samples that were tested for total mercury concentration. A survey tool was administered to hair sample participants. Data analysis was performed in SPSS to determine significant correlations between reported consumption frequencies and hair mercury levels. Fish species mean mercury concentrations from this study were compared to previous state means; they did vary. Hair and fish mercury concentrations in samples from this study were well within safe limits. However, it was concluded that fish consumption advisories should be modified for demographic populations that may be more susceptible to low level mercury exposure through fish consumption and for certain species and sizes of fish.