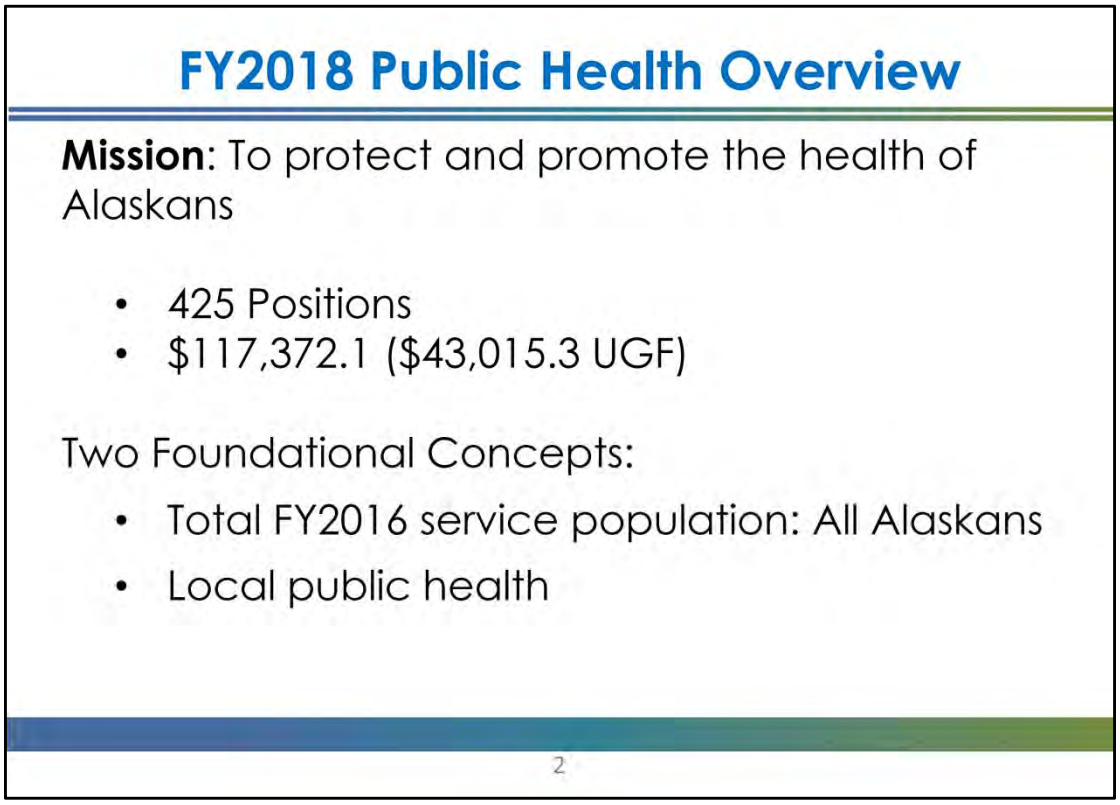
Agenda:

- A review of the budget reductions and impacts since Fiscal Year 2015
- An overview of the Fiscal Year 2018 Governor's budget
- A description of the Division of Public Health's work
- Public health approaches to both reducing healthcare costs and addressing the opioid epidemic
- How the Division of Public Health is strategically focusing our resources around our top priorities and measuring our progress.

Augmenting the slides are some handouts in a separate attachment.

1. A copy of the FY2018 Governor's Budget spreadsheet
2. The Division of Public Health Strategic Plan and "Winnable Battle" priorities
3. Healthy Alaskans 2020 scorecard
4. Public Health Nursing map
5. Grants and Contracts map
6. The Web of Risk Factors and Chronic Conditions
7. Copy of today's slides with notes

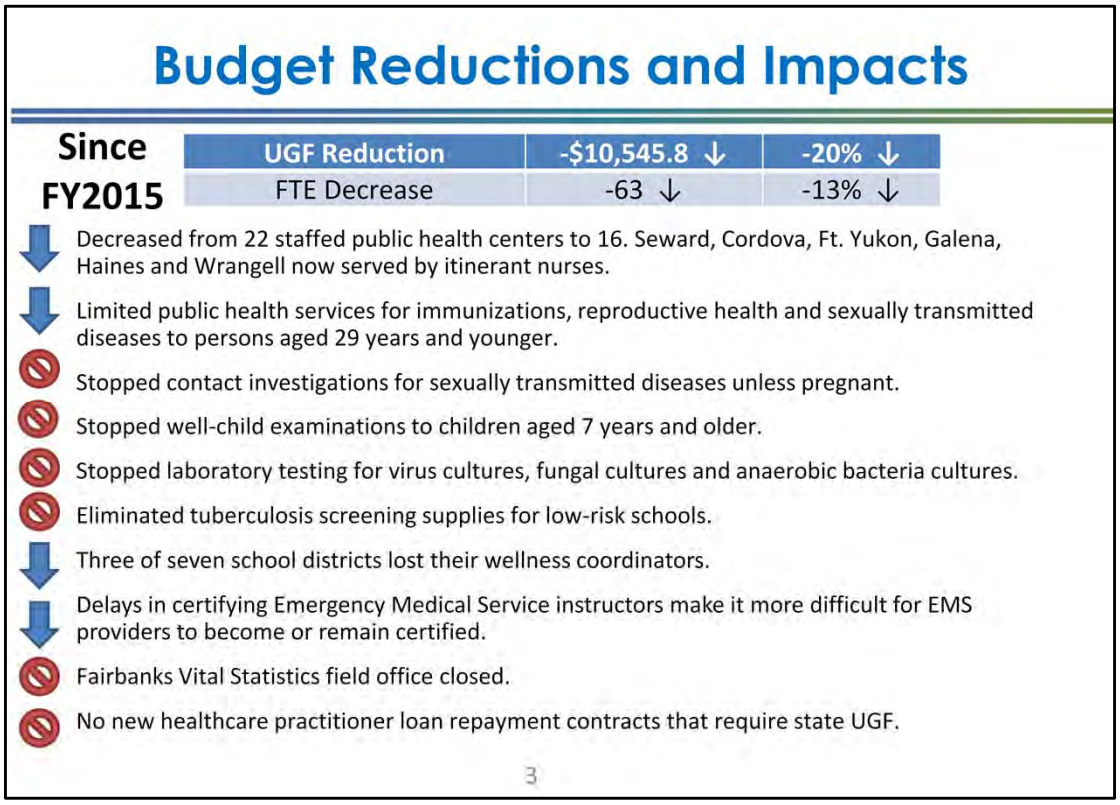


There are two foundational concepts that we would like to highlight to frame the discussion about the Division:

First, we are the *health* side of the Department of Health and Social Services. The purpose of state public health is to protect and promote the health of *all* citizens, not just those who qualify for certain benefits. This is why many states separate health and social services in the structures. This is also why, in the framework of the presentations of divisions within the Department of Health and Social Services, we number the Division of Public Health's service population as the population of the state. However, our work actually extends more broadly to also include persons visiting Alaska for business or pleasure. For example, when a foreign national student returned to Alaska with measles, our response in evaluation, isolation, targeted immunization, and public information directly benefited many Alaskans as well as travelers to Alaska, although most are not aware of that benefit.

Second, although we are a state agency, the Division of Public Health, particularly through the section of Public Health Nursing, is the local, boots-on-the-ground public health in Alaska. Many states have city and country health departments operating in cooperation with state public health; these local agencies are often semi-autonomous and have their own local revenue sources. In Alaska, outside of Anchorage, the Division of Public Health is the primary public health agency, working out of 22 public health centers as the primary local public health agency, and working in collaboration with local community health centers and tribal health organizations. Even in Anchorage, the local public health

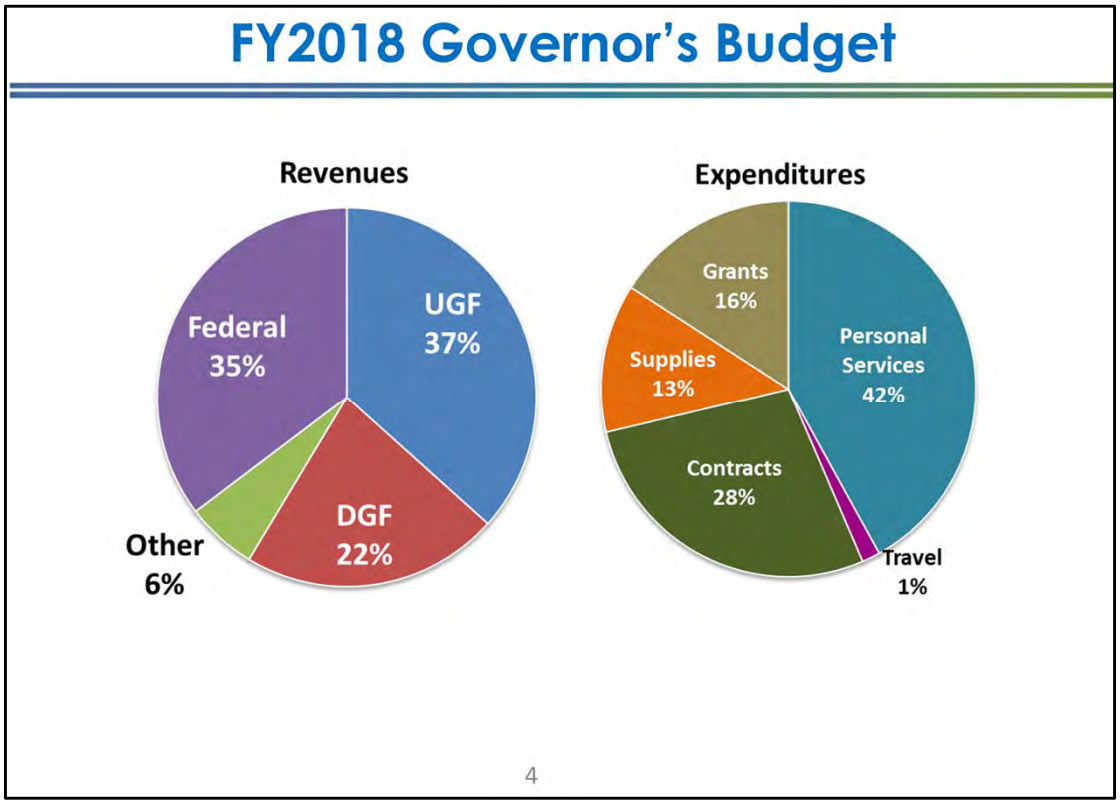
agency is augmented for public health nursing through a grant from the Division.



Since Fiscal Year 2015, the Division's unrestricted general fund (UGF) budget has been reduced by 20% or $10.5 million.

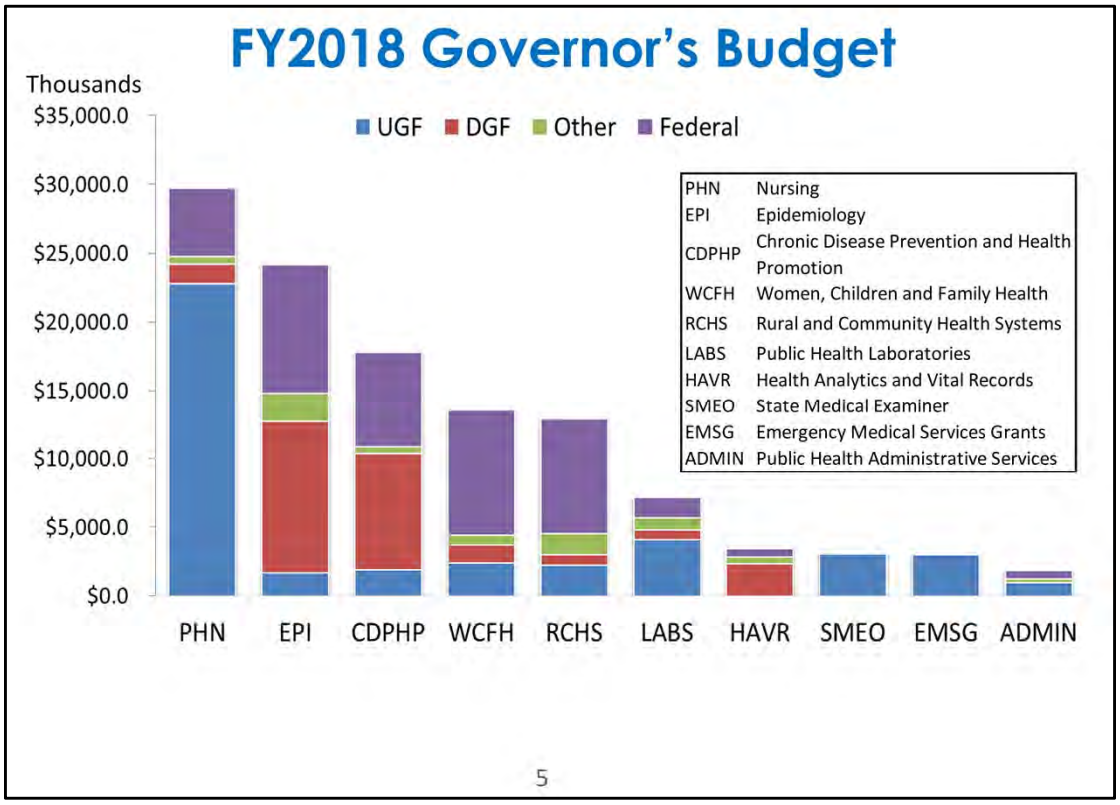
Sixty-three (63) full- and part-time permanent positions were deleted, a reduction in staffing of 13%. Twenty-seven (27) of these positions were filled at the time we eliminated them.

The Division of Public Health's UGF is concentrated in the Public Health Nursing component which has had to disproportionately absorb nearly half of these cuts. Since Fiscal Year 2015, Nursing's UGF budget has been reduced by $4,841.8 thousand (-18%) and staffing by 39 positions (-20%). As a result, we have had to make substantial changes to our service delivery, including the first four changes outlined above. The list also includes changes in services from other Division sections to improve efficiencies and/or to absorb budget cuts.



The Division of Public Health budget is roughly divided into 1/3 unrestricted general fund or UGF, 1/3 federal and 1/3 other funds and designated general funds or DGF. The DGF includes the Tobacco Fund, Vaccine Assessment Fund and program receipts. Other funds are mainly composed of interagency receipts for specialized work we perform for other departments such as health impact assessments for the Department of Natural Resources.

The largest expenditure category is Personal Services at 42%. Grants and contracts, making up a combined 44%, are monies we pass through to for-profit and non-profit entities to support public health activities across the state. Supplies represent 13% of our budget. This category includes drugs and medical supplies. Finally, our travel budget comprises just 1%, the majority of which is for itinerant nurses who travel across the state providing public health services.



The Division of Public Health is organized into 10 components.

- The Public Health Nursing budget is 77% unrestricted general fund and accounts for slightly more than half of the Division of Public Health's total UGF authorization (53%).
- The section of Epidemiology's $11 million designated general fund from the Alaska Vaccine Assessment Fund is 46% of their total authorization.
- Chronic Disease Prevention & Health Promotion's designated general fund, just over half of their total authorization (54%), is from the Tobacco Use, Cessation and Education Fund.
- The budget of both the section of Women's, Children's & Family Health and the section of Rural Community Health Systems are approximately 70% federally funded (67% and 65%, respectively). These sections have the highest proportion of federal funding in the division.
- The Public Health Laboratories are 57% funded through unrestricted general funds.
- Health Analytics & Vital Records designated general fund comes from program receipts (fees) for birth, death and marriage certificates. These program receipts make up 64% of their authorized budget.
- The budget for the State Medical Examiner's Office is 97% unrestricted general funds.
- Emergency Medical Service Grants, managed by the Rural and Community Health Systems section, are 100% unrestricted general funds.
- Administrative Services accounts for 2% of the total Division budget.

FY2018 Governor's Operating Budget
GF Decrements
(-$1,592.1 UGF/-$11,989.6 DGF)

Rural and Community Health Systems (Health Planning & Systems Development)	-$22.7	UGF	Reduce Strengthening Healthcare Access through Loan Repayment (SHARP)
Rural and Community Health Systems (Emergency Programs)	-$50.0	UGF	Emergency Medical Services study expiration
Rural and Community Health Systems (Emergency Medical Services Grants)	-$160.0	UGF	Reduce grants to EMS regions
Rural and Community Health Systems (Community Health Grants)	-$1,164.1	UGF	Transition community health aide grants to 100% federal Medicaid
Chronic Disease Prevention and Health Promotion	-$103.8	UGF	Reduce staff costs due to retirements
Epidemiology	-$91.5	UGF	Reduce unused authority for Alaska Vaccine Assessment
	-$11,989.6	DGF	

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The first four items are from our section of Rural and Community Health Systems. The Healthcare Access through Loan Repayment (SHARP) program was reduced by $22.7 thousand. These funds were available because some of the health practitioner contracts were completed. All existing contractual obligations for the Healthcare Access through Loan Repayment (SHARP) program will be honored.

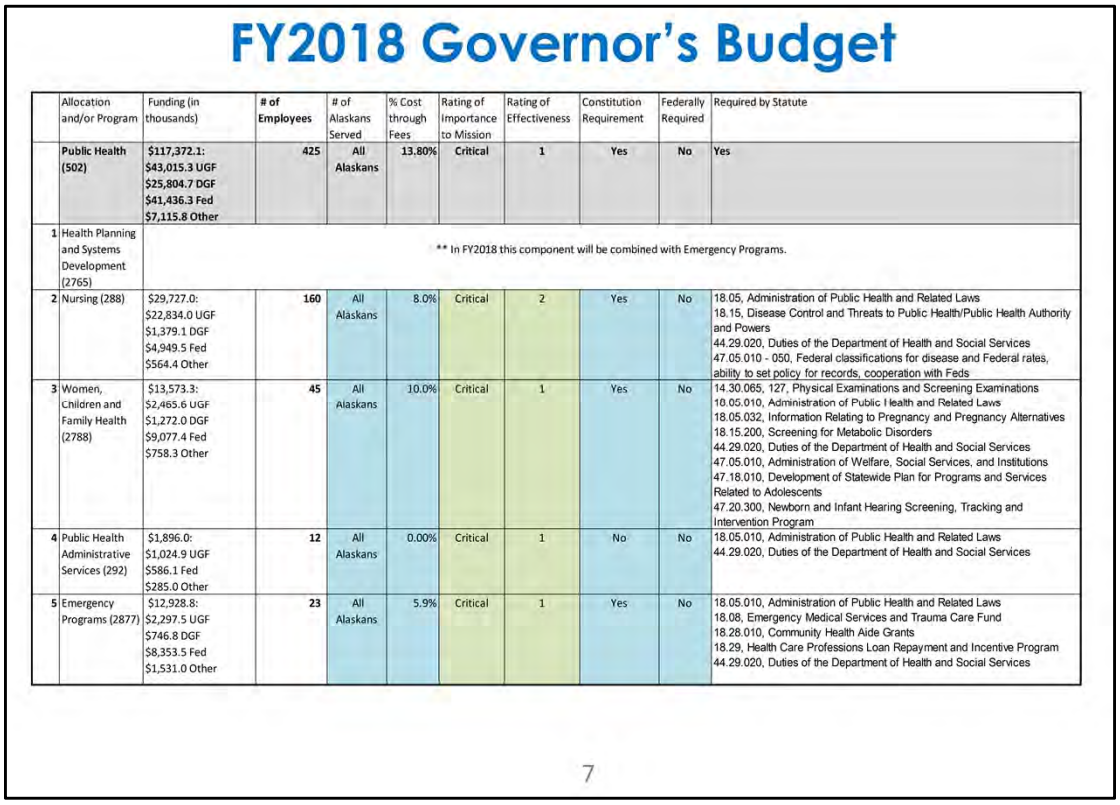
A one-time expense of $50.0 thousand for a study of the emergency medical services system is no longer needed.

Grants for seven Emergency Medical Service regions were reduced by 5%. Emergency Medical Services Grants support training and certification of Emergency Medical Services providers, as well as training for basic Emergency Trauma Technician first responders to enable Alaskans to receive the best in prehospital care. Regulation updates underway will simplify and update certification and instructional processes and reduce associated costs.

The 100% unrestricted general fund Community Health Aide Training and Supervision grants are being transitioned to 100% federal Medicaid reimbursement as part of the Department of Health and Social Services' healthcare reforms.

The section of Chronic Disease Prevention & Health Promotion deleted a position and reduced staffing costs due to the retirement of long-term employees.

Finally, the section of Epidemiology reduced unused authorization for the Alaska Vaccine Assessment Program by $12 million. The remaining $10.5 million authorization is sufficient and in line with actual vaccine purchases.



FY2018 Governor's Budget

	Allocation and/or Program	Funding (in thousands)	# of Employees	# of Alaskans Served	% Cost through Fees	Rating of Importance to Mission	Rating of Effectiveness	Constitution Requirement	Federally Required	Required by Statute
	Public Health (502)	**$117,372.1: $43,015.3 UGF $25,804.7 DGF $41,436.3 Fed $7,115.8 Other**	**425**	**All Alaskans**	**13.80%**	**Critical**	**1**	**Yes**	**No**	**Yes**
1	Health Planning and Systems Development (2765)	** In FY2018 this component will be combined with Emergency Programs.								
2	Nursing (288)	$29,727.0: $22,834.0 UGF $1,379.1 DGF $4,949.5 Fed $564.4 Other	160	All Alaskans	8.0%	Critical	2	Yes	No	18.05, Administration of Public Health and Related Laws 18.15, Disease Control and Threats to Public Health/Public Health Authority and Powers 44.29.020, Duties of the Department of Health and Social Services 47.05.010 - 050, Federal classifications for disease and Federal rates, ability to set policy for records, cooperation with Feds
3	Women, Children and Family Health (2788)	$13,573.3: $2,465.6 UGF $1,272.0 DGF $9,077.4 Fed $758.3 Other	45	All Alaskans	10.0%	Critical	1	Yes	No	14.30.065, 127, Physical Examinations and Screening Examinations 18.05.010, Administration of Public Health and Related Laws 18.05.032, Information Relating to Pregnancy and Pregnancy Alternatives 18.15.200, Screening for Metabolic Disorders 44.29.020, Duties of the Department of Health and Social Services 47.05.010, Administration of Welfare, Social Services, and Institutions 47.18.010, Development of Statewide Plan for Programs and Services Related to Adolescents 47.20.300, Newborn and Infant Hearing Screening, Tracking and Intervention Program
4	Public Health Administrative Services (292)	$1,896.0: $1,024.9 UGF $586.1 Fed $285.0 Other	12	All Alaskans	0.00%	Critical	1	No	No	18.05.010, Administration of Public Health and Related Laws 44.29.020, Duties of the Department of Health and Social Services
5	Emergency Programs (2877)	$12,928.8: $2,297.5 UGF $746.8 DGF $8,353.5 Fed $1,531.0 Other	23	All Alaskans	5.9%	Critical	1	Yes	No	18.05.010, Administration of Public Health and Related Laws 18.08, Emergency Medical Services and Trauma Care Fund 18.28.010, Community Health Aide Grants 18.29, Health Care Professions Loan Repayment and Incentive Program 44.29.020, Duties of the Department of Health and Social Services

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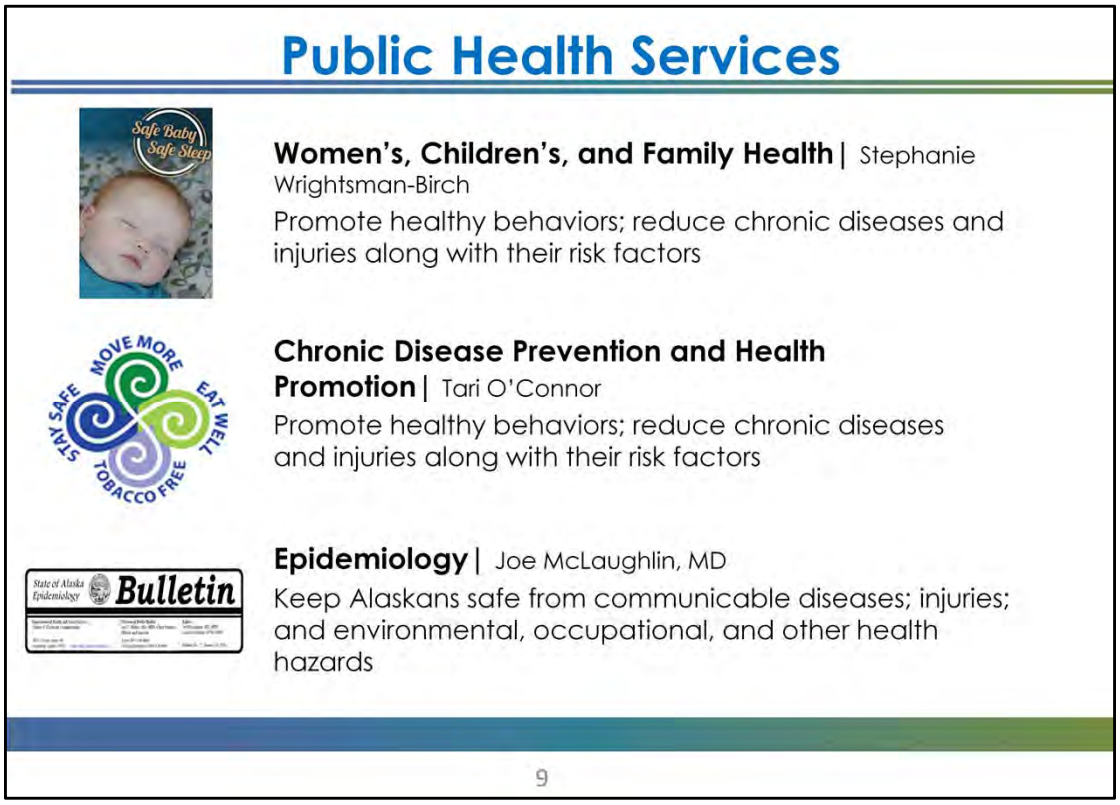
*Handout #1 – FY2018 Governor's Budget spreadsheet

The committee has seen this table before with details about our budget, statutory mandates and constitutional authority. Article 7.4 of the Alaska State Constitution states that "the Legislature shall provide for the promotion and protection of public health." Public health programs are the foundation that ensures all Alaskans have the opportunity for good health no matter where they live. When we do our jobs well – preventing illness and injury, promoting healthy behaviors, and protecting everyone – Alaska is a better place to live, work and play.

FY2018 Governor's Budget

	Allocation and/or Program	Funding (in thousands)	# of Employees	# of Alaskans Served	% Cost through Fees	Rating of Importance to Mission	Rating of Effectiveness	Constitution Requirement	Federally Required	Required by Statute
6	Chronic Disease Prevention and Health Promotion (2818)	$17,836.1: $1,959.6 UGF $8,434.0 DGF $6,956.0 Fed $486.5 Other	41	All Alaskans	1.1%	Critical	1	Yes	No	18.05.010, Administration of Public Health and Related Laws 44.29.020, Duties of the Department of Health and Social Services
7	Epidemiology (296)	$24,169.1: $1,751.6 UGF $11,000.0 DGF $9,332.5 Fed $2,085.0 Other	59	All Alaskans	40.3%	Critical	1	Yes	No	18.05.010, Administration of Public Health and Related Laws 18.09.200, State Immunization Program 18.15.160, Test for Syphilis 18.15.200, Screening for Metabolic Disorders 18.15.250, Vaccination Program for Volunteer Emergency Personnel 18.15.270, Testing Procedures for Gonorrhea and Chlamydia 18.15.370, Reportable Disease List 44.29.020, Duties of the Department of Health and Social Services
8	Bureau of Vital Statistics (961)	$3,500.7: $143.4 UGF $2,227.8 DGF $644.6 Fed $484.9 Other	27	All Alaskans	74.9%	Critical	1	Yes	No	09.55.050-.060, Presumptive Death Certificates 17.37.010-.070, Registry of Patients Relating to Medical Marijuana 18.05.010, Administration of Public Health and Related Laws 18.50, Vital Statistics Act 25.05.071-.391, Marriage Licenses 25.20.050-.055, Legitimation of Children and the Paternity Program 25.23.150-.170, Adoption Proceedings
9	Emergency Medical Services Grants (2309)	$3,033.7: $3,033.7 UGF	-	All Alaskans	0.0%	Critical	1	Yes	No	18.05.010, Administration of Public Health and Related Laws 18.08, Emergency Medical Services and Trauma Care Fund
10	State Medical Examiner (293)	$3,217.6: $3,112.6 UGF $20.0 DGF $10.0 Fed $75.0 Other	19	All Alaskans	0.6%	Critical	1	Yes	No	12.65, Death Investigations and Medical Examiners 18.05.010, Administration of Public Health and Related Laws
11	Public Health Laboratories (2252)	$7,239.8: $4,142.4 UGF $725.0 DGF $1,526.7 Fed $845.7 Other	39	All Alaskans	23.4%	Critical	1	Yes	No	18.05.010, Administration of Public Health and Related Laws 18.15.160, Test for Syphilis 18.60.475 - 545, Radiation Protection 44.29.020, Duties of the Department of Health and Social Services
12	Community Health Grants (2308)	$250.0: $250.0 UGF	-	All Alaskans	0.0%	Critical	1	No	No	18.05.010, Administration of Public Health and Related Laws 18.28.010 - 100, State Assistance for Community Health Aide Programs



The division's core functions are broad and include a myriad of services and activities as part of the overall continuum of health in Alaska. Women's, Children's and Family Health led innovations to address new and ongoing gaps in care, including pilots for shared plans of care for children with complex medical conditions; partnerships to increase cervical cancer screening rates and prevention; the transition of sponsorships of the Cleft Lip & Palate clinic to Southcentral Foundation and the Genetics clinic to the Pediatric Sub-specialty clinic at Providence. With the retirement of Alaska's only pediatric neurodevelopmental physician, WCFH leads workforce development initiatives to strengthen the capacity of primary care providers to diagnose and care for kids with autism. These efforts have reduced state costs and increased access to care.

New public education efforts in Chronic Disease Prevention and Health Promotion include the launch of the state's first opioid public education website in partnership with the DHSS Public Information Team to prevent and reduce opioid misuse and abuse. The section also developed educational materials to reduce health risks from marijuana use among adults and to prevent use among youth through an updated website and a TV public service announcement. Special areas of concern addressed include driving and marijuana use, use during pregnancy, and lack of knowledge regarding consumption of marijuana edibles. Ongoing prevention efforts addressing chronic health conditions are achieving results. Through education and increased access to screenings, 60% of all Alaska adults and 66.4% of Alaska Native adults now meet colorectal cancer screening guidelines, a 5% increase since 2008 for all Alaskan adults and 9% increase for Alaska Native adults. The Section worked to improve patient care in 3,635 patients with high blood pressure and

1,081 patients with diabetes by providing training and technical assistance to six umbrella Federally Qualified Health Centers that provide services in 68 Community Health Centers (CHCs). One such FQHC is Yukon-Kuskokwim Health Corporation with 39 CHCs.

Epidemiology conducted more than 50 outbreak investigations and significant infectious disease health responses, responded to Zika virus disease concerns among Alaskans returning from overseas travel, and published over 26 Epidemiology Bulletins on a wide range of public health topics. The section collected data on over 240 overdose deaths, including abstraction of autopsy/police investigation reports and initiated a Suicide Toxicology Project to assess substance use as a contributory factor to suicide. Staff participated in numerous marijuana public health-related activities and outputs, including a marijuana users survey to inform marijuana use in Alaska. Collaboration with the Alaska Public Health Laboratory reduced response time when the Lab performed in-house testing for varicella (chicken pox) to identify the cause of a rash in a person housed in a state-run correctional facility. The time from specimen collection to result was less than 4 hours which enabled a rapid response to be launched among potentially susceptible contacts to prevent spread of the virus.

State public health nurses provided 54,735 individual client visits and provided direct services to more than 34,000 Alaskans. PHNs provided more than 23,600 immunizations against infectious diseases. Nurses screened more than 14,240 individuals for tuberculosis, followed by 1,928 nursing visits for 445 individuals affected by tuberculosis, and 160 clients who were started on tuberculosis medication. Nurses completed Screening and Brief Intervention for Alcohol (SBIRT) in over 10,800 clients, finding that 27% of those screened were positive for risky alcohol use.

Public Health Laboratories performed 233,533 laboratory tests, an increase of 27% percent from the previous year, as a result of additional and more efficient respiratory virus panel testing, sequencing capabilities, as well as federally funded Ebola and Zika testing. For the fourth consecutive year, 19 of 100 individuals tested for toxic alcohols and glycols were positive for one or more toxic compounds, with more cases of toxic antifreeze ingestions recorded than in the previous eight years. Rapid testing provided Emergency Department physicians with critical information to speed patient treatment and decrease morbidity and mortality. Changes in hepatitis C virus screening reduced the turnaround time to diagnose a patient's condition and allows physicians to offer appropriate genotype-specific treatments quickly and without additional blood draws. The lab provides on-site capacity for rapid response during outbreak investigations, working in collaboration with Epidemiology.

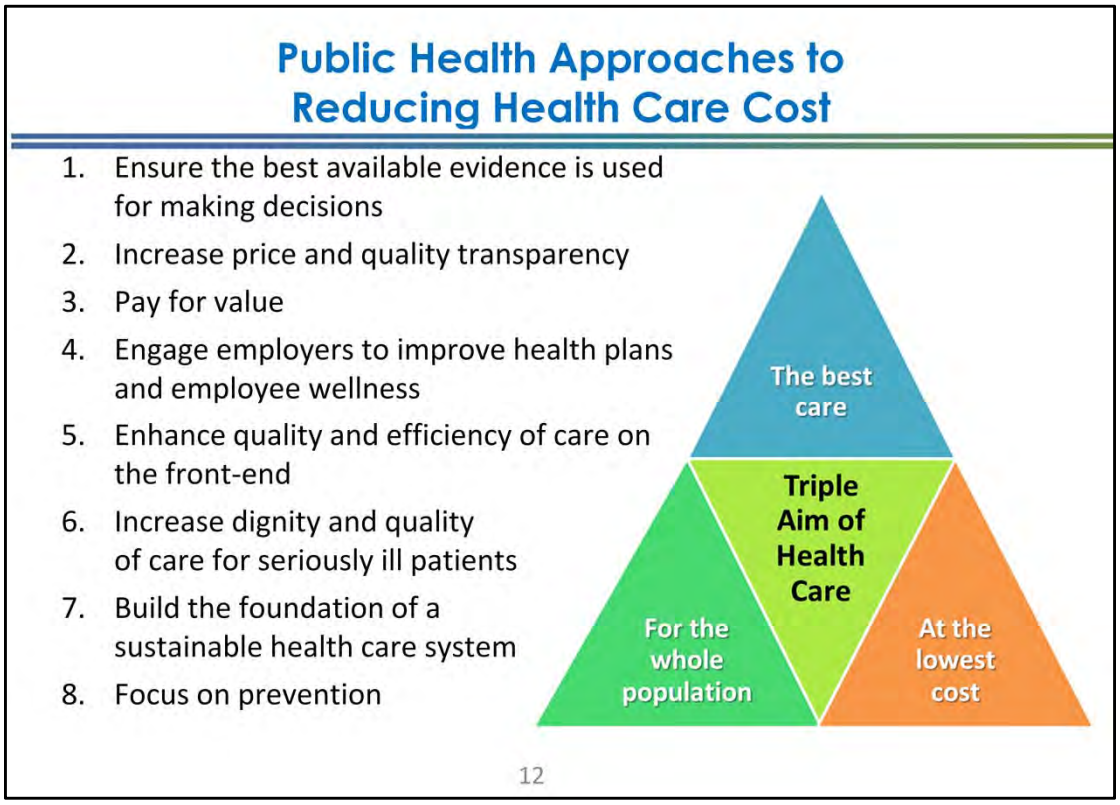
The State Medical Examiner's Office investigated 1,867 cases (44% of all deaths), assuming jurisdiction in 1,073 of those cases. The section successfully coordinated with the Division of Behavioral Health for toxicology testing on suicide cases to identify trends that

might enhance prevention efforts. The office has an agreement with Joint Bases Elmendorf-Richardson (JBER) to perform histology testing at no cost to the state. The paperwork for requesting specimens for paternity testing on behalf of next of kin was reduced 50%, improving customer service and reducing required staff time. Transportation of cases to Anchorage from remote locations is increasingly expensive and delays in transport result in longer times to certify and release cases.

Emergency Programs and Health Planning and Systems Development merged to leverage their shared community-based focus to ensure health care systems and services under all conditions. The new Rural and Community Health Systems section is implementing a $5 million federal grant to reduce the number of prescription drug/opioid overdose-related deaths through the purchase and distribution of naloxone to first responders and the general public. With Rural and Community Health Systems oversight, 17 small hospitals received funding and training to improve quality of care to their patients, their operations, and their financial status. Health Emergency Response Operations coordinated the departmental response to the Southeast and Western Alaska aircraft incidents, providing medical and behavioral health support, essential medical supplies and equipment, and coordination with support entities to provide essential services for affected communities and entities. Health Emergency Response Operations deployed its Incident Management Team to the Kotzebue "Arctic Chinook" full-scale exercise, using its staff, mobile communications, equipment, and mobile medical surge facility to support the response to an arctic cruise ship mass rescue/medical operation. Bleeding control trainings (e.g., tourniquet use) provided to first responders by the Trauma unit were credited with three lives saved.

Health Analytics and Vital Records (formerly the Bureau of Vital Statistics) issued certified copies of certificates to 47,552 individual customers. Staff registered Alaska's 11,153 births, 48 delayed births, 4,270 deaths, 5,362 marriages, and issued 932 Medical Marijuana Registry cards, completed 3,934 paternities, 1,280 amendments/corrections, and 667 adoptions. The section responded to and completed 832 standing and 179 ad hoc

data analysis requests to state, federal, and external agencies to expedite business processes, aid in reporting, and support program development. Among them was analysis that deaths from opioid-related overdoses have increased 24% from FY2015 to FY2016. The section continues to work with key stakeholders to provide data in order to support the reduction of opioid abuse as a public health burden.



The "Triple Aim of Health Care" is a framework developed by the Institute for Healthcare Improvement that describes an approach to optimizing health system performance. See www.ihi.org

- Improving the patient experience of care (including quality and satisfaction);
- Reducing the per capita cost of health care; and
- Improving the health of populations.

Public health approaches to the Triple Aim include:

1. Ensure the best available evidence is used for making decisions

Support clinicians and patients to make clinical decisions based on high grade medical evidence regarding effectiveness and efficiency of testing and treatment options. Apply evidence-based principles in the design of health insurance plans and benefits.

2. Increase price and quality transparency

Provide Alaskans with information on health care costs, prices and quality so they can make informed choices. Provide clinicians, payers and policy makers with information needed to make informed health care decisions.

3. Pay for value

Redesign payment structures to incentivize quality, efficiency and effectiveness. Support multi-payer payment reform initiatives to improve purchasing power for the consumer and minimize the burden on health care providers. Reduce fraud, waste, and abuse.

4. Engage employers to improve health plans and employee wellness

Support employers to adopt employee health and health insurance plan improvement as a business strategy, including encouraging price and quality transparency.

5. Enhance quality and efficiency of care on the front-end

Strengthen the role of primary care providers, and give patients and their clinicians better tools for making health care decisions. Some specific Division activities include improving pre-hospital care by improving Alaska's Trauma system and supporting rational use of medications through antimicrobial stewardship and rational pain management.

6. Increase dignity and quality of care for seriously ill patients

Support Alaskans to plan in advance to ensure health care and other end of life decisions are honored: We are in the final stages of updating and expanding from the current Comfort One "do-not-resuscitate" form to the more comprehensive Medical Orders for Life-Sustaining Treatment (MOLST) form with the Palliative Care group and address any resulting required legislative actions*. Progress toward providing secure electronic access to advance directives:* We are exploring the Health Information Exchange and updating options used in other states toward secure electronic access; however, many Emergency Medical Services agencies don't have capacity to access electronic records, particularly when responding in the field. *Encourage provider training and education in end-of-life care. Establish a process that engages seriously and terminally ill patients in shared treatment decision-making with their clinicians. Use telehealth and redesign reimbursement methods to improve access to palliative care.*

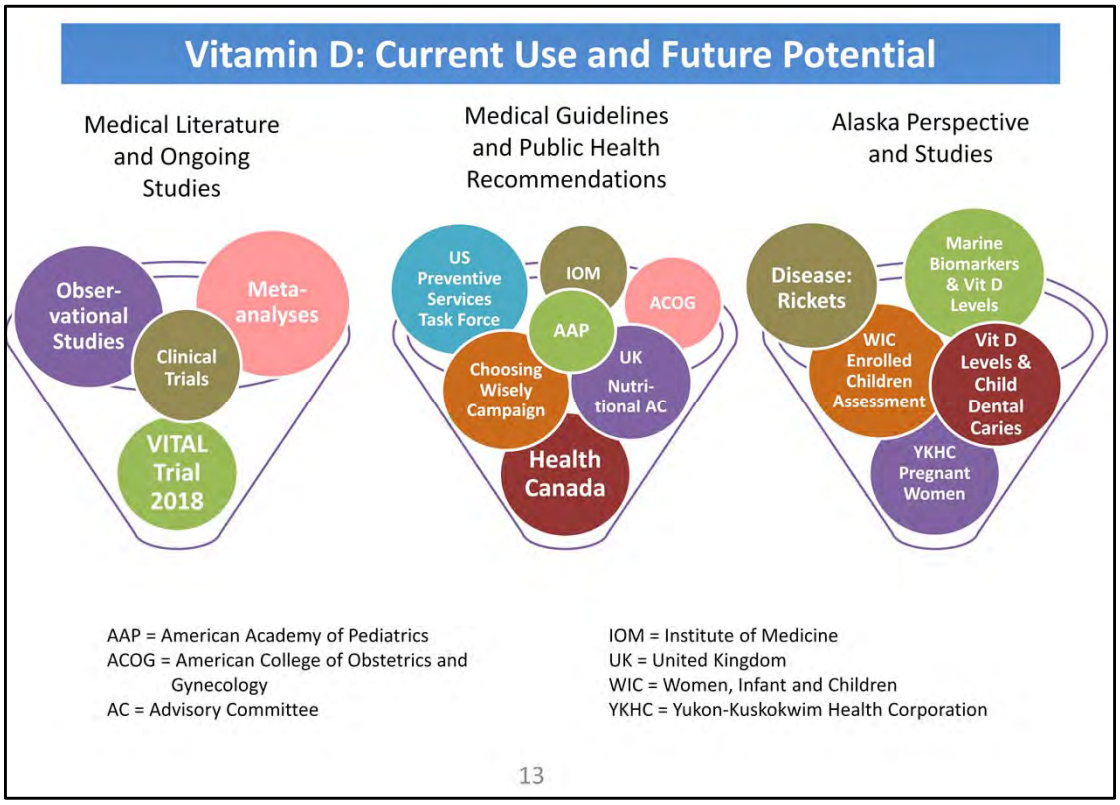
7. Build the foundation of a sustainable health care system

Create the information infrastructure required for maintaining and sharing electronic health information and for analysis of health care data to drive improved quality, cost and outcomes. Support an appropriate supply and distribution of health care workers. Provide statewide leadership to facilitate health care system transformation.

8. Focus on prevention

Create the conditions that support and engage Alaskans to exercise personal responsibility for living healthy lifestyles. High priorities include reducing obesity rates, increasing immunization rates, increasing behavioral health screening, and integrating behavioral health and primary care. One aspect of prevention where there has been a lot of discussion has been nutrition, including macronutrients and micronutrients.

(Additional information on public health approaches to reducing health care costs are outlined in Handout #6 entitled "The Web of Risk Factors and Chronic Conditions.")



One specific micronutrient of interest is vitamin D. It is well known that adequate vitamin D intake or production of vitamin D by the skin through UV light exposure is essential to good bone health. There is also a great deal of interest as well as controversy regarding benefits of adequate vitamin D on non-skeletal health. The public health practice and policy question is whether adequate vitamin D intake can be achieved through diet or requires use of dietary supplements, and if so, who should receive what dose.

Observational studies have shown associations between low serum vitamin D levels and a number of adverse health outcomes. The studies are very useful for hypothesis generation, but they do not prove causation, nor do they answer two critical clinical questions: is low vitamin D simply a marker of poor overall health and does increasing vitamin D levels through diet or use of supplements improve health or prevent ill health.

Clinical trials help to sort out these two questions. To date, most clinical trials are small and the results are mixed. Some of the well-designed but disappointing trials have failed to confirm benefits of supplementation for prevention of colorectal cancer [*N Engl J Med* 2015; 373:1519-30]], preventing asthma in the first 3 years of life by increasing vitamin D levels in pregnant women [*JAMA* 2016; 315:353-61, *JAMA* 2016; 315:362-70], improving outcome in knee osteoarthritis [*JAMA* 2016; 315:1005-13], improving outcomes during intensive care [*JAMA* 2014; 312; 1520-30],

Meta-analyses are studies that pool data from multiple studies to increase statistical power. These studies have been quite variable in their quality and their results. They have suggested that “more is not always better”—that poor health outcomes may be more common at the lowest and the highest serum vitamin D levels, raising important questions about the optimal dose of vitamin D supplementation. The author of an recent

analysis of all of the systematic reviews and meta-analysis concluded: “Despite a few hundred systematic reviews and meta-analyses, highly convincing evidence of a clear role of vitamin D does not exist for any outcome, but associations with a selection of outcomes are probably.” [*BMJ* 2014; 2014; 348:g2035]

Large, population-based trials are crucial for determining benefits and risks from nutritional supplements. Past enthusiasm regarding health benefits of beta-carotene, vitamin E, and selenium have been tempered by health risks detected through larger studies. For example, beta-carotene supplementation was found to have little benefit and actually *increased* the risk of cancer is certain persons. [*N Engl J Med* 1994; 330:1029-35]

Large, population-based studies of vitamin D supplementation to increase serum levels have been ongoing. One of particular interest is the VITAL trial, a large study with over 25,000 participants assessing the role of vitamin D and omega-3 fatty acid supplementation in prevention—the study will end later this year and results are anticipated in 2018

The current state of the art and science on vitamin D supplementation has been nicely summarized by Dr. JoAnn Manson in the Division of Preventive Medicine at the Harvard Medical School: “When there is uncertainty about whether supplementation is warranted, the usual medical principle is to err on the side of caution and to avoid excess. Thus, while awaiting the results of the large trials now in progress, physicians would be well advised to follow current U.S. Preventive Services Task Force and Institutes of Medicine recommendations and avoid overscreening and overprescribing supplemental vitamin D. Doing so is not only in the best interest of current patients but will also help advance knowledge to benefit future patients and inform future public health recommendations.” [*JAMA* 2015; 313:1311-12]

Some of the evidence-based clinical recommendations that have been issued, in addition to those of the USPSTF and the IOM, are those from the American Academy of Pediatrics and the American College of Obstetrics and Gynecology. The Choosing wisely campaign, endorsed by groups such as the American College of Physicians and the American Academy of Family Practice has concluded that there is currently insufficient evidence to support routine screening for supplementation. Because of concern about the risk of vitamin D deficiency being greater in more northern latitudes, we also have great interest in the recommendations from HealthCanada, the UK Scientific Advisory Committee, and European medical societies.

Because of concern about serum vitamin D levels being lower among persons in higher latitudes where sun exposure may be less, we also look for local experience and data. While DPH is does not have the infrastructure to conduct clinical trials, we have been able to collaborate on work conducted by other institutions, such as the University of Alaska, CDC’s Arctic Investigations Program, and ANTHC:

Among young children, cases of rickets have been reported among Alaska children of mothers who exclusive breast feed and do not provide supplementation according to current recommendations.

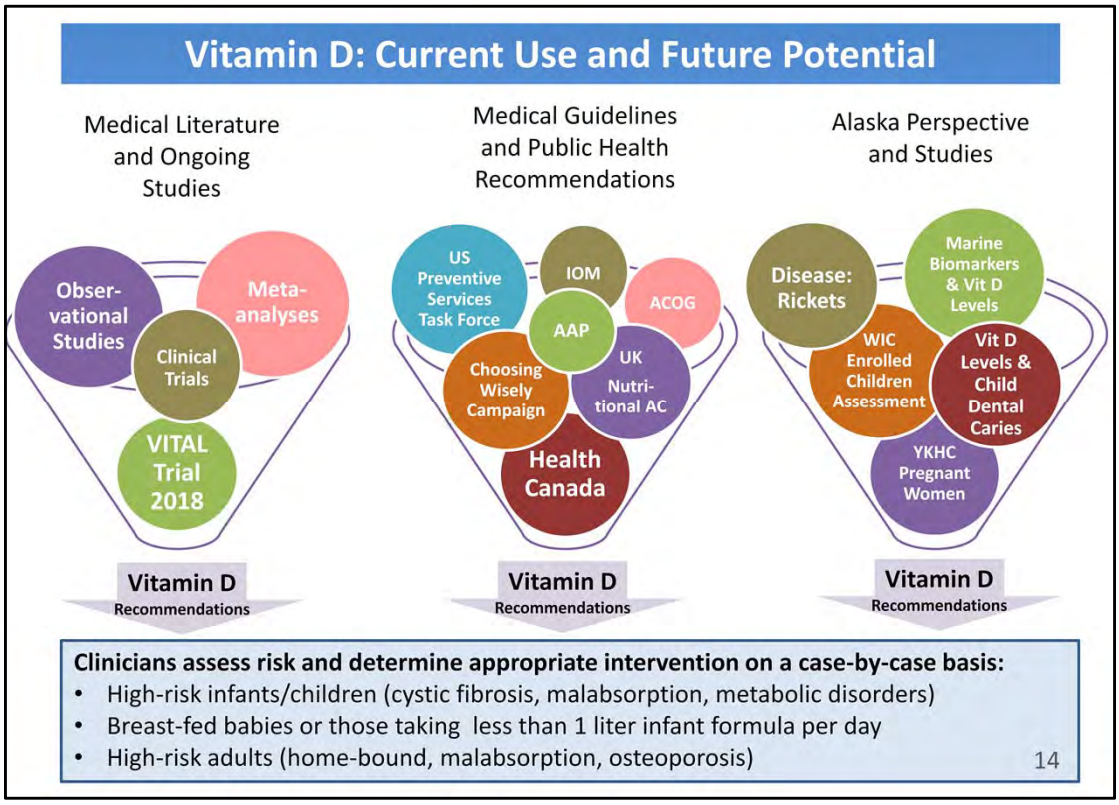
Not surprisingly, a study of children aged 6 to 23 months and enrolled in Alaska WIC found that roughly one in four had low serum vitamin D levels.

Studies in which DPH has collaborated shown that among Alaska Native people in southwestern Alaska, mean serum vitamin D levels have declined over the past 50 years as

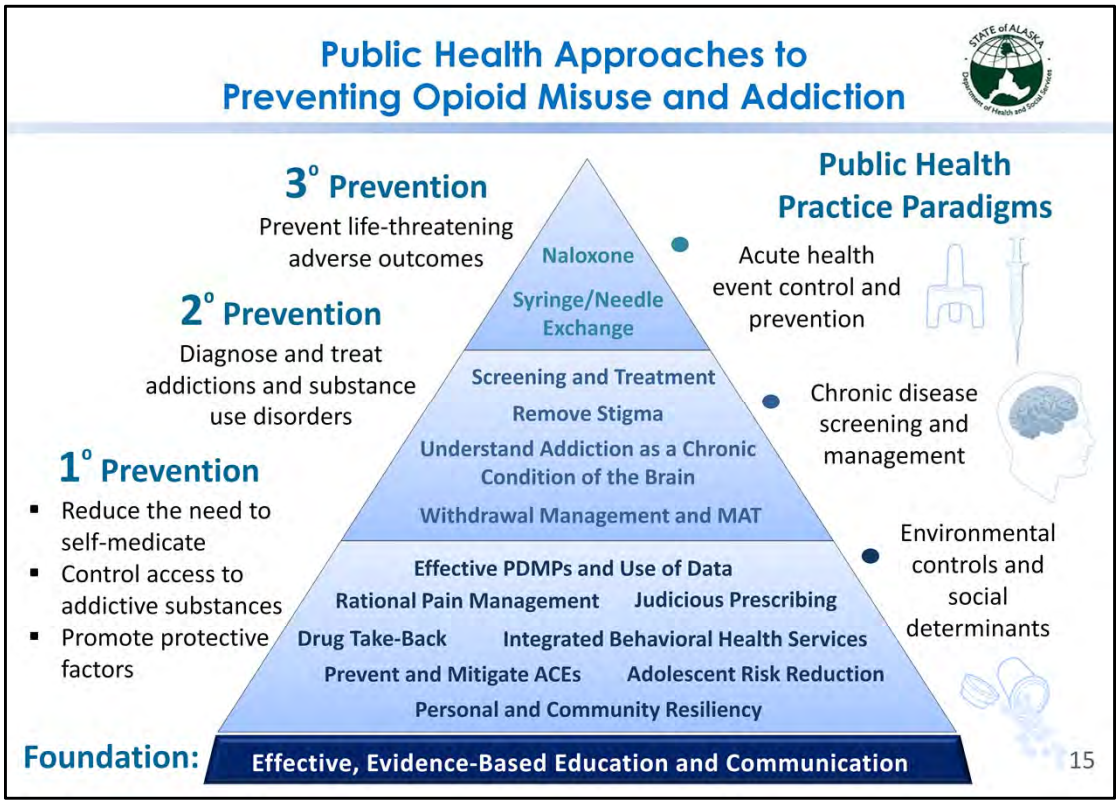
mean levels of biomarkers for consumption of marine omega fatty acids have also declined.

One new project involves a retrospective review of the association between vitamin D levels in early childhood and early childhood dental caries, a condition known to be common about children in rural Alaska.

Another ongoing project, led by the Center for Alaska Native Health Studies, is assessing the feasibility of increasing vitamin D levels among pregnant women receiving care through the Yukon-Kuskokwim Health Corporation by providing supplemental vitamin D. We anticipate initial results of this assessment in about 3 months.



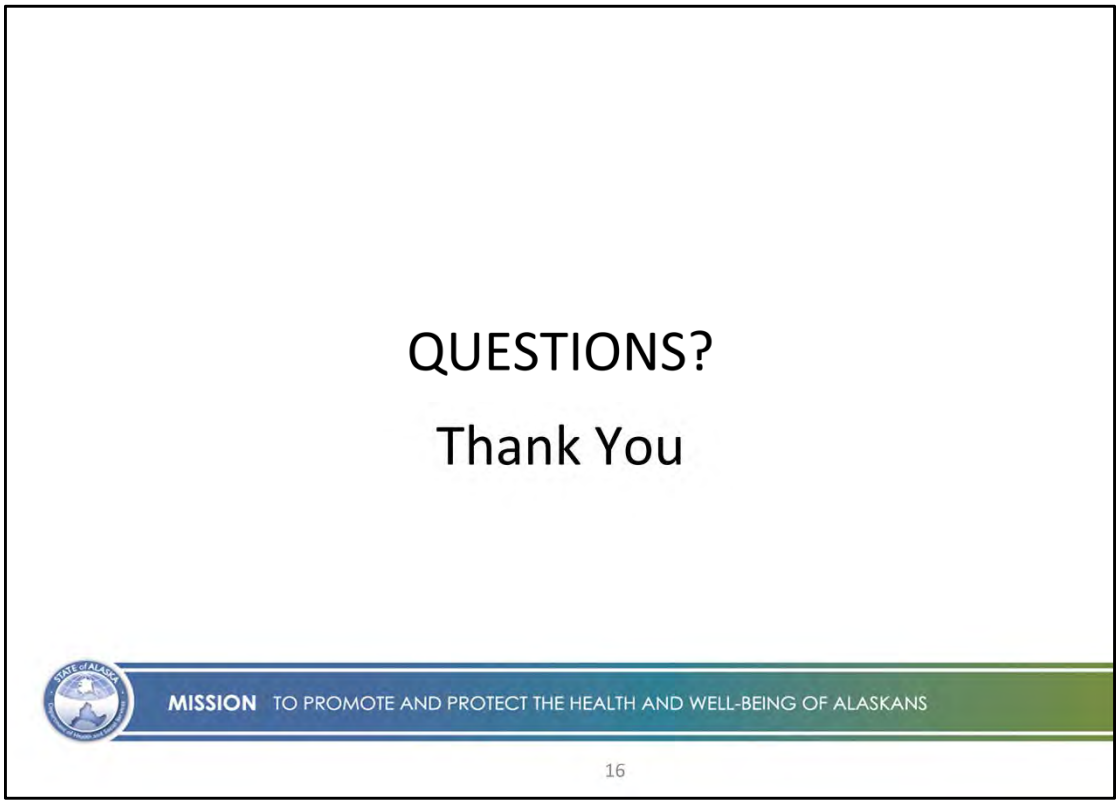
Taken together, our current public health approach to this evolving issue has been to encourage clinicians to assess for increased risk and intervene as appropriate, with particular emphasis on the situations outlined at the bottom of the slide.



Finally, an emerging health issue that the Division has been addressing has been the epidemic of opioid misuse and related health consequences. This is a health challenge that requires a multi-pronged approach to:

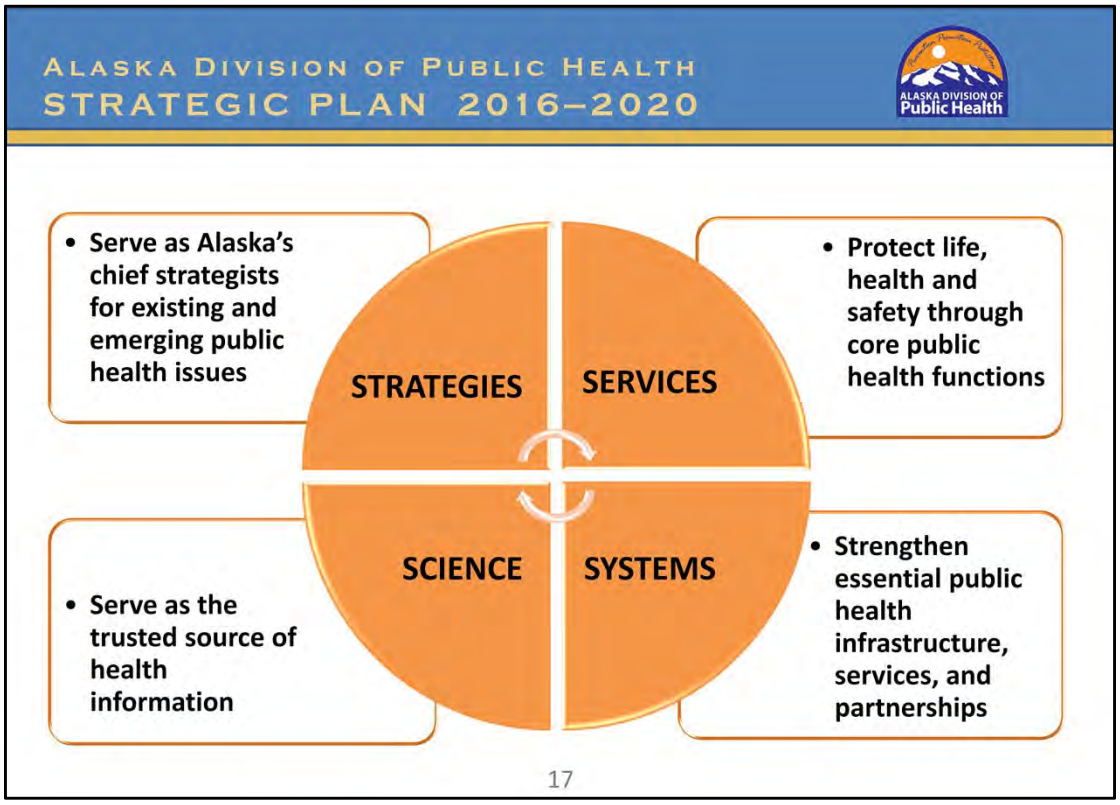
- Prevent the late-stage consequences, such as overdose death and infectious complication, including HIV and hepatitis C
- Increase effective treatment by increasing the understand that addictions are health conditions of the brain rather than moral failings, by removing the stigma associated with addictions, and improving access to care
- Address the drivers of the need to self-medicate and the supply of substances with misuse potential in communities across Alaska.

Addressing this challenge will require commitment and coordination across government and non-government sectors, including public and behavioral health, the health care system, law enforcement, our courts, jails, and prions, tribal organizations, and communities and coalitions at the local level across the state.



This concludes today's presentation.

Additional slides related to the handouts follow.

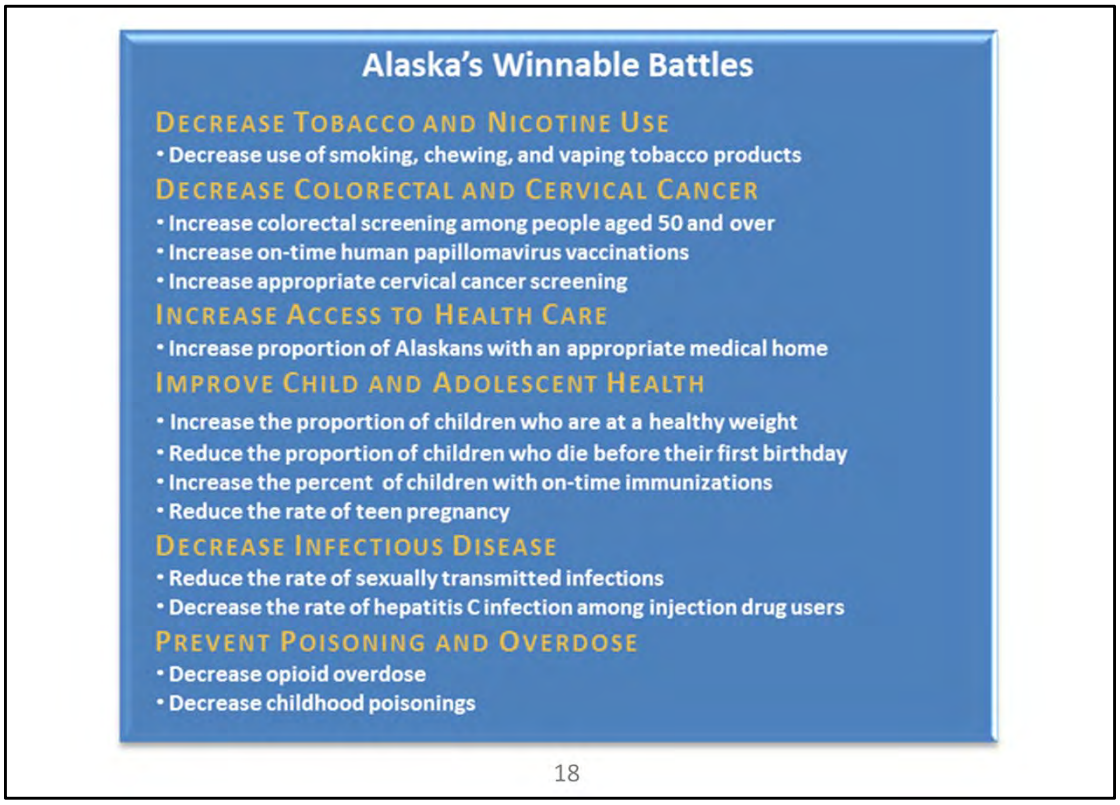


*Handout #2 – Division of Public Health Strategic Plan and Winnable Battles

The Division of Public Health's strategic plan focuses on four core service areas:

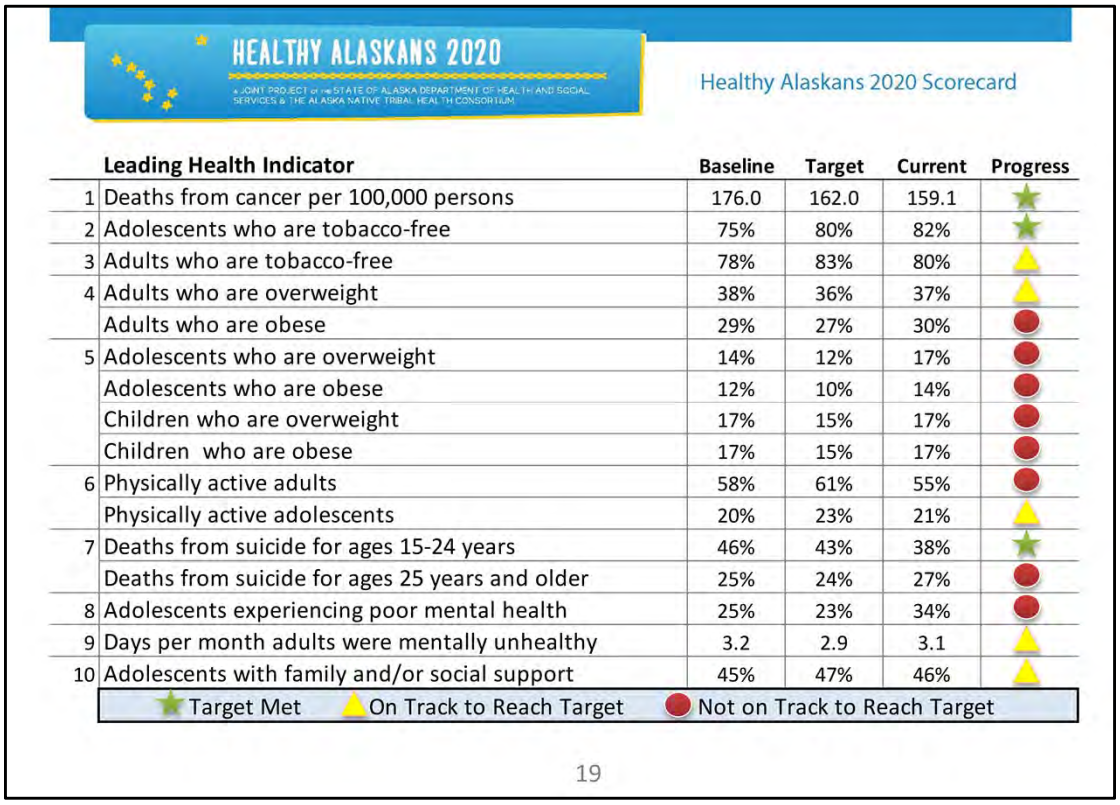
- **Serve as Alaska's chief strategists for existing and emerging public health issues**
  - Collaborate to achieve health equity for Alaskans
  - Engage communities to set and implement public health strategies and policies
  - Foster a culture of health for individuals, families, and communities
  - Translate data into policies and actions affecting population health
  - Communicate and promote wellness and the value of public health
  - Support quality improvement initiatives
- **Protect life, health, and safety through core public health functions**
  - Monitor health status
  - Respond to outbreaks and disasters
  - Prevent or limit illness, injury, and premature death
  - Ensure health services for vulnerable populations
- **Serve as the trusted source of health information**
  - Collect and analyze public health data
  - Share timely public health information important to stakeholders
  - Communicate effective health messages
- **Strengthen essential public health infrastructure, services, and partnerships**
  - Develop policies to improve the health of Alaskans
  - Support an adequate and competent health workforce
  - Leverage resources and collaborate with health partners

- Integrate technology, informatics, and cross-sector partnerships into practice



*Handout #2 – Division of Public Health Strategic Plan and Winnable Battles

The Division of Public Health's Strategic Plan includes six "Alaska Winnable Battles" – specific areas where we can achieve our mission of promoting and protecting the health of Alaskans by 2020.



HEALTHY ALASKANS 2020

A JOINT PROJECT OF THE STATE OF ALASKA DEPARTMENT OF HEALTH AND SOCIAL SERVICES & THE ALASKA NATIVE TRIBAL HEALTH CONSORTIUM

Healthy Alaskans 2020 Scorecard

	Leading Health Indicator	Baseline	Target	Current	Progress
1	Deaths from cancer per 100,000 persons	176.0	162.0	159.1	★
2	Adolescents who are tobacco-free	75%	80%	82%	★
3	Adults who are tobacco-free	78%	83%	80%	▲
4	Adults who are overweight	38%	36%	37%	▲
	Adults who are obese	29%	27%	30%	●
5	Adolescents who are overweight	14%	12%	17%	●
	Adolescents who are obese	12%	10%	14%	●
	Children who are overweight	17%	15%	17%	●
	Children who are obese	17%	15%	17%	●
6	Physically active adults	58%	61%	55%	●
	Physically active adolescents	20%	23%	21%	▲
7	Deaths from suicide for ages 15-24 years	46%	43%	38%	★
	Deaths from suicide for ages 25 years and older	25%	24%	27%	●
8	Adolescents experiencing poor mental health	25%	23%	34%	●
9	Days per month adults were mentally unhealthy	3.2	2.9	3.1	▲
10	Adolescents with family and/or social support	45%	47%	46%	▲

★ Target Met ▲ On Track to Reach Target ● Not on Track to Reach Target

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*Handout #3 – Healthy Alaskans 2020 Scorecard www.ha2020.alaska.gov

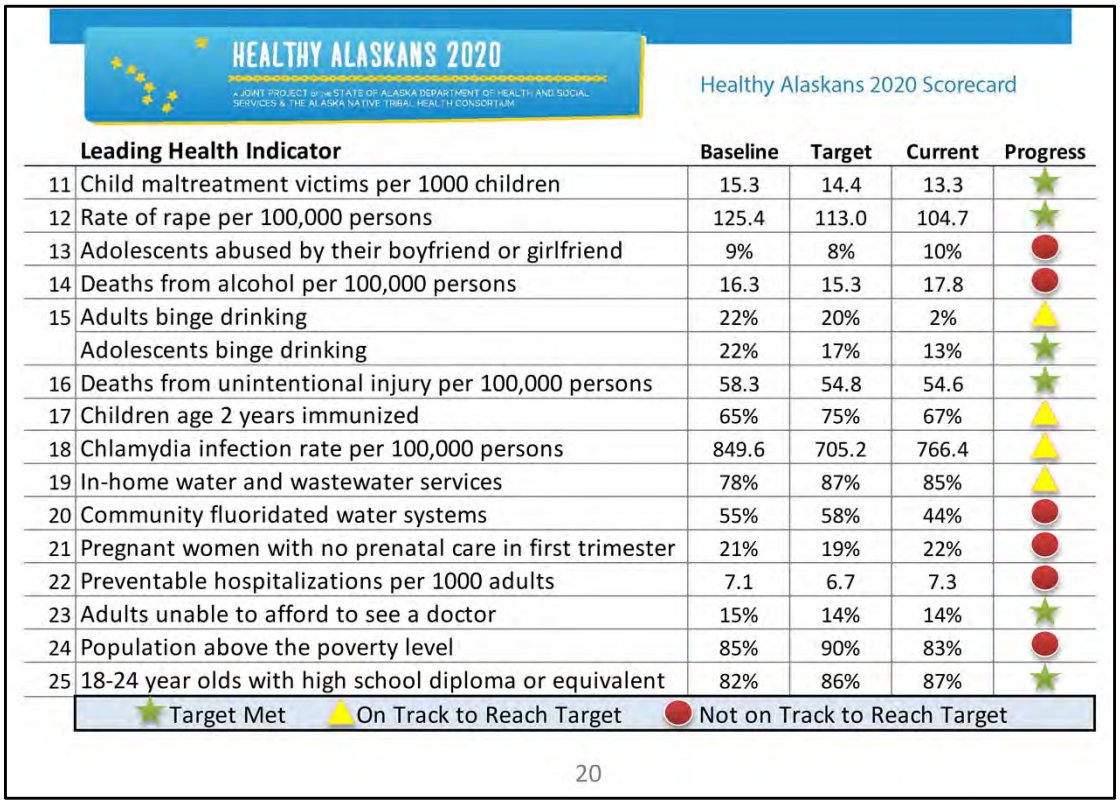
Healthy Alaskans 2020 is the state's comprehensive health improvement plan aligning public health partners around 25 health priorities in a partnership led jointly by the State of Alaska Department of Health and Social Services and Alaska Native Tribal Health Consortium.

In FY2016 the Healthy Alaskans 2020 initiative focused efforts on four pilot projects with champions addressing one of the Leading Heath Indicators:

- tobacco,
- domestic violence,
- suicide, and
- poverty.

Each champion is a professional in the community reaching out to key partners identified in Healthy Alaskans 2020 as well as partners within their existing networks and coalitions. Groups convene to examine data and strategies statewide to address and advance implementation and outcomes related to each indicator.

The 2016 Healthy Alaskans 2020 Scorecard shows that the project is on track to reach health-improvement goals. With four years to go before the target date of 2020, Alaska has met, or is on target to meet, 14 of its 25 goals or Leading Health Indicators for improving the health of all Alaskans. Reductions in suicide, dating violence, child maltreatment, and binge drinking are among the reported results.



HEALTHY ALASKANS 2020

A JOINT PROJECT OF THE STATE OF ALASKA DEPARTMENT OF HEALTH AND SOCIAL SERVICES & THE ALASKA NATIVE TRIBAL HEALTH CONSORTIUM

Healthy Alaskans 2020 Scorecard

	Leading Health Indicator	Baseline	Target	Current	Progress
11	Child maltreatment victims per 1000 children	15.3	14.4	13.3	★
12	Rate of rape per 100,000 persons	125.4	113.0	104.7	★
13	Adolescents abused by their boyfriend or girlfriend	9%	8%	10%	●
14	Deaths from alcohol per 100,000 persons	16.3	15.3	17.8	●
15	Adults binge drinking	22%	20%	2%	▲
	Adolescents binge drinking	22%	17%	13%	★
16	Deaths from unintentional injury per 100,000 persons	58.3	54.8	54.6	★
17	Children age 2 years immunized	65%	75%	67%	▲
18	Chlamydia infection rate per 100,000 persons	849.6	705.2	766.4	▲
19	In-home water and wastewater services	78%	87%	85%	▲
20	Community fluoridated water systems	55%	58%	44%	●
21	Pregnant women with no prenatal care in first trimester	21%	19%	22%	●
22	Preventable hospitalizations per 1000 adults	7.1	6.7	7.3	●
23	Adults unable to afford to see a doctor	15%	14%	14%	★
24	Population above the poverty level	85%	90%	83%	●
25	18-24 year olds with high school diploma or equivalent	82%	86%	87%	★

★ Target Met ▲ On Track to Reach Target ● Not on Track to Reach Target

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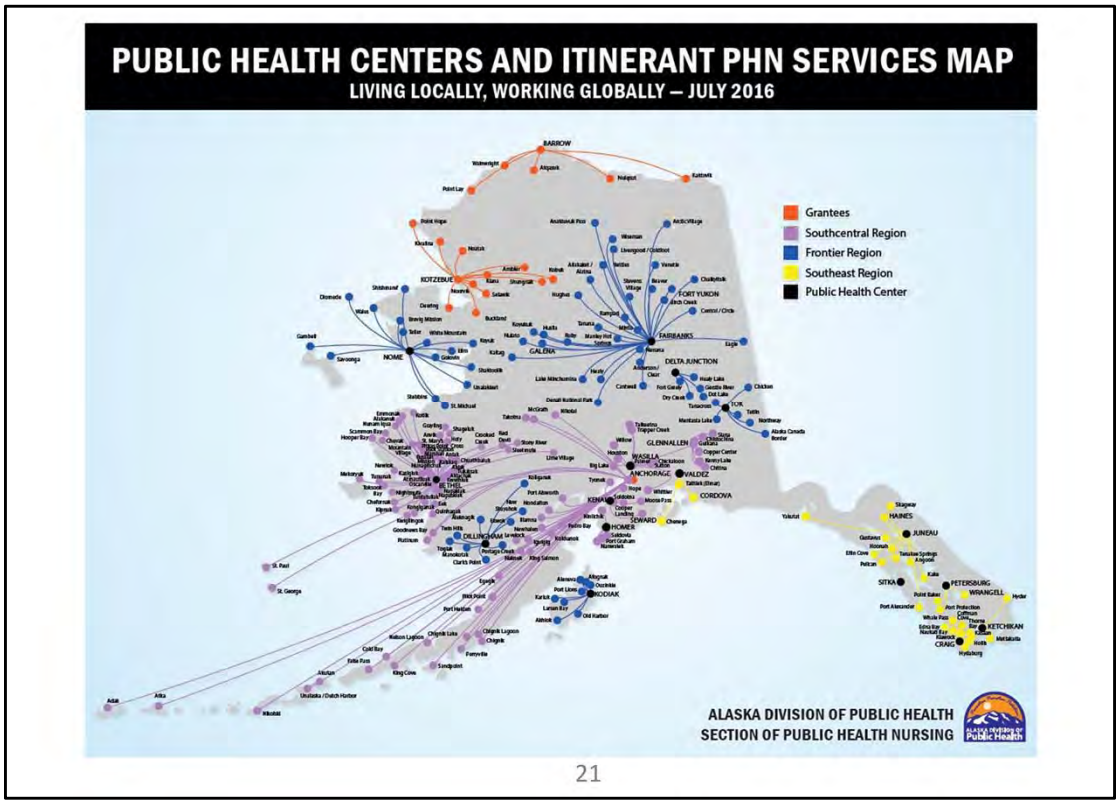
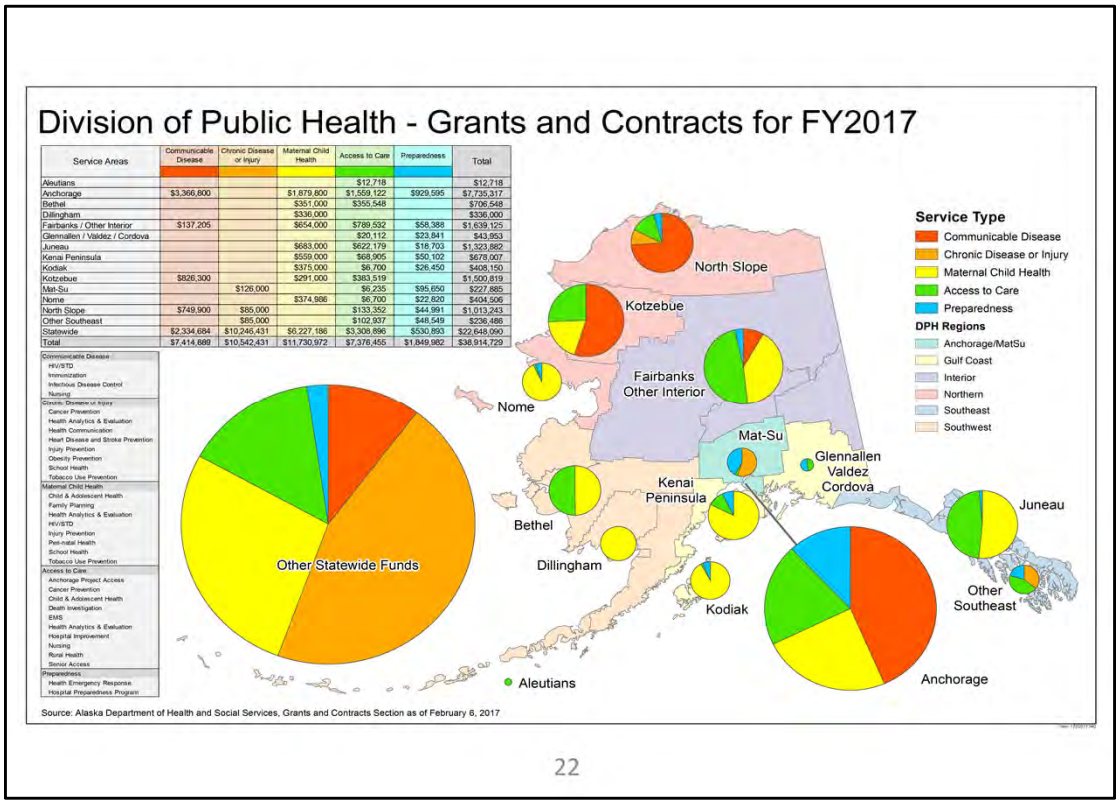
*Handout #3 – Healthy Alaskans 2020 Scorecard www.ha2020.alaska.gov



*Handout #4 – Public Health Nursing map

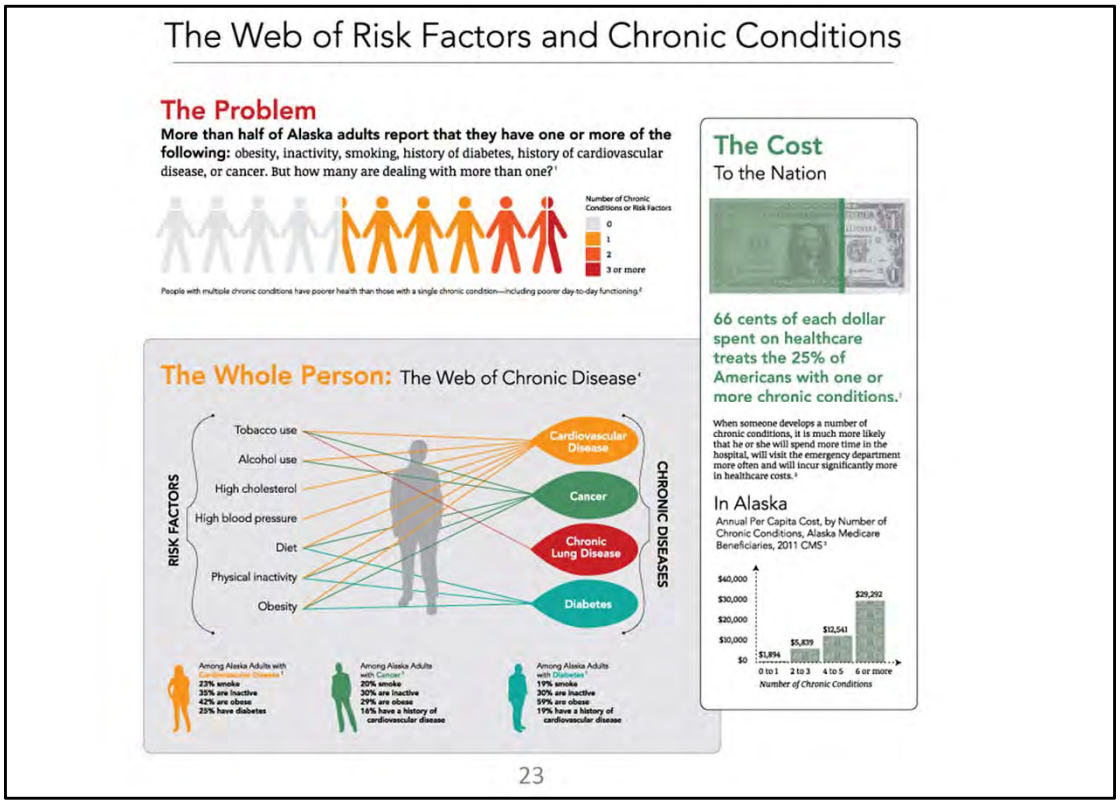
Alaska's public health nurses work in settings ranging from large urban public health centers to one nurse/one clerk stations. Itinerant public health nurses travel by air, boat or other motorized vehicle to a group of remote rural villages, taking public health to even the smallest communities. Public health nursing is different than other types of nursing. It is known for its community-centered focus, autonomy, broad-based generalist practice and creative nursing interventions. Public health nurses work in partnership with a wide spectrum of community partners and care providers.

This map shows the statewide coverage provided by Public Health Nursing. Nursing has 22 public health centers, 16 of which are staffed year-round, and the approximately 280 other places across the state to which nurses travel or “itinerate”. The Division of Public Health also grants funds to the Municipality of Anchorage, Maniilaq, and North Slope Borough to provide public health services.

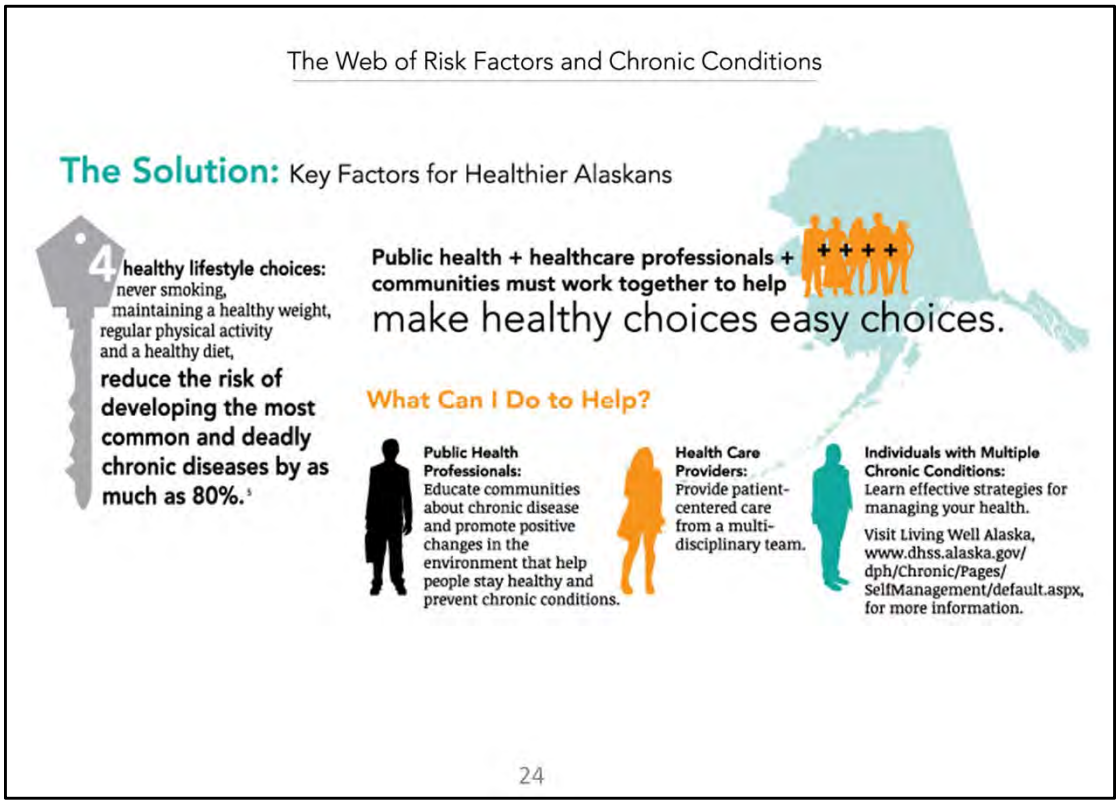


*Handout #5 – Grants and Contracts map

This map depicts where grants and contracts are distributed across the state and the main type of public health activities being supported. Given the population-based focus of public health, it is not surprising that the greatest amount of monies the Division passes through to for-profit and non-profit entities are statewide and not limited to one geographic area.



*Handout #6 – The Web of Risk Factors and Chronic Conditions



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