

## DIVISION of

# Public Health

### MISSION:

*... to protect and promote the health of Alaskans.*



*Dr. Richard Mandsager, Public Health Division Director.*

*“Building on the solid past record of accomplishment of the Division of Public Health, I am really interested in developing a solid quality improvement focus within the division and also improving our partnerships with other organizations in our state’s public health system.”*

*—Dr. Richard Mandsager,  
Director*

The Division of Public Health touches every corner of Alaska, from the biggest cities to the smallest villages. The division’s responsibility is to protect and promote the physical health of all people in the state, and ensure access to quality care.

Disease control is the principal reason for the division’s strong local presence in Alaska communities. Unlike the county- or city-based health department models found in much of the rest of the country, Alaska’s Division of Public Health is the primary — and sometimes the only — public health entity in many towns and villages.

The division focuses on disease and injury prevention and control, health promotion, collection of data to monitor health trends in the population, homeland security related to public health, and the facility licensing activities necessary for a quality health care system. In the last year, the division has built new leadership teams, updated public health laws to better equip staff to deal with an epidemic, and has incorporated methods of responding to bioterrorism and other public health emergencies.

One of the largest operating divisions within the largest department — Health and Social Services — in state government, Public Health runs 20 public health centers throughout the state, plus four additional centers through grants to local governments and nonprofit Native health corporations. The division’s itinerant public health nurses serve Alaskans in 250 communities. The state’s two public health laboratories, located in Anchorage and Fairbanks, are also run by the division. The labs provide human diagnostic testing services as well as reference testing and training for all clinical laboratories in the state. The division’s section of epidemiology monitors and manages infectious disease, providing expert medical consultation to control outbreaks and prevent epidemics.

The division’s far-reaching responsibilities also include provision of certain children’s health services, such as specialty and genetics clinics for cleft lip and palate, cardiac and neurodevelopment problems, chromosomal disorders, and birth defects; surveillance and treatment for newborn hearing problems; women’s health screening for breast and cervical

cancers; medical/legal investigations of unanticipated, sudden or violent deaths through the State Medical Examiner's Office; vital records (births, deaths, marriage, divorce, and adoptions) management through the Bureau of Vital Statistics; and emergency medical services system support through grants, technical assistance, training and certification of providers.

### Accomplishments 2003–05 Highlights

- Achieved comprehensive reform of public health statutes. A bill passed by the 2005 Legislature provides the statutory framework and gives clear legal authority for public health officials to effectively monitor health status in communities, identify health threats and act quickly and decisively to control the spread of disease. The new statute sets boundaries around quarantine, isolation and other kinds of infectious disease control work so that chances of overreaching are very small. The statute also includes due process for the individual, which was not defined before.
- Created a new section of chronic disease prevention and health promotion, integrating programs focused on education and advancement of healthy choices around risk behaviors, such as the tobacco control and obesity programs, with programs targeting chronic conditions, such as the diabetes and arthritis programs.
- Developed a series of emergency training and operations plans and implemented the Alaska Public Health Alert Network in 2004, which provides rapid notification of public health advisories and emergencies to medical providers and public health system partners across the state.
- Centralized certification and licensing services for health care facilities and assisted living homes in a new section of certification and licensing in 2004, streamlining virtually all of the licensing functions related to standards and

enforcement. A bill passed by the 2005 Legislature consolidated virtually all of the licensing functions related to standards, enforcement and appeal rights into a centralized chapter of Alaska law.

- Received an appropriation from the 2005 Legislature for the construction of a new Alaska State Virology Laboratory in Fairbanks to replace a 38-year-old facility. The virology lab tests for infectious diseases caused by viruses, including rabies, influenza, SARS, West Nile Virus, Norovirus, hepatitis, HIV, measles, mumps and rubella. In fiscal 2004, the Fairbanks lab tested 36,000 specimens.

### What we continue to work on

The division is studying ways to improve the delivery of public health services using several strategies, which include developing a performance management system to improve the effectiveness of the division and Alaska's overall public health system; enhancing the team-based approach to manage public health preparedness efforts and emphasize training and participation in exercises; developing capacity and management support for making public health information and data easily available to policymakers, partners and communities; and developing strategies to enhance the training, recruitment and retention needs of the statewide public health workforce.

Other challenges facing the division include being prepared for emerging infectious diseases, such as SARS and pandemic influenza; ensuring the vital records of Alaskans are protected from identity theft; the need to improve tracking of immunizations; and the need for better access to prenatal care.

Additional efforts include the division's ongoing attempt to lower injury rates — Alaska's rate of unintentional injury is the nation's highest; addressing rising overweight and obesity rates; sustaining Alaska's largely volunteer-based EMS system; and reducing rates of teen pregnancy and sexually transmitted diseases.

## Alert public health nurse confronts pertussis outbreak

*“Pertussis is very infectious between one and two weeks. By treating all the residents, we were trying to suppress the outbreak in that facility — and we stopped it.”*

—Gemma Smith

Gemma Smith wanted to be a public health nurse ever since nursing school at University of Alaska Anchorage. “Public Health nurses are important players in prevention,” she says, “like educating the public about the importance of immunizations.” She was also drawn to other aspects of public health, especially solving the mysteries of disease outbreaks.

Little did she know that after only 18 months as a Public Health Nurse II in Kenai, she would find herself making a difference to her community during the recent pertussis outbreak.

As lead nurse in controlling the outbreak, Smith was in a unique position because she continues to work part time on weekends at a Kenai area nursing home where the highly contagious bacterial infection first surfaced. She worked there before working for the state, and has continued part time because, she says, “I like having a one-on-one experience with patients, and I enjoy working with the elderly.”

Although pertussis, commonly known as whooping cough, is generally considered a childhood disease, people of any age can get it. The illness is transmitted person-to-person by direct or droplet contact with nasal secretions of an infected person.

Smith first noticed on July 30 that about 10 of the nursing home residents were coughing. “I had an inkling, a feeling that it was more than a cold or upper respiratory infection,” she recalls. Two days later, the home’s nursing director told her that pertussis was suspected after a local doctor diagnosed one of the facility’s kitchen employees.

“Based on that, I contacted Ann Marie Bailey, a nurse epidemiologist in Anchorage, and we decided to go to the facility and conduct tests,” Smith says. “We tested six people and three were positive for pertussis.”

The two sections came together — Public Health Nursing and Epidemiology — to halt the spread. “Neither section could have done it without the other,” Smith’s manager Jo Ann Hagen says. Everyone at the long-term care facility was given medications, even those without symptoms. “Pertussis is very infectious between one and two weeks,” Smith explains. “By treating all the residents, we were trying to suppress the outbreak in that facility — and we stopped it.”

The nursing home has 53 residents and 96 employees. Smith and Hagen believe the outbreak began when one of the staff became infected outside the facility. By late August, there were 28 confirmed cases on the Kenai Peninsula among children and adults. Although the illness is most dangerous during a child’s first year of life, and less threatening to adults, stopping the spread wherever it appears is important.

While it was a team effort, Hagen credits Smith for her thoroughness investigating families connected with the long-term care facility, and for her communications skills. “She was on the phone all day, every day, for several weeks, communicating with — and educating — the long-term care facility staff, Epidemiology staff, families, local hospital staff and her supervisors.” Hagen says. “Gemma was the bridge between all those groups.”



Gemma Smith is a public health detective — and a public health nurse.