North Dakota’s Oral Health Surveillance System

North Dakota Department of Health, Oral Health Program (NDOHP) began building its oral health surveillance system in 1993. With limited staff and resources for surveillance, strategies to collect data for surveillance included paying for primary data collection, bargaining/bartering with partners to collect the data, integrating oral health into existing surveillances/surveys, and enlisting the support of key stakeholders to collect the data. In 2007, the NDOHP acquired the services of epidemiology staff equal to a 0.5 full time equivalent position.

A broad-based member advisory committee assists the program in identifying data sources and gaps, providing data for the system, defining the indicators, reviewing data collection methods and processes, interpreting trends and making recommendations for data communication activities. A surveillance logic model was created to guide the program in development of the surveillance plan and system. Currently, the North Dakota Oral Health Surveillance System (NDOHSS) includes 44 indicators in the areas of oral health status and treatment need, utilization of dental services, oral health behaviors, tobacco use, oral cancer, cleft lip and cleft palate, dental workforce, and fluoridation.

The purpose of the NDOHSS is to monitor oral health status and trends and use the information to guide program actions to improve the oral health of North Dakotans. The data is used for program planning and implementation, assessing program effectiveness, guiding policy planning and advocacy and improving program accountability. This resulted in the implementation of oral health components in local maternal and child health programs; targeted fluoride mouth rinse, fluoride varnish and dental sealant programs to high risk children; establishment of a dental loan repayment program to expand the dental workforce; and expanding the scope of practice to allow medical professionals to apply fluoride varnish to high-risk children. The surveillance plan includes a timetable for data collection, a question matrix, a data indicator grid to track trends, and a data communication plan. Program integration, collaboration and strong partnerships assure the sustainability of the system by leveraging resources.

Lessons Learned:

A mature surveillance system shows several years of data and analyzes trends. In order to sustain the NDOHSS, data collection must be consistent and maintained in the NDOHP offices.

In addition, partnerships with other agencies and divisions are essential to sustaining the access to data, proper interpretation of data and development of new data collection tools.

The Licensure Workforce Survey is designed and analyzed by the NDOHP. However, the State Board of Dental Examiners (SBDE) helps with the mailing by including the surveys with the license renewal. The Dental Workforce Survey is conducted by the University of North Dakota-Center for Rural Health in partnership with the NDOHP. Without working partnerships like this, the NDOHSS could not be sustained.

Sustainability also relies on consistency in the collection of data. Several data points measuring the same indicators are necessary to produce trends. These trends are used to identify areas where problems may be growing and where attention is needed to address the problem. In addition, trends
are critical in demonstrating progress that the program and partners are making in improving the status of oral health in North Dakota.

Contact Person(s) for Inquiries:

Kimberlie Yineman, Director, Oral Health Program, North Dakota Department of Health, East 600 Boulevard, Dept. 301, Bismarck, ND, 58505, Phone: 701-328-4930, Email: kyineman@nd.gov

Grace Njau, Epidemiologist, North Dakota Department of Health, East 600 Boulevard, Dept. 301, Bismarck, ND, 58505, Phone: 701-328-4930, Email: gnjau@nd.gov