

IMPROVING PUBLIC HEALTH IN ALASKA





THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

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Dear Alaskans,

I am pleased to share *Improving Public Health in Alaska* with you. In May 2014 the Healthy Alaskans 2020 initiative convened 80 Alaskans to evaluate our statewide public health system's capacity to deliver the 10 Essential Services of Public Health. A number of areas for improvement were identified, and the results of the evaluation are now available on the Healthy Alaskans website.

Improving Public Health in Alaska is the Division of Public Health's first contribution to our partners' collective response to the Healthy Alaskans 2020 evaluation. This report is intended to help explain what the public health system is and does, and to demonstrate the Division's commitment to working with our community partners on strengthening the system. We look forward to working together over the coming months and years on issues of common concern identified in the evaluation.

A strong public health system is every Alaskan's right, and every Alaskan's responsibility. The staff and leaders of the Division of Public Health are humbled by the trust the people of Alaska place in us to be good stewards of and accountable for the public health services we provide. Thank you for your interest in and commitment to protecting and improving the health of all Alaskans.

Yours in good health,

A handwritten signature in black ink, appearing to read "JC Butler".

Jay C. Butler, MD, Chief Medical Officer and Division of Public Health Director
Alaska Department of Health & Social Services



AN INTRODUCTION TO PUBLIC HEALTH

When we talk about public health, we mean the prevention of illness and injury for the entire community, along with the collaborative system for supporting and taking care of our families and neighbors. Public health is what we do together to create the conditions in which people can be healthy.

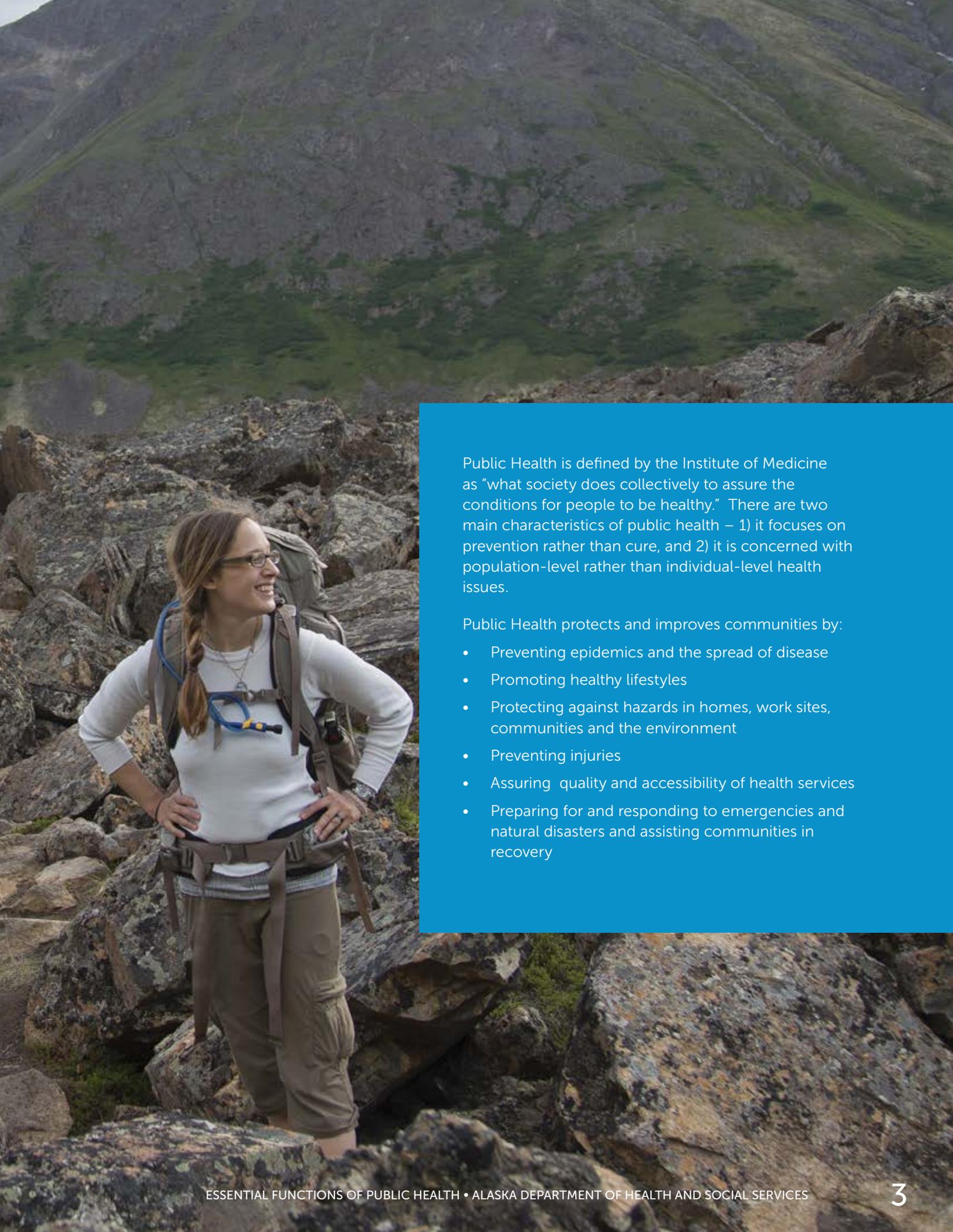
Hand washing, eating healthy foods, exercising, not smoking, drinking alcohol in moderation if at all, and wearing bicycle helmets and life jackets go a long way towards avoiding illness and injury, but individuals cannot create all of the conditions for ensuring good health by themselves.

People have long known the importance of mutual action to protect and promote health. Ancient texts and rituals often established rules to prevent foodborne illness and contagious disease. These days, governments play a role in ensuring safe food and water, maintaining sanitation systems, providing vaccinations, delivering maternal and child health services, enacting public policies such as seat belt laws, and operating programs like obesity and cancer prevention.

The increase in life expectancy from 45 years in 1900 to over 75 years in 2000 occurred primarily because of public health interventions. Improved medical care made an impact, but public health contributed most of those gains through vaccines, improved access to water and food, regulations that safeguard community health, policies that set the standards for health, and many other measures.

The U.S. Constitution reserves to state governments the primary authority and legal responsibility to protect the health of their people. In Alaska the legislature is charged under our State constitution to “provide for the promotion and protection of public health.” State government does not act alone, however. It relies on partnerships with many sectors, including the business community, schools, the media, non-profit organizations, academia and the tribal and private health care system.

Together, the partnerships of public health work together to create conditions in our communities that support healthy living and prevent disease, injury and disability.



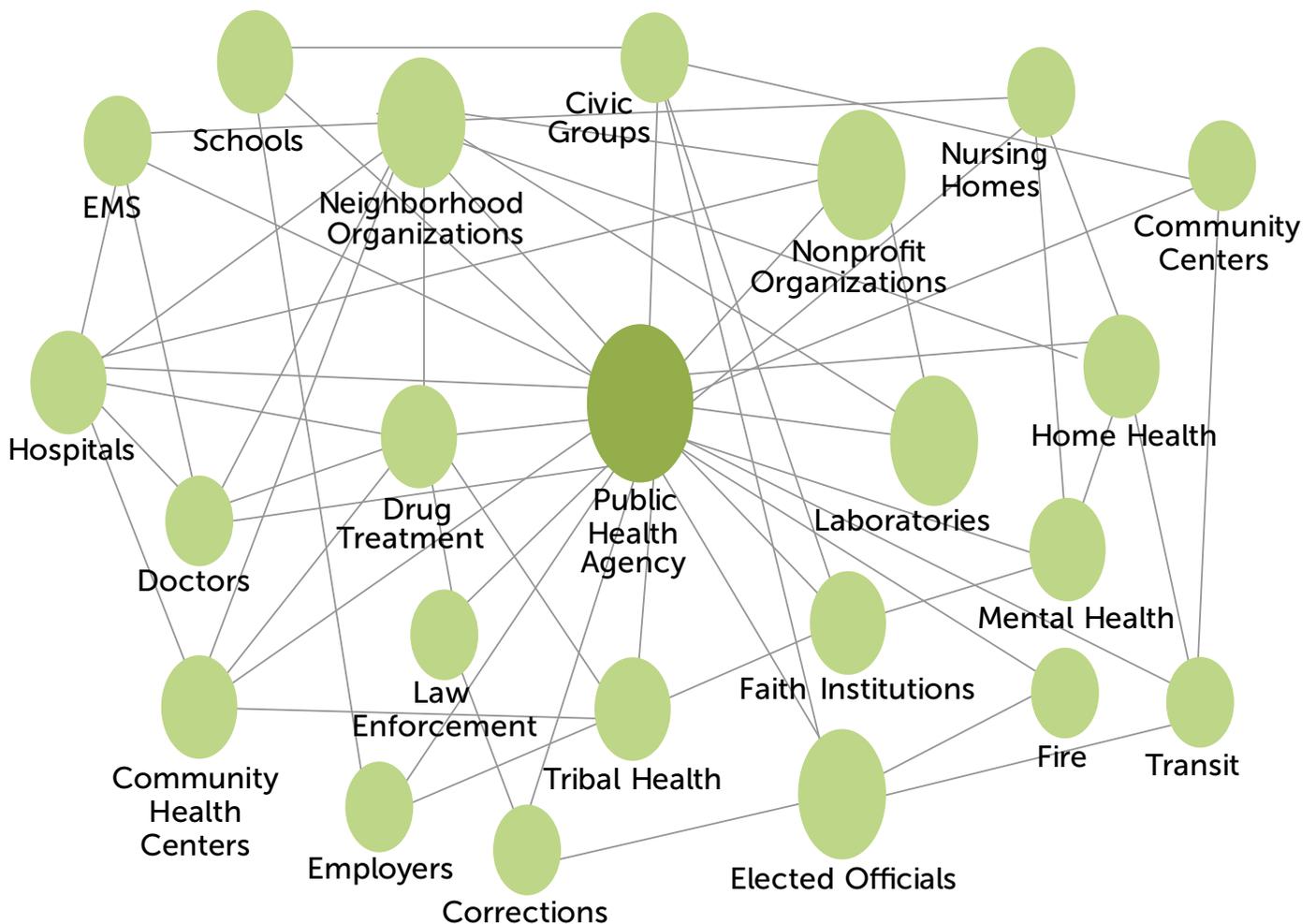
Public Health is defined by the Institute of Medicine as “what society does collectively to assure the conditions for people to be healthy.” There are two main characteristics of public health – 1) it focuses on prevention rather than cure, and 2) it is concerned with population-level rather than individual-level health issues.

Public Health protects and improves communities by:

- Preventing epidemics and the spread of disease
- Promoting healthy lifestyles
- Protecting against hazards in homes, work sites, communities and the environment
- Preventing injuries
- Assuring quality and accessibility of health services
- Preparing for and responding to emergencies and natural disasters and assisting communities in recovery

THE PUBLIC HEALTH SYSTEM

The public health system includes all public, private, tribal and voluntary entities that contribute to the health and well-being of Alaskans. Agencies and organizations involved in health care, public safety, education and youth development, recreation and the arts, economic development and philanthropy, human service and the environment are all contributors to public health and are important system partners.



ONGOING PUBLIC HEALTH SYSTEM IMPROVEMENT IN ALASKA

A sound public health system is essential for protecting and improving health. A report by the Institute of Medicine published in 2003 found that the nation's governmental public health infrastructure had been neglected and an overhaul of its building blocks was needed. About the same time, a statewide public health system improvement initiative resulted in comprehensive reform of the State's public health laws and construction of two new modern State public health laboratories in Anchorage and Fairbanks.

In 2014, a Community Capacity Review supported by the Healthy Alaskans 2020 partnership between the Alaska Native Tribal Health Consortium and the Alaska Division of Public Health continued this evaluative and development work. A team of experts and partners gathered in May 2014 to conduct the review and used a nationally designed and tested process for measuring the capacity of our system to effectively deliver the 10 Essential Services of Public Health.

Today, Division of Public Health leadership supports an internal quality improvement team that looks at how well programs are doing and identifies areas that need to be strengthened. The Division also supports and is expanding the Informed Alaskans initiative to make population health data easily accessible to the public. This assessment, review and information sharing work helps improve the Division's ability to protect and promote the health of Alaskans, and provides accountability to the public for its programs.

The Division intends to continue working with its partners over the coming years in building on the strengths of Alaska's public health system and developing areas that need improvement. Through a process of ongoing strategic planning and performance improvement, public health system partners can and will demonstrate responsibility and good stewardship for the trust the public places in us for improving the health of all Alaskans.

The next section of this report presents stories to help explain how the Division of Public Health participates and partners in delivering the 10 Essential Services of Public Health.



WHAT ARE THE TEN ESSENTIAL SERVICES OF PUBLIC HEALTH?

The field of public health identifies ten essential services for achieving its goals. These functions center on data collection and evaluation, policy development and education, planning and response:

1	Monitor health status to identify community health problems.	Pages 8-9
2	Diagnose and investigate health problems and health hazards in the community.	Pages 10-11
3	Inform, educate, and empower people about health issues.	Pages 12-13
4	Mobilize community partnerships to identify and solve health problems.	Pages 14-15
5	Develop policies and plans that support individual and community health efforts.	Pages 16-17
6	Enforce laws and regulations that protect health and ensure safety.	Pages 18-19
7	Link people to needed personal health services and assure the provision of health care when otherwise unavailable.	Pages 20-21
8	Assure a competent public and personal health care workforce.	Pages 22-23
9	Evaluate effectiveness, accessibility and quality of personal and population-based health services.	Pages 24-25
10	Research for new insights and innovative solutions to health problems.	Pages 26-27

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PUBLIC HEALTH SERVICE

MONITOR HEALTH STATUS TO IDENTIFY AND SOLVE COMMUNITY HEALTH PROBLEMS

Public Health monitors the community's health status by identifying health risks, assets and resources, and attending to vital statistics and disparities. This work includes the maintenance of population health registries, and the interpretation and communication of community data.



Photograph courtesy: Department of Commerce, Community and Economic Development, Division of Community and Regional Affairs' Community Photo Library.



HEALTH STATISTICS

HEALTH DATA HELP YUKON-KUSKOKWIM HEALTH CORPORATION SET PRIORITIES

Every year, the Alaska Bureau of Vital Statistics gives the Yukon-Kuskokwim Health Corporation an overview of birth and death data for its region. Since 2004, YKHC has used these data to build health status reports for its annual Tribal Gathering in Bethel. “It helps guide priorities for corporate decision making,” said Joseph Klejka, medical director for the Yukon-Kuskokwim Health Corporation.

To get the right information to the corporation, the bureau takes data from the two primary census regions covered by YKHC, and then adds four additional villages in a bordering census district to match those villages in YKHC’s service unit. Additionally, the bureau age-adjusts the data using village population age data from the state demographer.

“The age-adjusting is tricky because the state website reports vital statistics by census districts, not by service units,” said Klejka. “Vital statistics helps me obtain and consolidate the information I need. That would be impossible without their help.”

Phillip Mitchell, Chief of Vital Statistics, Division of Public Health, said that giving YKHC access to data specific to its region helps it assess the health of the population it serves. “If a particular indicator is not showing improvement, they can use that information to make programmatic changes or use different intervention strategies to improve health in the future,” he said.

Data about suicide, cancer, injuries and infant mortality have proven vital to YKHC’s planning and programmatic work, said Klejka, who noted that the corporation provides health services to all individuals, Native and non-Native, in its region of 50 rural communities in southwest Alaska.

“Internally it’s sometimes surprising data for us,” Klejka said. “We knew suicide was a big problem, but age-adjusting the data really shows the full scope of the problem.”

When YKHC first requested the data, Klejka was surprised by the bureau’s responsiveness. Now he considers the relationship essential to his work. “They age-adjust, I’m able to make trend lines, and the data really point out our disparities,” he said.

Vital Statistics can often help other corporations or groups requesting similar analysis, Mitchell said. “This kind of data helps them monitor the progress in improving health, and I would say it’s the same for DHSS — it’s one of the department’s goals to improve the health of all Alaskans.”

PUBLIC HEALTH SERVICE

DIAGNOSE AND INVESTIGATE HEALTH PROBLEMS AND HEALTH HAZARDS

Public Health identifies and investigates health threats using available diagnostic services, including laboratory capacity, to classify potential hazards to the community. The information collected allows the public health system to develop and execute a response plan.



Photograph courtesy: the CDC and Arctic Investigations Program
brochure "A Helping Hand: Keeping your family safe from botulism."

INFECTIOUS DISEASE SURVEILLANCE AND CONTROL TRACKING DOWN AND CONTAINING FOODBORNE ILLNESS

By the time a potential health threat like West Nile virus or measles shows up in the news, the public health system has already begun identifying, testing, researching and planning how to reduce and prevent harm. In Alaska, the health hazards range from paralytic shellfish poisoning to rabies. The Division of Public Health activates multiple sections to respond.

After botulism caused a death in Western Alaska in 2014, the Division identified and then monitored for additional cases of the foodborne illness in that community. An infection control nurse at the Yukon-Kuskokwim Delta Regional Hospital contacted the Section of Epidemiology after hospital staff evaluated two surviving patients. Clinical specimens were obtained to help confirm the diagnosis through the Alaska Public Health Laboratories. At that point, epidemiologists could determine the contaminated food product, in this case fermented fish heads.

“Botulism is a public health emergency for which we launch an immediate investigation to make sure those already ill are receiving life-saving treatment, and anyone else who might have shared the food is monitored for signs of illness,” says Louisa Castrodale, an epidemiologist with the Alaska Division of Public Health.

The team notified Public Health Nursing of the test results and worked with nurses in getting information about botulism to their communities. Nurses monitored for illness, and informed and empowered people about how to prevent infection.

A state epidemiologist then traveled to the area with an environmental health officer from the Yukon-Kuskokwim Health Corporation to hold a community meeting and, a month later, participate by phone in a call-in show on a community radio station. The Division sustained its education effort by posting an educational video about botulism on its website and in social media.

Many infectious diseases such as the flu spread easily, but botulism outbreaks are finite because of the limited quantity of contaminated food. In this case, the primary purpose of epidemiology centered on confirming the diagnosis, determining the suspected contaminated product, making sure no one else consumed it, and determining if others were at risk of consuming or sharing it and needed to be evaluated and monitored for illness.

Responding to a foodborne illness or other infectious disease requires Public Health to enlist a network of highly trained professionals from an array of public health disciplines.

PUBLIC HEALTH SERVICE

INFORM, EDUCATE, AND EMPOWER PEOPLE ABOUT HEALTH ISSUES

Public Health focuses on impacting individuals by building knowledge, shaping new attitudes, and developing skills and behaviors for healthy living. To do this, health education and health promotion programs partner with schools, faith-based communities, work sites, personal care providers, and others to implement and reinforce health messages.



CHRONIC DISEASE PREVENTION AND CONTROL

HELPING PEOPLE MANAGE HEALTH CONDITIONS

Most people would prefer avoiding an afternoon of talking about and focusing on their pain, but attendees at a recent health management workshop saw the benefit after just one meeting.

“Since this workshop, I am walking more, visiting with friends more, and taking less pain medicine,” wrote one participant in the post-workshop evaluation. “I am now more determined to keep myself as fit as possible, physically, mentally, emotionally and spiritually.”

Held throughout Alaska by the Alaska Division of Public Health, these workshops are intended for people with chronic conditions such as arthritis, diabetes and heart disease. The workshops help people learn the steps for managing their conditions and taking charge of their lives.

The workshops offer more than a checklist of ways to manage symptoms or ease pain. They also allow participants to connect and build friendships with other Alaskans dealing with similar struggles. One attendee wrote about how the group decided to meet again after the workshop ended. “We all expressed an interest in a reunion so we made it happen.”

Still another participant said that meeting and talking to other attendees helped her feel empowered. “Just being able to talk with others going through some of the same issues as I am and listening to other solutions was very helpful for me. A classmate stimulated me to action — particularly exercising more and eating healthier.”

The participants feel better about their situation and options, are less limited by their illness, and may spend less time at the doctor or in the hospital, said Barbara Stillwater, the program manager for the workshops. “Even better, participants are able to manage their symptoms better and communicate more easily with their doctors and loved ones.”

Dealing with chronic pain is not easy. Through these workshops and the connections participants make because of them, Alaskans in pain and enduring chronic illness know that a healthier outlook and life is just one afternoon away.

4 PUBLIC HEALTH SERVICE

MOBILIZE COMMUNITY PARTNERSHIPS TO IDENTIFY AND SOLVE HEALTH PROBLEMS

Public Health identifies and solves health problems through formal and informal partnerships that include local, state and federal government agencies, along with nonprofits, businesses, community organizations and other stakeholders. These partners work together to galvanize available resources and expertise to promote health improvement.





HEALTH EMERGENCY RESPONSE OPERATIONS MEETING A FLOOD OF NEEDS

Widespread flooding devastated communities along the Yukon River in May 2013. In emergencies like these, Alaska's Division of Public Health provides health and medical life-safety response while working collaboratively with state, federal, Tribal and nonprofit partners.

The loss of power, water, and sewer services, along with flood damage, forced the evacuation of more than 350 residents in Galena. The Division provided medical staff and volunteers, and offered vital records, vaccines and a host of other support services, while also identifying and coordinating with the right partners to meet community needs. The Department of Health and Social Services took the role of State Mass Care lead at the request of the Alaska Division of Homeland Security and Emergency Management, and the Division of Public Health provided full-time staff to coordinate shelter, food services, human services, and pet sheltering and care.

"Everywhere you turned there were logistical issues," said Merry Carlson, chief of Emergency Programs for the Division of Public Health. "How do you return people safely to their community where almost every home is damaged or destroyed, along with much of the community infrastructure?"

Sheltering, whether in Galena or Fairbanks, brought its own challenges, particularly when options for temporary shelter in Galena narrowed to one building. The Mass Care group looked for creative solutions by providing "wraparound services" from food to laundry. If a stovepipe was the last item needed for a warm, secure home, staff found and installed it. If only a few washing machines were in operation, staff helped coordinate the staging, cleaning and delivery of laundry.

Returning as many families and pets to Galena as possible — while also meeting the needs of displaced families in Fairbanks and other communities — required partnerships with Homeland Security, FEMA, The Salvation Army, the Tanana Chiefs Conference, the City of Galena, the Galena School District, the Bureau of Land Management (BLM Barracks), the American Society for the Prevention of Cruelty to Animals, and multiple DHSS and other state agencies, along with federal and non-governmental volunteer organizations.

The Division further proposed and co-chaired the innovative Integrated Services Task Force, using its Alaska-based expertise to gather specific partners to address complex unmet needs. FEMA caseworkers continued to serve as the primary points of contact for clients, while the task force secured the necessary resources and solutions to address issues related to disability, medical care, mental health, substance abuse, safety, child care and housing.

In this way and others, the Division worked with partners doing behavioral health support, child protective services, transportation and other response work in making sure that those affected by the floods received a whole range of services to get them back on their feet.

5 PUBLIC HEALTH SERVICE

DEVELOP POLICIES AND PLANS THAT SUPPORT HEALTH EFFORTS

Public Health develops policies and plans that protect and guide public health practices, improve state and community planning, develop emergency response planning, and align resources to assure successful planning.



PERINATAL HEALTH

ALASKA GOES FROM WORST TO FIRST IN NEONATAL SURVIVAL

Alaska moved from worst to first in infant mortality rates over the last 25 years, according to data published by the American Academy of Pediatrics in 2012 and 2013. The state's neonatal mortality rates decreased to an all-time low of 1.92 deaths per live births in 2010, the most recent data available. Rates were as high as 8.3 deaths per 1,000 births in the early 1980s.

Perinatal regionalization was initiated in the early 1980s led by neonatologists and obstetricians at Providence Alaska Medical Center and Alaska Native Medical Center. As a part of developing this system, which included a Level III Newborn Intensive Care Unit and high-risk obstetrical services, the need to identify and transport high-risk pregnant women and preterm or sick newborns was critical to improving health outcomes. A specialized perinatal/neonatal air and ground transportation service was developed to transport patients to perinatal regional centers early. In addition, the Division of Public Health funded training for clinical providers and health aides in the screening and early recognition and management of pregnant women and newborns living in rural Alaska.

"What's unique about this is really how the state came together," said Stephanie Wrightsman-Birch, chief of Women's, Children's and Family Health, the Division of Public Health. "It was a team effort. Health aides, community physicians, hospitals, neonatologists, perinatologists, nurse practitioners, physician assistants, nurses, conscientious parents and so many others — everyone plays a part in recognizing when a pregnant woman or her newborn needs specialized care."

Birch worked as a newborn intensive care and labor and delivery nurse in the 1980s when the state had the highest neonatal and infant mortality rates in the nation. She said DHSS banded together with the tribal health system and Alaska neonatology doctors to create a system of care that would support Alaska's unique geographic challenges. In addition to a sophisticated early identification and transport system, new physician specialists and nurses moved to Alaska to offer care to high-risk pregnant women and newborns. These included maternal-fetal medicine specialists, pediatric surgeons and pulmonologists, nurse practitioners and registered nurses, as well as others.

"These specialists were key in supporting the clinical needs in Alaska of both pregnant women and premature and sick newborns. These professionals were co-located with the high risk perinatal regional center, which allowed for women and their newborns to receive outstanding care close to home," Wrightsman-Birch added. "Pregnant women and their newborns are much healthier being born in Alaska now as a result of this ongoing statewide effort — and that gives us a lot to celebrate."

PUBLIC HEALTH SERVICE

ENFORCE LAWS AND REGULATIONS THAT PROTECT HEALTH AND ENSURE SAFETY

Public Health develops and enforces laws and regulations that protect health and ensure safety. The work includes reviewing, evaluating and revising laws, regulations and legal authority, and advocating for regulations that protect health. Public Health further supports this service by assisting in compliance efforts and educating stakeholders and the general public about the laws and regulations that safeguard their health.



RADIATION/HIGH ENERGY SAFETY BRINGING RADIOLOGICAL REGULATIONS TO THE 21ST CENTURY

Medical radiology can save lives by identifying and assessing illness and injury, but excessive exposure to radiation can do harm. New regulations written by the Alaska Division of Public Health will establish standards for training in and operation of equipment used in radiation therapy, C.T. (computed tomography), bone densitometry and magnetic resonance imaging (MRI).

Regulations currently in the approval process will comply with federal mandates and bring Alaska into the 21st century in terms of medical imaging safety practices, said Clyde Pearce, Chief of Radiological Health in the Alaska Public Health Laboratories, Division of Public Health. X-ray machines used to rely on film processing to produce images. Operators could recognize when an overexposure occurred because they could see the telltale dark or black image on film. With digital radiography, said Pearce, "computer-based processing allows more latitude in exposure to the extent that an exposure up to 100 times optimum can be adjusted to an interpretable image."

In other words, operators of digital machines do not see visible clues of overexposure. Moreover, the settings on digital machines are often optimized to create the most visually attractive image rather than to minimize dose, according to several surveys of manufacturers and vendors. Pre-set calculations can also limit the operator's ability to control the dose to meet the particular size, age, and medical concern of the patient. "This means an operator who selected the proper procedure button may be unwittingly exposing patients excessively because the algorithms were incorrect," Pearce said.

Some potential immediate and visible effects of overexposure include hair loss, burns, redness of the skin or membranes, cataracts and lesions. Long term effects range from cancer and leukemia to birth defects. "Newer technologies allow much higher exposures to occur, which is why there are more observable injuries throughout the U.S. resulting from the medical use of radiation," Pearce explained.

Changing technology creates a need for ongoing review and assessment. Inspections at Alaska facilities have shown that a lack of training and procedural controls does lead to higher exposures than necessary. New regulations will clarify and expand the training protocol and requirements for various radiological procedures and equipment, and address procedures for current technologies. They will also create standards for the ultraviolet radiation used in indoor tanning.

"Some radiation device operators are fully trained and certified," said Pearce. "We believe that if all operators were fully trained in how to use radiation safely to produce diagnostic images it would reduce the costs to individuals and families by allowing them to get additional treatment and adequate imaging without the need to travel outside their local area. The new regulations are a very important effort to protect all Alaskans from the adverse effects of excessive exposure, while supporting its use in beneficial ways that can reduce health care costs, save lives, and sometimes eliminate surgery."

7

PUBLIC HEALTH SERVICE

LINK PEOPLE TO NEEDED PERSONAL HEALTH SERVICES

Public Health identifies populations that have barriers to care and assures the provision of health care where unavailable. The Division further provides culturally appropriate and targeted health information for at-risk populations, as well as services such as transportation support to assist in getting people the care they need, including entry into a coordinated system of clinical care and ongoing care management.





COMMUNITY AND SYSTEM PUBLIC HEALTH NURSING VACCINE CLINICS AT BASKETBALL GAMES PROTECT FAMILIES AGAINST THE FLU

For some people from Prince of Wales Island, the list of things to do in January looks something like this: work, school, basketball.

So when the Craig Public Health Center wanted to raise flu immunization coverage rates in 2014, the idea of doing a vaccine clinic outside the high school gym seemed like a slam-dunk proposal. The school principal Josh Andrews encouraged an even greater involvement by suggesting flu clinics at its three home games.

Working together, the public health center and school advertised to students and parents through email. They borrowed curtains from the Prince of Wales Chamber of Commerce for privacy and put up information tables in the lobby. During the clinics, kids flocked to the displays and grabbed free toothbrushes and stickers with their parents behind them looking for information about the flu.

“People of all ages attend the games so you can get everyone immunized easily at one time,” explained Colleen Watson, a public health nurse. “It is great for working parents because it is after work or free time, and there is no scheduling of appointments needed.”

Once word got out about how easy and convenient the clinics were, it became a neighborhood affair. “People had time to talk with their friends and neighbors about the vaccine,” Watson said. “It was surprising to me how friends and families encouraged others to get vaccinated.”

What was the primary driver in putting on a successful clinic? “Making the vaccine easy to access in a friendly relaxed atmosphere,” Watson said. “We took the vaccine to the people where they naturally congregate, and that’s the whole idea.”

In the end, 75 vaccinations were given during the three clinics. “People were serious about getting their friends protected,” Watson said. “I think we will need to offer it during the wrestling tournaments as well.”

PUBLIC HEALTH SERVICE

ASSURE A COMPETENT PUBLIC AND PERSONAL HEALTH CARE WORK FORCE

Public Health improves public and personal health services through the education, training and assessment of personnel. The Division emphasizes the maintenance of professional standards and lifelong learning to secure a qualified work force with experience and essential skills.



HEALTH WORKFORCE DEVELOPMENT

SHARP PROMOTES ACCESS TO MEDICAL SERVICES IN REMOTE ALASKA

Those who live away from Alaska's Railbelt know that life can be inconvenient and difficult. Basic supplies like milk and bread can be hard to obtain. Jobs and professional support can be hard to find. Medical and other services can be limited.

Enter the SHARP program, a direct incentive and education loan repayment program that helps put qualified professionals in health care shortage areas. Alaska has historically lower numbers of physicians per 1,000 residents than the national average. Many Alaskans can't choose which doctor or dentist to see because they might not have access to either.

To help fill the void, the SHARP program recruits and retains health care professionals to serve in designated areas in exchange for help with their student loans or other payments.

Dentist Michael Costa now lives and works in King Cove and knows the advantages of the SHARP program. "I don't have to worry if I will make enough to pay my student loans," he said. "This allows me to focus on serving the members of the community where I live."

Costa has stayed longer than he expected and sees the daily benefits of his efforts. "I am going on four years of serving the people covered by the Eastern Aleutian Tribes, and I'm constantly seeing the benefits for the people who live here by having more access to dental services than they have had for quite some time."

The growth and stability of health care services built by support-for-service programs like SHARP improve overall public health by putting knowledgeable professionals in areas lacking in simple services.

SHARP participant Pete Tallman, a child psychologist in Dillingham, said, "This experience has allowed me to serve communities that struggle with staff acquisition and retention while increasing my awareness of health care issues in rural Alaska. SHARP is the state of Alaska acknowledging that all Alaskans deserve quality health care and supporting our work in Alaska's unique and challenging service environments."

PUBLIC HEALTH SERVICE

EVALUATING EFFECTIVENESS, ACCESSIBILITY AND QUALITY OF HEALTH SYSTEMS

Public Health provides ongoing evaluation of personal and population-based health services with attention to quality improvement and performance management. The process involves examining the public health system as a whole, and looking at personal health services to individuals as well as population-based services that target community health by reducing or preventing disease, injury, disability and premature death.



HEALTHY ALASKANS 2020 TARGETING 25 HEALTH GOALS FOR THE STATE

The Alaska Department of Health and Social Services joined the Alaska Native Tribal Health Consortium in creating a statewide initiative called Healthy Alaskans 2020 to evaluate the state's public health system and build a framework for supporting its partners and stakeholders. The initiative's work includes completing a statewide assessment, prioritizing 25 health objectives and identifying strategies and actions to reach those targets by 2020.

From its start in 2011, Healthy Alaskans 2020 — or HA2020 — engaged numerous community groups and professionals in identifying 25 health priorities and producing the "Healthy Alaskans 2020 Health Assessment: Understanding the Health of Alaskans." The assessment released in July 2014 presents information about population characteristics, social and economic factors, health outcomes, and health equity issues in the state. HA2020 also led the effort to plan and release the statewide Community Capacity Review and is working towards a statewide health improvement plan to lay out steps to reach the 25 leading health goals.

"I think that HA2020 has added something unique by including measures that reflect underlying determinants of health that reflect Alaska's development, such as water and sanitation services, education success and poverty measures," said Thomas Hennessy, a member of the HA 2020 advisory board since 2013. Hennessy is the Director of the Arctic Investigations Program, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention. "We can't ignore these if we want to have a sustainable impact on health," he added.

The HA2020 health priorities include indicators concerning the quality and access to health care (rates of preventable hospitalizations and the proportion of people who can afford to see a doctor); leading causes of death (cancer and unintentional injuries); root causes of death and morbidity (obesity and tobacco use); mental health and substance abuse issues (suicide, depression, and binge drinking of alcohol); violence and abuse (child maltreatment and rape); and basic health services (childhood immunizations, and prenatal care early in pregnancy).

"By tracking these factors we put emphasis on people getting early and preventive health services that have the most benefit," Hennessy said.

The evaluative work involved an array of community groups and professionals, along with the collection of public input from Alaskans on what they view as the health priorities for themselves and their communities. With the health assessment complete, objectives in place, and strategies identified, HA2020 is building a plan for meeting these goals.

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PUBLIC HEALTH SERVICE

RESEARCH FOR NEW INSIGHTS AND INNOVATIVE SOLUTIONS TO HEALTH PROBLEMS

Public Health identifies and monitors innovative solutions and cutting-edge research to advance public health. It also conducts epidemiological studies, health policy analyses and public health systems research, and links public health practice with academic and research settings.





OCCUPATIONAL INJURY SURVEILLANCE AND MEDICOLEGAL DEATH INVESTIGATIONS

DEATH INVESTIGATIONS CONTRIBUTE TO TRACKING TRENDS AND DEVELOPING PREVENTION PROGRAMS

Epidemiologist Deborah Hull-Jilly works closely with the State Medical Examiner's Office, the Bureau of Vital Statistics and law enforcement in investigating traumatic and violent deaths. The goal: To prevent similar deaths in the future.

"It's the networking of information that centers on the Medical Examiner's Office in conjunction with law enforcement that allows us to track trends," said Hull-Jilly, an injury epidemiologist and health program manager for the Division of Public Health. "The information the Medical Examiner provides is comprehensive, encompassing the sciences of forensic investigation and forensic pathology."

When seeking the cause and manner of death, the Medical Examiner can do autopsies, along with toxicology tests, said Dr. Gary Zientek, chief of the Medical Examiner's Office. "The scene investigations look for circumstances surrounding the death along with social and history information, and this helps guide further testing."

The data goes into a centralized Alaska Violent Death Reporting System where it provides timely information about factors that contribute to these deaths.

Epidemiologists use the data to find trends and then share their analysis with public health professionals and health care practitioners, who can respond through public information campaigns, establishing health care practices and generating policy change.

For example, a 2013 epidemiology analysis of work-related assaults and homicides determined that these assaults and deaths occurred primarily within protective services, sales and transportation. Violence against health care workers accounted for only 4 percent of the cases identified, but two of the three cases were fatalities.

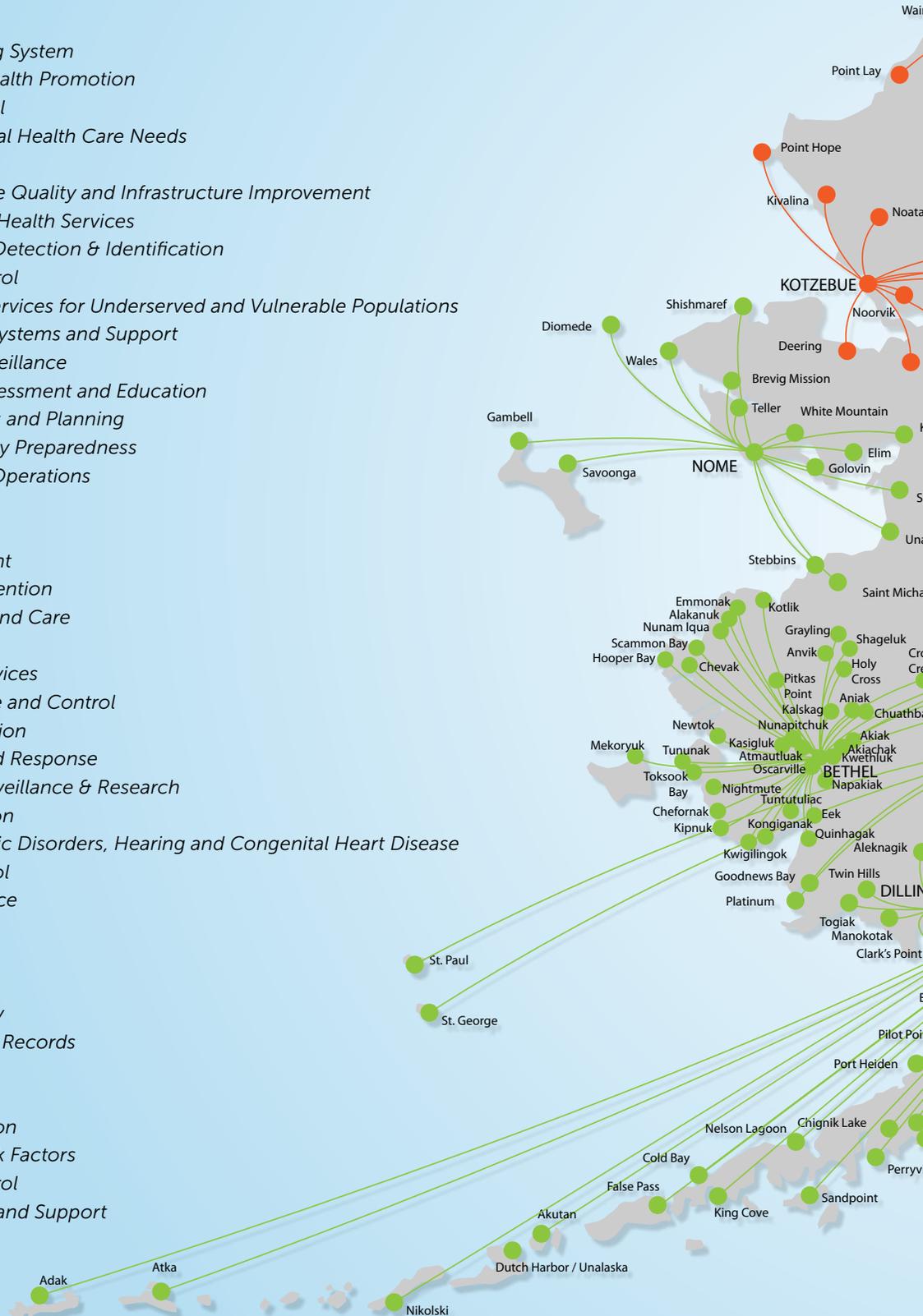
The analysis was published in a state Epidemiology Bulletin, along with background resources, such as a 2005 U.S. Bureau of Labor Statistics survey that indicated that over 70 percent of workplaces don't have a formal violence-prevention policy. The bulletin recommended that employers develop tailored violence-prevention policies, promote open communications and provide employee services after violent incidents. It also specifically stated the importance of health care providers encouraging patients to report violent incidents to senior management.

Making prevention recommendations like these requires an examination of the factors and trends related to the death of Alaskans, said epidemiologist Deborah Hull-Jilly. "It is the collaboration between injury epidemiologists, public safety personnel, and medical examiners and death investigators that provides a clear understanding of the circumstances and environmental factors leading up to a death in order to develop strategies for prevention."

ALASKA DIVISION OF PUBLIC HEALTH

The list below represents programs within Alaska's Division of Public Health. The map to the right illustrates how the State of Alaska and grantees combine efforts to offer health centers and itinerate nurse services to a vast number of communities in Alaska.

- Adolescent Health*
- Alaska Violent Death Reporting System*
- Breast and Cervical Cancer Health Promotion*
- Cancer Prevention and Control*
- Children and Youth with Special Health Care Needs*
- Clinical Laboratory Assurance*
- Community Health, Healthcare Quality and Infrastructure Improvement*
- Community / System Nursing Health Services*
- Contagion and Toxin Disease Detection & Identification*
- Diabetes Prevention and Control*
- Direct Access to Healthcare Services for Underserved and Vulnerable Populations*
- Emergency Medical Services Systems and Support*
- Environmental Exposures Surveillance*
- Environmental Health Risk Assessment and Education*
- Health Care Research, Analysis and Planning*
- Health Care System Emergency Preparedness*
- Health Emergency Response Operations*
- Health Impact Assessment*
- Health Statistics Research*
- Health Workforce Development*
- Heart Disease and Stroke Prevention*
- HIV Surveillance, Prevention, and Care*
- Immunization*
- Individual Clinical Nursing Services*
- Infectious Disease Surveillance and Control*
- Injury/Family Violence Prevention*
- Mass Fatality Preparedness and Response*
- Maternal and Child Health Surveillance & Research*
- Medicolegal Death Investigation*
- Newborn Screening—Metabolic Disorders, Hearing and Congenital Heart Disease*
- Obesity Prevention and Control*
- Occupational Injury Surveillance*
- Oral Health*
- Pediatric Specialty Services*
- Perinatal Health*
- Radiation & High Energy Safety*
- Registration / Issuance of Vital Records*
- Reproductive Health*
- School Nursing*
- STD Surveillance and Prevention*
- Surveillance for Behavioral Risk Factors*
- Tobacco Prevention and Control*
- Trauma System Development and Support*
- Tuberculosis Control*
- Vital Record Special Services*







State of Alaska
Bill Walker, Governor

Department of Health and Social Services
Valerie Davidson, Commissioner

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