

**Abstract**

The number of unsatisfactory sputum specimens submitted to the Alaska State Public Health Laboratory for culture testing has increased from 2% to 12%, from 1994 to 2005. This project set out to determine possible causes and suggestions for improvement.

Analysis of existing laboratory data for tuberculosis samples submitted 1994-2005 based on unsatisfactory reason, submitter region, and population size. Interviews of health care providers from a representative sample of regions, population sizes, and TB Control partners in Alaska were conducted to determine user-perspective barriers and suggestions for improvement.

Data analysis revealed that the two most common reasons for unsatisfactory specimens were “Quantity not sufficient” and “greater than ten days in transit”. Key informants identified patient compliance as the most significant barrier.

Updated instructions for collecting and shipping tuberculosis samples, improved communication of protocol changes and testing results, and consistent training in all partner programs may improve tuberculosis sample quality in Alaska.