DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
FY 2020-21 JOINT BUDGET COMMITTEE HEARING AGENDA

Friday, December 6, 2019
9:00 am – 12:00 pm

9:00-9:15 INTRODUCTIONS AND OPENING COMMENTS

Presenter: Jill Hunsaker Ryan, Executive Director

9:15-9:45 DEPARTMENTAL ISSUES

Main Presenters:
- Jill Hunsaker Ryan, Executive Director
- Karin McGowan, Deputy Executive Director

Supporting Presenters:
- David Norris, CFO

Topics:
- Total Worker Health Programs: Page 1, Question 1 in the packet
- Cash Funds Spending Authority: Pages 1-2, Questions 2-3 in the packet
- Marijuana Tax Cash Fund: Page 2, Question 4 in the packet

9:45-10:45 HEALTH DIVISIONS

Main Presenters:
- Jill Hunsaker Ryan, Executive Director

Supporting Presenters:
- Tony Cappello, Director of Division of Disease Control and Environmental Epidemiology
- Carrie Cortiglio, Director of Prevention Services Division
- Alison Reidmohr, Tobacco Communications Strategist
- Karin McGowan, Deputy Executive Director
- Chris Wells, Director of Center for Health and Environmental Data

Topics:
- R2 Immunization Outreach: Pages 2-17, Questions 5-16 in the packet
- Vaping and Amendment 35 Revenue: Pages 17-21, Questions 21-26 in the packet
- Local Public Health Funding History: Pages 22-26, Questions 27-34 in the packet

10:45-11:00 BREAK

11:00-12:00 ENVIRONMENTAL DIVISIONS

Main Presenters:

- Jill Hunsaker Ryan, Executive Director
- John Putnam, Director of Environmental Programs

Supporting Presenters:

- Gary Kaufman, Director of Air Pollution Control Division
- Scott Bookman, Director of Colorado State Public Health Laboratory
- Jeff Lawrence, Director of Division of Environmental Health and Sustainability

Topics:

- R1 Stationary Sources Program Resources: Pages 26-30, Questions 35-41 in the packet
- R5 Laboratory Facility Maintenance: Pages 30-32, Questions 42-44 in the packet
- Recycling Resources Economic Opportunity Fund: Pages 32-33, Question 45 in the packet

DEPARTMENTAL ISSUES

1. Is the Department aware of any other Executive Branch agencies or Departments using the same or similar Total Worker Health programs identified in the R3 request?

RESPONSE**:** Several Executive Branch agencies are actively utilizing Total Worker Health programs. CDLE, DNR, and CDPHE are certified by Health Links, a program led by the Center for Work Health and Environment at the Colorado School of Public Health (CWHE). CWHE is one of six Total Worker Health Centers of Excellence funded by the National Institute for Occupational Safety and Health. A number of other agencies are interested and/or have worked with the model in the past including HCPF, OEDIT and CDHS. A list of all employers certified or participating is available at Health Links website.

CDPHE has achieved the highest level of certification, Healthy Business Leader, and additionally has achieved Family Friendly certification through their assessment process. Finally, in 2019, CDPHE was recognized as a leading employer and received the Halo Award from Health Links. This award is presented as a recognition of the Department's work in occupational safety, health, and community engagement through employer/employee efforts.

As a recognized leader in this work, CDPHE works closely with DPA and other agencies to develop or improve their programs. CDPHE is currently participating in an inter-agency working group focusing on Work Force Resilience and employee wellness is a priority area. This group includes representatives from DPA, CDOR, DNR, CDPHE, CDPS, CDHS, CDOT, DOLA, DOC, and CEO.

2. Are the proposed reductions in spending authority related to R4 Technical Reductions in Spending Authority reflecting reductions in services?

RESPONSE: No. The reductions align spending authority with available revenue. The spending authority reductions related to R4 Technical Reductions are not causing a reduction in services, but are rather reflective of declining revenue and fewer dollars available to be awarded for grantees, specifically for A35/Tobacco funding.

3. For each of the following cash funds, please indicate whether the Department believes continuous spending authority is necessary, and if so, why. What consequences or challenges would the Department expect if the fund were annually appropriated rather than continuously appropriated?

- Community Crime Victims Grant Program created in Section 25-20.5-801, C.R.S.

RESPONSE: It is the Department's understanding the intent of the legislation is to ensure that the funds appropriated for the Crime Victims Grant Program be available to assist crime victims irrespective of the fiscal year. For example, services committed to help an individual deal with and recover from a traumatic victimization could last several months or years. It is the Department's understanding that the legislative intent is that the funds appropriated be available

continuously to ensure that the funds remain available to provide the services the legislation requires to help crime victims. The continuous spending authority for the Crime Victims Grant Fund effectively facilitates this intent. Per statute, any unexpended and unencumbered money in this fund transfers to the General Fund on September 1, 2023.

- Front Range Waste Diversion Cash Fund created in Section 25-16.5-111 (4), C.R.S.

RESPONSE: The Front Range Waste Diversion Fund was created as an enterprise fund during the 2019 legislative session with a Governing Board of Directors. The revenue is funded from tipping fees. To be responsive and nimble the fund needs to be continuously appropriated so the Board can be assured of the ongoing nature of the funds to provide grants to increase diversion. With a number of possible variables impacting the revenue (increased population, increasing construction and increased diversion) a continuous appropriation allows the Board to be responsive while meeting the legislative intent.

- Opiate Antagonist Bulk Purchase Fund created in Section 25-1.5-115, C.R.S.

RESPONSE: The Opiate Antagonist Bulk Purchase Fund was created to facilitate the purchase of opiate antagonists, providing subsidies when possible. In other states, settlement agreements have been able to provide ongoing funding to allow the subsidization of purchases for various entities to have opiate antagonists on-hand in case of emergency. The continuous spending authority granted in statute would enable the Department, in the event that settlement or other funds are transferred to the program, to use the funds quickly and efficiently to subsidize the purchase of opiate antagonists for qualified entities. The Department's ability to do this quickly and efficiently would be challenged if continuous spending authority were not granted as the Department would need to wait for the normal budget process to begin to use the funds awarded in a settlement or otherwise deposited into the fund.

4. Why is the amount of Marijuana Tax Cash Fund used for the indirect cost assessments and centrally appropriated items so large? What programs funded with the Marijuana Tax Cash Fund drive the $2.6 million indirect cost assessment and centrally appropriated figures?

RESPONSE: The Department receives $24.2 million from the MTCF for 23.5 FTE and programmatic activities. Indirect is charged on programs funded with MTCF at a blended rate of 10.5%. The Department is also appropriated $544 thousand in centrally appropriated costs for the POTS related to 23.5 FTE in those MTCF funded programs.

HEALTH DIVISIONS

R2 IMMUNIZATION OUTREACH

FUNDING INFORMATION

5. Please describe the Departments plans for distributing the requested funding to local public health agencies (LPHAs).

RESPONSE: The Department plans to distribute funds to LPHAs in the least burdensome manner utilizing existing annual immunization core services contracts. The requested funds will be tied to a new section in the LPHA contract that focuses specifically on the Wildly Important Goal (WIG) to increase the number of kindergartners protected against measles, mumps and rubella (MMR) to 90% by June 2020 and 95% by June 2023. The Department would work with LPHAs to develop a funding formula that takes into account general population and poverty, number of kindergarten-age students, number of schools and their county MMR rate. The LPHAs would choose from a menu of fact-based interventions, and report progress on activities as part of the contracts required quarterly report. Some LPHAs have expressed interest in a regional collaboration model for certain projects and the Department is open to this approach.

- Can any of the funding that would go to local public health agencies be used to offset the cost of the vaccines or would it all be used for education?

RESPONSE: None of the funds will be used to purchase or offset the costs of vaccines. LPHAs receive publicly-funded vaccines from the Department at no cost to them for some populations, and those who immunize privately-insured persons charge the person or insurance to cover the cost of the vaccine. The requested funding is meant to support fact-based interventions that are known to raise immunization rates. Activities could include expanding immunization clinic hours into weekends/evenings or implementing reminder/recall (using CIIS data to notify parents that their kids are coming due or overdue for vaccines).

6. Please explain how the Department determined the funding level for the Immunization Outreach request.

RESPONSE: The Department utilized a quote received from the vendor that conducted the internet market research survey and developed vaccine hesitant parent messaging to determine the amount requested for the outreach campaign.

The Department provides approximately $3.9 million in state and federal funds to 52 of 54 LPHAs to increase community immunization rates. Because the funding formula takes into account population and population in poverty for each LPHA jurisdiction, the funding per LPHA varies greatly from a maximum of $806,777 to a minimum of $8,438. The Department's $1.5 million request seeks to bolster the current funding provided to LPHAs while acknowledging fiscal constraints in the state budgeting process. The requested funding will provide a 38% increase in support to help establish a nimble and responsive platform using strategic contracting to address low kindergarten MMR rates.

- What other Department funds can be used to purchase and increase access to vaccines?

RESPONSE: The Department does not receive state funds to purchase vaccines, but does receive an allocation of publicly-funded vaccines from the Centers for Disease Control and Prevention (CDC). The federal Vaccines for Children (VFC) program was created in response to low immunization coverage and the 1989-1991 measles outbreak in the United States. VFC ensures access to vaccines for children who are uninsured, those covered by Medicaid, those

who have insurance that does not cover vaccines, and children who are American Indian/Alaskan Native. The CDC estimates that vaccination of children born between 1994 and 2018 in the U.S. will prevent 419 million illnesses, help avoid 936,000 deaths, and save nearly $1.9 trillion in total societal costs (that includes $406 billion in direct costs).[1] Over 700,000 children, representing over half of children 18 years and under in Colorado are eligible to receive vaccines through the federal VFC Program. Each year, the Department oversees the distribution of more than 990,000 doses of VFC vaccines valued at over $52 million to public and private providers, including local public health agencies, to vaccinate children who might not otherwise be vaccinated because of inability to pay. LPHAs receive enough VFC vaccines to cover eligible children in their jurisdiction.

The Department also receives federal Section 317 vaccine funds to immunize uninsured adults, and to provide vaccine for VPD outbreaks, such as the current hepatitis A and meningococcal vaccine outbreaks, to prevent further spread of disease.

- Are the dollars included in the request available for LPHAs to purchase vaccines?

RESPONSE: None of the funds will be used to purchase or offset the costs of vaccines. LPHAs receive publicly-funded vaccines from the Department at no cost to them for some populations, and those who immunize privately-insured persons charge the person or insurance to cover the cost of the vaccine. The requested funding is meant to support fact-based interventions that are known to raise immunization rates. Activities could include expanding immunization clinic hours into weekends/evenings or implementing reminder/recall (using CIIS data to notify parents that their kids are coming due or overdue for vaccines).

7. What federal programs and funding, or non-profit resources, are available to address the state's low vaccination rate?

RESPONSE: The Department's Immunization Branch uses state and federal funds to reduce vaccine-preventable disease (VPD) statewide by promoting education, implementing policies that support vaccination, optimizing vaccine resources, and assuring access to vaccines to positively influence the uptake of immunizations across the lifespan. The Immunization Branch maintains the Colorado Immunization Information System (CIIS), the state's immunization registry, and administers the federal Vaccines for Children (VFC) and Section 317 programs, overseeing the stewardship and accountability of all publicly-purchased vaccine distributed in Colorado. The Department has leveraged existing staff and funding sources to address Colorado's low kindergarten MMR rate. Part of the Branch's day-to-day work is addressing current issues, whether this is responding to a hepatitis A or meningococcal disease outbreak or trying to raise kindergarten MMR rates.

In addition to state funds, the Department's Immunization Branch is funded through the federal Immunization and Vaccines for Children Cooperative Agreement (CoAg) and received $5,182,407 in FY 2019-20. Nearly one-third of the federal funding is used to implement the

[1] VFC Infographic: Protecting America's Children Every Day. Updated 2018 analysis using methods from "Benefits from Immunization during the Vaccines for Children Program Era – United States, 1994-2013." https://www.cdc.gov/vaccines/programs/vfc/protecting-children.html

VFC and 317 programs and to ensure accountability of the publicly-purchased vaccine distributed in Colorado. Staff work with VFC providers and oversee adherence to VFC program rules, and provide Quality Improvement strategies to increase vaccine uptake by improving processes in VFC clinics. Another 25% ($1.5 million) of federal funding is distributed to LPHAs who directly provide immunization services. The remaining funds are used to support activities required by the CoAg to assess and monitor immunization coverage and to conduct education and outreach activities, such as flu vaccine awareness campaigns.

This fiscal year, the branch was awarded $911,607 in additional funding through competitive applications to improve vaccination coverage, respond to an outbreak of vaccine preventable disease and to expand capacity to analyze data from CIIS to identify disparities and pockets of under-immunization. This funding must be applied for each year and is meant to be used for short term projects. These resources are not enough to fund the additional activities to support the WIG.

While the Department doesn't work with for-profit companies directly, there are some for-profit resources that can improve access to immunizations locally. For example, provider offices can work with private companies to provide immunizations for insured patients. One such company covers the up-front cost of vaccines at no cost to providers, and bills health plans to recover the vaccine cost. While this company has helped improve access to vaccines in some provider offices, they only cover some health plans and prefer to work with high volume providers. Other examples include retail pharmacies that provide some flu vaccines at no-charge through a limited waiver program or pharmaceutical companies that offer patient assistance programs for uninsured adults or those with financial or medical hardships. Additionally, the department does not directly work with any non-profits that funds vaccines directly.

- How does the availability of these resources affect the Department's proposed use of the requested funds?

RESPONSE: The existing state and federal funds support critical ongoing work of the Department and LPHAs to assure access to vaccines through the VFC and Section 317 program, manage the state's immunization registry (CIIS) and implement programming locally to raise immunization rates. To fully address vaccine hesitancy, the Department needs more funds to launch a statewide, multifaceted campaign that includes a combination of radio, digital, social, radio and out-of-home placement media. Based on current funding levels, this request will help provide a 38% increase in additional support needed to help establish a nimble and responsive platform using strategic contracting to address the current issue of low kindergarten MMR rates and any other vaccine preventable disease response and outbreak that may occur.

8. Can the Departments clarify plans for the distribution and use of requested funding in future years? (e.g., potential shift of funding away from communities that are successful in increasing their immunization rate, causing it to fall again).

RESPONSE: In future years, the requested $1.5 million will continue to go to LPHAs to implement fact-based interventions based on data that demonstrates need. Additionally, These

interventions can improve other vaccination rates. For Example, if an LPHA notifies parents/guardians that their child is coming due or overdue for the MMR vaccine, there is an opportunity to review the child's record for other missing immunizations and talk to the parent/guardian about them. Funding will be based on strategic contracting where the Program evaluates current immunization trends and disease epidemiology to better align funding to local public health to address identified areas of need and help prevent future outbreaks.

Ongoing investments in immunization is critical for disease control so the Department will also continue to provide the current immunization core services funding to LPHAs that is based on population, and population in poverty. This allows all LPHAs to receive funds to generally raise immunization rates and reach at-risk populations such as the hepatitis A and meningococcal disease outbreaks among persons experiencing homelessness injection drug use and incarceration.

Barriers to Vaccinations

9. Is access or hesitancy a larger driver of the state's low vaccination rate?

RESPONSE: While access is an issue in some rural communities, vaccine hesitancy is the larger driver of low vaccination rates in Colorado. The presence of both factors can cause a compounding effect and influence immunization-seeking behavior. Based on the Department's internet market research project, Vaccine Hesitancy in Colorado, approximately 65% of 692 parents indicated some degree of hesitancy and half of those said they didn't intend to vaccinate their children on time. Of these parents, 80% indicated they had no, little, or some knowledge about vaccines. From the Health eMoms survey, 20% indicated they were somewhat or very hesitant, 43% thought it was better for children to receive fewer shots at once, and 22% thought children receive more shots than are good for them. There may also be a large "middle ground," where moderately hesitant individuals have access, but that access can involve significant effort (based on location, hours, etc). This moderate hesitancy may be offset by truly convenient access in combination with appropriate communication and support. Being able to "nudge" with additional resources available may have a significant impact on vaccine uptake. Additional information about distance traveled and the impact on immunization uptake is provided below.

10. If the largest barriers to vaccinations are access and cost, why is the Department proposing using the requested funds for advertising?

RESPONSE: The Department is proposing a statewide media campaign because, based on the data, vaccine hesitancy is the more urgent issue to address. However, the campaign will also focus on access to vaccinations by promoting the Vaccines for Children (VFC) program and locations where free or low cost vaccination can be obtained through VFC providers, including local public health agencies.

In the same internet market research project of 692 Colorado parents, the Department asked follow-up questions to better understand other barriers to vaccination, outside of hesitancy. The ability to pay for vaccines was listed as the most common barrier for parents who planned to

vaccinate their child(ren) on schedule (23%), those that did not intend to vaccinate their child(ren) on schedule (24%), 44% of all parents with a household income < $50,000 and 19% of parents with a household income < $100,000. While inability to pay was the most common barrier, it did not appear to influence vaccination behavior. Among hesitant parents who indicated they did not intend to vaccinate their child(ren) on schedule, two barriers rose to the top that were different from barriers identified by hesitant parents who planned to vaccinate their child(ren) on schedule: 1) 19% indicated they had trouble getting their child to a check-up and 2) 9% indicated they live more than 30 minutes away from a place to receive vaccinations.

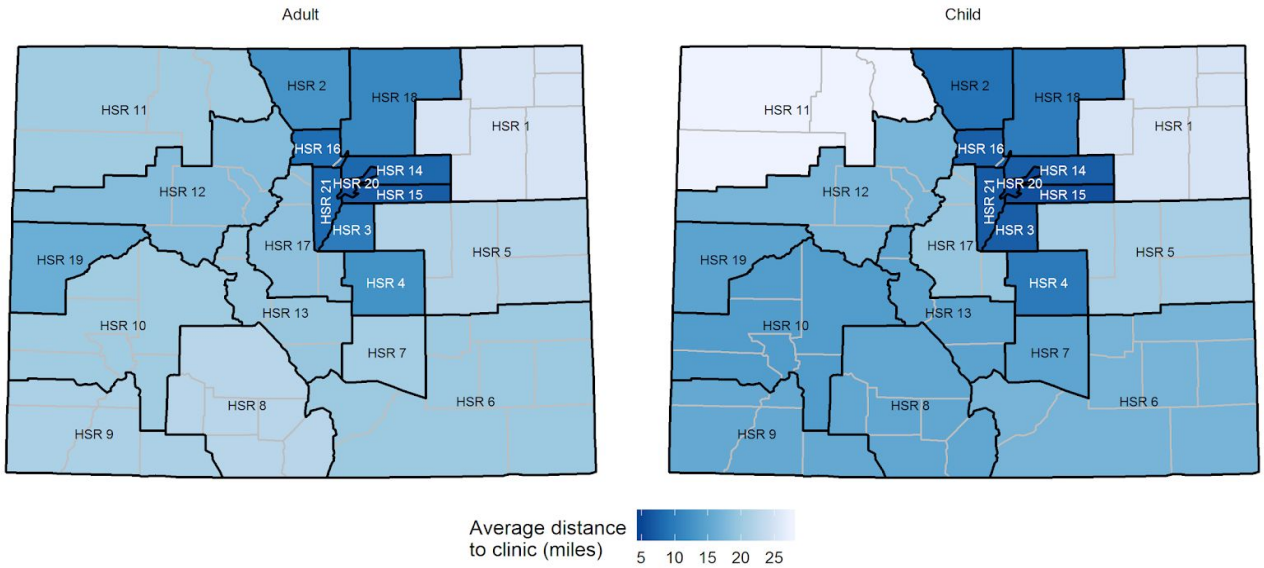
Additionally, in the 2017 National Immunization Survey of children 19 - 35 months, the CDC identified several factors that might partially explain the lower coverage among children living in rural areas including: unfamiliarity with the VFC program and how to access it, transportation, child care, and convenience of clinic hours, lack of geographic proximity to vaccination providers, including those who participate in the VFC program, and a shortage of healthcare providers, especially pediatricians. A combination of these issues are likely a factor in some of Colorado's rural counties, and potentially some urban, and underscores the need for targeted interventions based on local needs.

To try and increase access to immunization services, the Department is also working with HCPF to increase Medicaid children immunization rates. This work started by evaluating potential gaps in immunization service. 156 out of 2006 Medicaid providers (7.7%) billed for well child checks but did not also bill for immunizations during 2017 and 2018. This data was shared with quality managers from the 7 Medicaid Regional Accountable Entities (RAE's). The programs are working together to determine areas of focus for immunization quality improvement projects and any additional data needs, and potential VFC recruitment for non-immunizing providers.

11. Can the Department provide a clear picture of regional differences in the distance needed to travel to get an immunization?

RESPONSE: In November 2019, the Department used CIIS data to look at the distance between a patient's home address and the most recent immunization clinic they went to. Flu shots were excluded. Patients were grouped by age (children under 18 and adults 18 or older) as of January 1, 2019. Statewide, the average distance from patients' most recent immunization clinic was 15.7 miles for adults, and 13.5 miles for children. By Health Statistics Region (HSR), the distance varied from 6 to 25.2 miles for adults (HSR 20 and 1, respectively), and from 4.8 to 11 miles for children (HSR 20 and 11, respectively).

HSR	Counties	Average distance from most recent immunizaing clinic (miles) Adult	Child
1	Logan, Morgan, Phillips, Sedgwick, Washington, and Yuma	25.2	25.2
2	Larimer	12.8	8.9
3	Douglas	9.9	7.1
4	El Paso	12.6	9.7
5	Cheyenne, Elbert, Kit Carson, and Lincoln	21.8	20.8
6	Baca, Bent, Crowley, Huerfano, Kiowa, Las Animas, Otero, and Prowers	20.0	17.0
7	Pueblo	20.6	15.0
8	Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache	22.4	15.3
9	Archuleta, Dolores, La Plata, Montezuma, and San Juan	21.3	15.6
10	Delta, Gunnison, Hinsdale, Montrose, Ouray, and San Miguel	20.3	13.9
11	Jackson, Moffat, Rio Blanco, and Routt	20.3	27.5
12	Eagle, Garfield, Grand, Pitkin, and Summit	18.1	17.1
13	Chaffee, Custer, Fremont, and Lake	19.6	14.8
14	Adams	7.9	7.1
15	Arapahoe	7.0	5.9
16	Boulder, and Broomfield	8.4	7.2
17	Clear Creek, Gilpin, Park, and Teller	18.8	19.3
18	Weld	11.3	9.9
19	Mesa	16.3	14.8
20	Denver	6.0	4.9
21	Jefferson	8.1	6.8

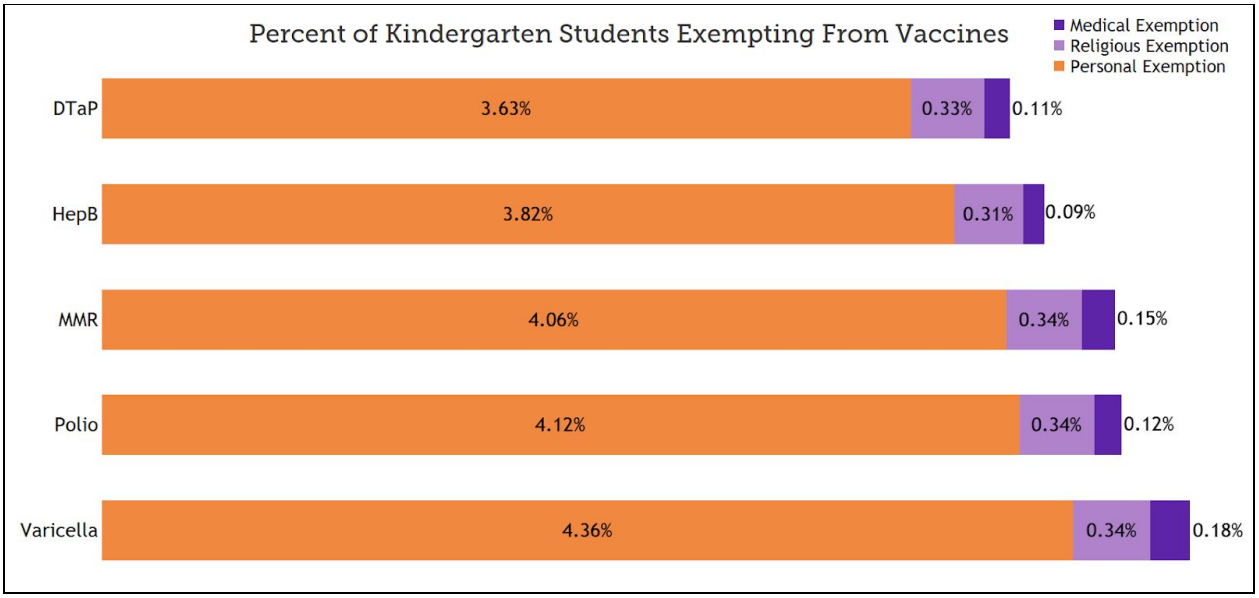


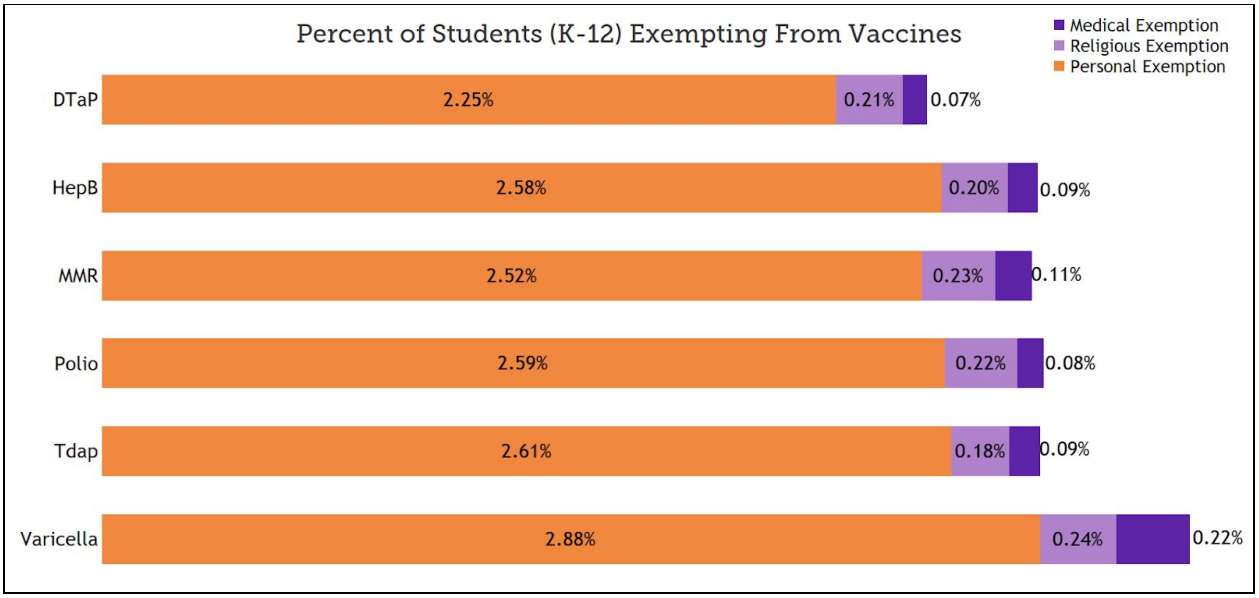
In September 2019, the Department looked at the effect that distance from a patient's most recent immunization clinic might have on the likelihood that a kindergarten-aged patient is up to date for MMR. To estimate kindergarten-aged children in Colorado for the 2018-19 school year,

The Program pulled a cohort of patients from CIIS who turned five years old after October 1, 2017 and on or before October 1, 2018. Patients' MMR up to date statuses were assessed by counting the number of valid MMR doses that had been administered by the beginning of the 2018-19 school year. 54,204 (62.2%) Kindergarteners had at least two valid MMR doses administered by October 1, 2018 and were counted as up to date. A statistically significant relationship was found between the distance from their immunizing clinic and the patient being up-to-date with MMR. A patient who lives 25 miles from their clinic was 98% more likely to be not up-to-date, and a patient who lives 10 miles from their clinic was 61% more likely to be not up-to-date.

12. When it comes to the number of children who are exempted from vaccinations from schools, is there a breakdown, by vaccines, from which children have been exempt?

RESPONSE: From our 2018-19 school and childcare immunization database:





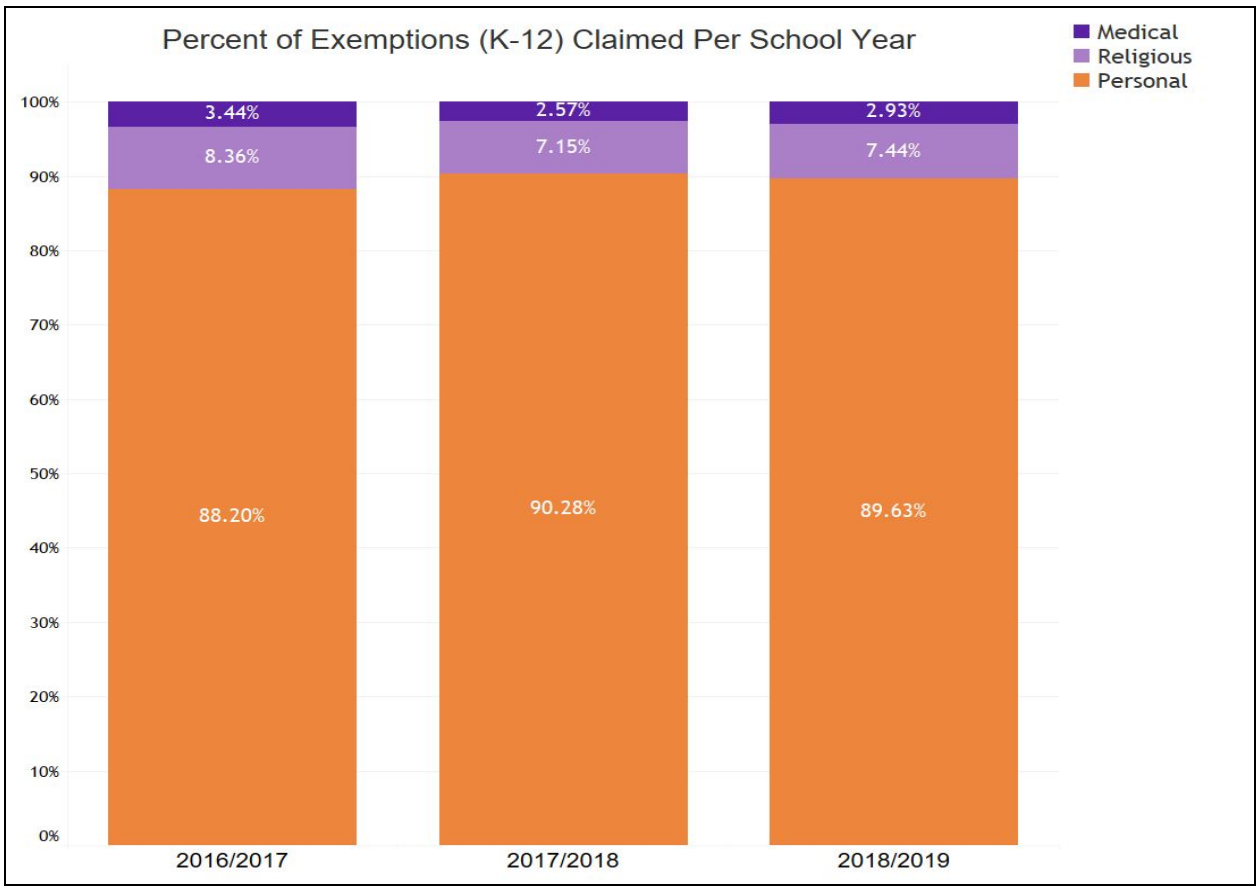
13. Do we know what the reasons are for "personal exemptions" from childhood vaccinations? Does the Department have any guidelines or examples of what this covers?

RESPONSE: Colorado has among the most permissive policies related to personal belief and religious exemptions in the nation. Per CRS 25-4-903, states "by submitting to the student's school a statement of exemption signed by one parent or guardian or the emancipated student or student eighteen years of age or older that the parent, guardian, or student is an adherent to a religious belief whose teachings are opposed to immunizations or that the parent or guardian or the emancipated student or student eighteen years of age or older has a personal belief that is opposed to immunizations." Currently, parents/guardians may use the Department's standard downloadable or online non-medical exemption form or write their own statement of exemption. See our Vaccine Exemption page for more details.

The Department doesn't have specific data on the reasons why parents/guardians claim personal exemptions for their children, because that information is not required to be submitted by the parent/guardian. Based on conversations with schools, we know some parents/guardians continue to claim personal exemptions based on convenience, rather than conviction. It is arguably much easier to fill out a form or write your own exemption rather than take the time to find their child's up-to-date immunization record or get them an appointment for vaccines.

However, the information collected by the Department's internet market research survey and Health eMoms survey points to concerns about safety and too many vaccines too soon. In the internet market research survey, 65% of parents were hesitant about vaccines and approximately half of those parents do not intend to vaccinate their children on a routine schedule. Of these

parents, 80% indicated they had no, little, or some knowledge about vaccines. 44 % also believe that children get too many vaccines and 30% agreed with a statement that vaccine ingredients are dangerous. From the Health eMoms survey, 20% indicated they were somewhat or very hesitant, 43% thought it was better for children to receive fewer shots at once, and 22% thought children receive more shots than are good for them. To better understand vaccine hesitant parent views, the Department plans to conduct a larger follow-up internet survey that is generalizable to all of Colorado.



General Questions

14. Please provide a total overview of all immunization services and related fund sources administered by the Department, and provide context for how Master Settlement Agreement funded programs fit into the Department's overall immunization program.

RESPONSE: The Department provides $3.9 million to support immunization services at LPHAs using both federal and state funds. The federal VFC Program contributes one million doses of VFC vaccines valued at over $52 million that are distributed to public and private providers throughout Colorado to be given to eligible children. The funding provided to LPHAs support their immunization core services contracts and are primarily used for staffing, general

operating costs and activities that support increasing access to vaccines within their communities. Common activities include maintaining a stock of all Advisory Committee on Immunization Practices (ACIP)-recommended vaccines, participating in the Vaccines for Children and Section 317 programs, screening clients for eligibility, entering data into CIIS for the vaccines they administer, promoting informed vaccine decision-making through education, promoting availability of vaccines in their clinic or in their communities, including the influenza vaccine, implementing at least one evidenced-based intervention and working with/supporting schools, childcares, and healthcare providers in their community. Tobacco Tax and MSA funds make up approximately $2.4 million of the LPHA funding and supports the work outlined in the immunization core services contracts; the remaining $1.5 million comes from federal funds.

15. Why is the request focusing on Measles, Mumps, and Rubella (MMR)? Why not cover all of the available immunizations and make them available for parents who want them?

RESPONSE: All state agencies went through a comprehensive strategic planning process relying on the framework of the "Four Disciplines of Execution" (4DX), which emphasizes focusing on a few wildly important goals to effectively manage and achieve them in the midst of extensive daily responsibilities. For the 2018-19 school year, Colorado's kindergarten MMR coverage rate is 87.4%, well below the 92 - 94% community immunity threshold needed for protection against measles. The Colorado 2018-19 kindergarten MMR coverage rate is the lowest in the nation and reflects a 1.3% decrease from the 2017-18 school year where Colorado also ranked the last state in the nation. Measles, easily spread by coughing and sneezing, is among the most contagious of vaccine-preventable diseases, and infects 90% of nonimmune people who might have been in contact with the infectious person. Based on this data, and the 4DX methodology, the Department chose to focus on improving vaccination coverage with the most room for improvement.

While the requested funds will focus on raising Colorado's kindergarten MMR rate, it is possible that other vaccination rates, and specifically other vaccines needed for kindergarten entry, may increase as well because the funding provided to LPHAs will support fact-based strategies known to improve immunization rates overall, not just MMR. Strategies such as expanding clinic hours and reminder/recall are effective. For example, if an LPHA notifies parents/guardians that their child is coming due or overdue for the MMR vaccine, there is an opportunity to review the child's record for other missing immunizations and talk to the parent/guardian about them.

16. Please provide more information about the proposed media campaign. Are vaccination rates statewide problem, or would the campaign target certain "hot spots" (communities or localities) with lower rates of immunization?

RESPONSE: Colorado's statewide kindergarten MMR rate is already too low to be protective at 87.4% (community immunity is between 92-94%) and there are pockets of even greater underimmunization in the state. For example, two of the most populous counties, Denver and El

Paso, only have kindergarten MMR coverage rates of 84.9% and 81.5%, respectively. While the campaign's reach will be statewide, the Program will focus media in areas of the state with the lowest kindergarten MMR rates and greatest numbers of unvaccinated kindergartners.

The majority of parents vaccinate their children, however, many parents who vaccinate according to the recommended schedule still consider themselves vaccine hesitant. According to the internet market research survey, 65% of parents were hesitant about vaccines and approximately half of those parents do not intend to vaccinate their children on a routine schedule. The media campaign will focus on these parents, 80% of whom indicated they had no, little, or some knowledge about vaccines, to provide information and resources in a non-judgemental way to promote positive vaccination behavior change. For the approximately half of those parents who do intend to vaccinate their children on a routine schedule, the campaign will reinforce their decision.

All campaign placements will lead to a fact-based website that provides parents with information about vaccine safety, including market-tested content about the benefits and risks of vaccination that resonate with many vaccine-hesitant parents. As research shows, parents consider health care providers to be the most trustworthy and influential resource on vaccines regardless of parent's degree of hesitancy. This fact-based website will include a frequently-asked questions section with answers provided by diverse Colorado healthcare providers who are also parents as well as information about the VFC program and where free and/or low cost vaccines can be obtained.

The media campaign will build off the same messaging the Department has already provided to healthcare providers and LPHAs via a provider toolkit, so the messages parents hear publicly are the same messages they hear from their health care provider or LPHA. Aligning these messages across audiences will give health care providers and LPHAs a common platform from which to speak to patients about vaccination.

17. Can the Department quantify the potential financial effects of Colorado increasing its immunization rate?

RESPONSE: Vaccine preventable diseases have real, direct financial impacts on families. In February 2019, Children's Hospital released their annual *Vaccine-Preventable Diseases Report.*[2] Using 2017 Colorado Hospital Association data, they determined the number of cases of hospitalizations or emergency Department (ED) visits associated with a vaccine-preventable disease (VPD) as well as the hospital-associated charges for these cases. Diagnoses of VPDs were identified using ICD-10 codes. Population estimates from the American Community Population Survey and the Colorado Health Institute were used to calculate incidence rates. Influenza, pneumococcal disease, pertussis and varicella were the most common reasons for hospitalization due to VPD in Colorado children in 2017. The most common vaccine-preventable cause of hospitalization and ED visits was influenza, with 460 hospitalizations and 8,656 ED visits in Colorado children in 2017. Total hospital charges and

[2] Cataldi, et al. *The Vaccine-Preventable Diseases Report.* Volume XV, Number 1. Children's Hospital Colorado. February 2019. https://www.childrensimmunization.org/uploads/VPD-2019-vol1-2.1.19-final.pdf

ED charges for vaccine-preventable diseases were over $55 million, with over $42 million due to influenza alone. The second most common vaccine-preventable cause of hospitalization was pneumococcal disease, with 61 hospitalizations and total hospital/ED charges of almost $10 million. This report only looks at direct costs in terms of hospitalizations and ED visits and doesn't take into account other societal costs such as lost productivity and time from school and work.

Working to increase statewide immunization rates is a major first step towards keeping people healthy and avoiding the financial costs of VPDs. However, even with a high statewide immunization rate, there could still be pockets of under-immunization that need to be addressed locally. Without comprehensively high coverage rates in all Colorado communities, outbreaks are possible. When outbreaks occur, the burden of prevention falls to public health Departments to conduct contact tracing, administer postexposure prophylaxis or treatment, and implement isolation and quarantine measures.[3] These activities require additional personnel time per contact and thus become very costly as the number of cases increases.

18. Are immunizations covered by the Affordable Care Act? If so, which ones?
    Are vaccinations considered preventive and thus are required to be provided for free, or are co-pays required?

RESPONSE: Health plans are required to cover recommended preventive services for children and for older adolescents and young adults at no cost to patients when delivered by a healthcare provider in their health plan's network, including all ACIP-recommended vaccines. This includes diphtheria, tetanus, pertussis (DTaP), haemophilus influenza type b (Hib), hepatitis A, hepatitis B, human papillomavirus (HPV), inactivated poliovirus, influenza, measles, mumps and rubella (MMR), meningococcal, pneumococcal, rotavirus and varicella (chickenpox). If the vaccines are given as part of a well child visit, also preventive, the family would likely not have a co-payment for that visit. Sometimes, vaccines are given as part of routine sick care or follow-up visits, and in that case a co-payment for the visit may be charged.

19. Some vaccines are packaged. What are the recommended packages of vaccines? Can a parent choose only MMR, or are they required to select a whole package that includes other vaccines?

- How does the recommended timing of vaccines affect the calculation of immunization rates? (e.g., if a parent chooses to spread out immunizations)?

RESPONSE: Yes, parents can choose to have a single vaccine administered over a "package" of vaccines. "Packaged" vaccines are known as combination vaccines and they take two or more vaccines that could be given individually and put them into one shot. Children get the same protection as they do from individual vaccines given separately but with fewer shots. The measles, mumps, and rubella vaccine (MMR) and diphtheria, tetanus, and pertussis vaccine

[3] F. Liu, W.T. Enanoria, J. Zipprich, et al. The role of vaccination coverage, individual behaviors, and the public health response in the control of measles epidemics: an agent-based simulation for California. BMC Public Health, 15 (2015), p. 447

(DTaP) each protect children against three diseases. However, these two vaccines are not considered true combination vaccines because in the United States, you cannot get separate vaccines for all of the diseases that MMR and DTaP protect against. In the US, some examples of combination vaccines include Pediarix™, which combines DTaP, Hep B, and IPV (polio) and ProQuad®, which combines MMR and varicella (chickenpox).

The Advisory Committee on Immunization Practices (ACIP), a committee of medical and public health experts within the United States Centers for Disease Control and Prevention (CDC), recommends a schedule of the number of doses and intervals of vaccination that provide the best protection against vaccine-preventable disease. The ACIP schedule is used to recommend the vaccinations given at a provider visit based on the age of the patient and their previous immunizations. The timing of vaccines is included in the calculation of immunization rates. A child is considered up-to-date if they have received immunizations (either in a combination or single vaccine) at the recommended age and interval. For example, MMR is a two dose series with the first dose given at 12-15 months and the second dose given at 4-6 years of age. Colorado Board of Health rule requires the second dose be administered prior to kindergarten. As long as the child receives their first dose of MMR at or after 12 months of age, and the second dose at least four weeks later, and prior to kindergarten entry, that child would be counted as up-to-date for MMR.

ACIP has also created a catch-up schedule for those patients not receiving vaccines per the standard recommended schedule. The children of parents that choose to spread out immunizations may still be considered up-to-date at the age the child is being assessed, if they received immunizations at the age and interval recommended in the ACIP catch-up schedule. For example, the ACIP catch-up schedule recommends two doses of MMR vaccine at 4 weeks apart. If a child did not receive their MMR vaccines per the standard schedule but instead received the vaccines at 4 ½ years and a second before they start school, they would be considered up-to-date by the time they are assessed at kindergarten entry.

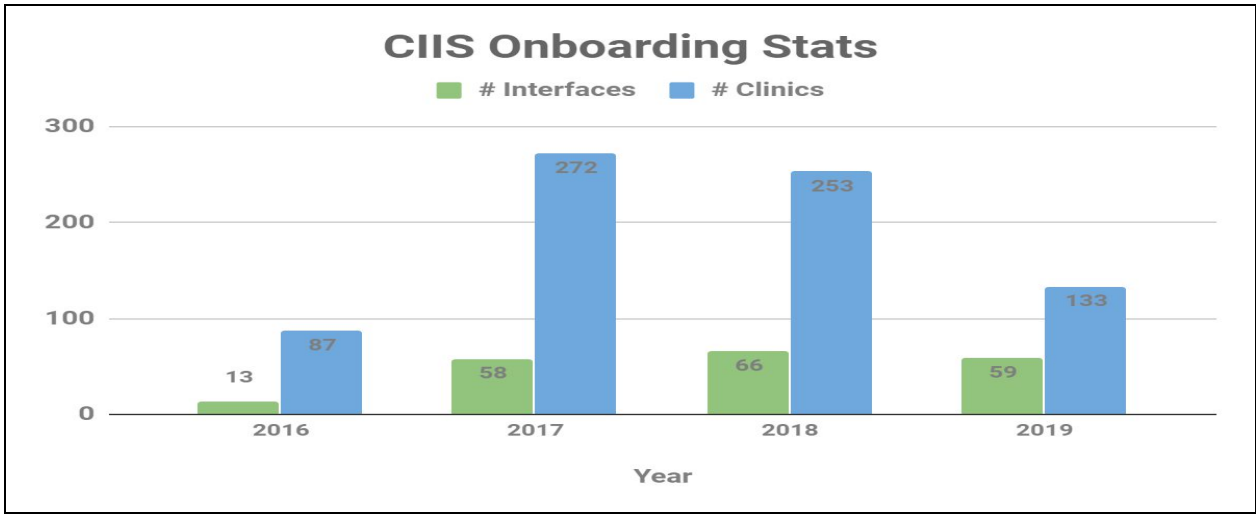
Parents who choose to follow an alternative schedule that delays recommended doses beyond what ACIP recommends in the standard or catch-up scheduled are not considered up-to-date and adversely affect Colorado's immunization rates.

20. Please describe the Department's efforts and success around improving provider participation in the Colorado Immunization Information System (CIIS).

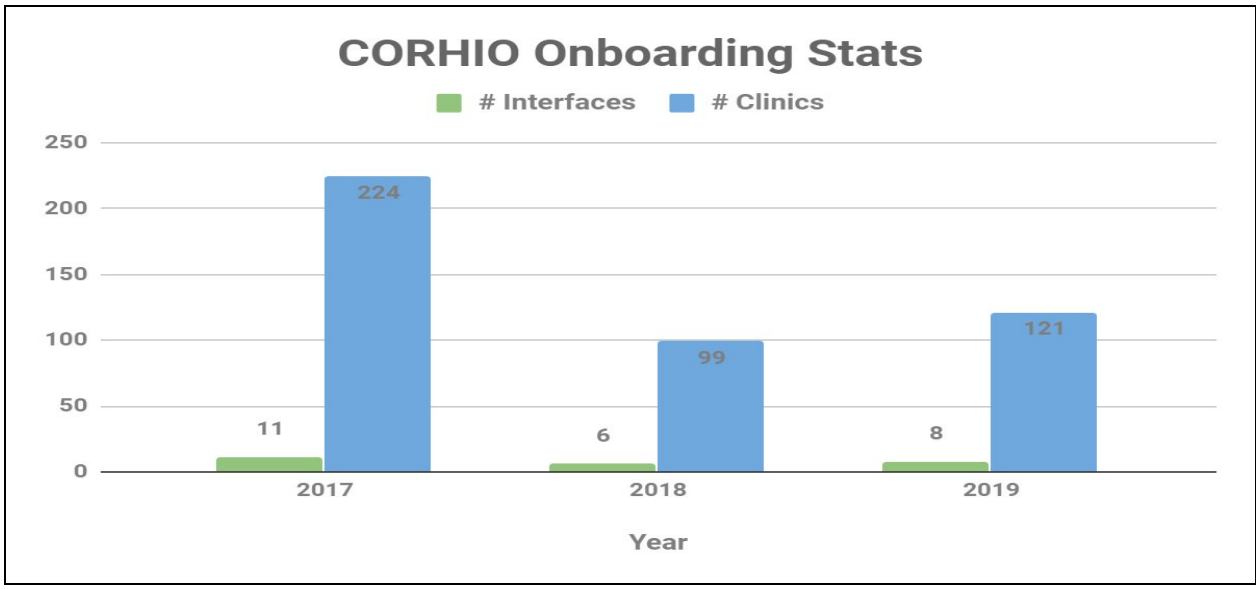
RESPONSE: Based on known immunizing providers, we estimate approximately 87% of providers now actively submit data to CIIS. In 2015, the CIIS program received state funding to hire four staff to focus on reducing the existing electronic interface waitlist. The CIIS program participated in a Quality Improvement (QI) project, with the goal of streamlining the immunization interface process and reducing overall timelines for each project. Since implementing the workflow changes from the QI project:

- The team has added 956 new sites submitting data to CIIS; a 106% increase in number of clinics submitting data relative to 2015.

- The number of patient records in CIIS has increased from 4.81 million in 2015 to 6.35 million in 2019 (32% increase in total patients).
- The team has reduced the time per electronic interface project by 47%, reducing the overall project timeline from 8.5 months to 4.5 months. The team has managed this even with following a stringent data quality process, which ensures accurate and complete data is entered into CIIS.
- CIIS now receives almost 500,000 more immunizations each year than in 2015 (12% increase in number of immunizations/year since 2015).



Additionally, since 2017, the Colorado Regional Health Information Organization (CORHIO) has also worked on connecting providers to CIIS.



VAPING AND AMENDMENT 35 REVENUE

21. Did the Tobacco Master Settlement Agreement impose age verification for purchasing tobacco products?

RESPONSE**:** The Tobacco Master Settlement Agreement did not impose age verification for purchasing tobacco products. The only mention of age-verification refers to allowed marketing practices occurring in adult-only facilities (e.g. bars), where the facility operator has a reasonable basis to believe no underage person is present.

The Master Settlement Agreement did not impose requirements on products themselves, only on the manufacturers. It imposed significant prohibitions and restrictions on tobacco advertising, marketing, and promotional programs or activities, including direct marketing to youth, lobbying policymakers, and misrepresentation of the health consequences of tobacco use and suppressing health-related research.

There are other guidelines that impose age verification to purchase tobacco products. The US Substance Abuse and Mental Health Administration issued guidelines requiring states to enact laws to prohibit selling or distributing tobacco products to individuals younger than 18 in 1996. Colorado Revised Statute 18-13-121 requires an ID check of anyone who appears younger than 30 before they can be sold tobacco. The Family Smoking and Tobacco Prevention Act of 2009 established a federal minimum age applied to cigarettes, smokeless tobacco and roll your own on 6/22/09. It applied to all other tobacco products starting August 8, 2016.

22. What specific programs would have been funded by HB 19-1333 (Cigarette Tobacco and Nicotine Product Tax)? Did the bill expand existing programs or create new programs?

RESPONSE**:** House Bill 19-1333 would have allocated 50% of the revenue to the Behavioral Health and Health Care Fund, 35% to the Preschool Programs Cash Fund and 15% to the Expanded Learning Opportunities Fund. Specific to the State Tobacco Education and Prevention Partnership (STEPP) program, the fiscal note projected approximately $30 million in additional revenue, bringing program funding in line with the CDC's public health best practices guidelines for Colorado's investment in its comprehensive statewide tobacco control activities. Please refer to the Legislative Council Fiscal Note for additional information.

23. Is vaping more dangerous than smoking?
- What research is available around this issue?

RESPONSE**:** It is difficult to say with certainty whether vaping is safer than smoking, particularly considering the recent outbreak of e-cigarette, or vaping, product use associated lung injury (EVALI). There is no long-term safety data on the effects of vaping on lung tissue. Early research points to potential cardiovascular and pulmonary health harms from vaping. E-cigarette aerosol may contain fewer toxic chemicals than smoke from regular cigarettes, but the composition of vaping materials and content of the aerosol is not public information. E-cigarette aerosol cans contain harmful substances, including nicotine, heavy metals such as

lead, volatile organic compounds, and cancer-causing agents.[4] Much is still unknown about the long-term effects of e-cigarette use.[5]

What is known is that e-cigarettes are not safe for youth, young adults, pregnant women, or adults who do not currently use tobacco products.[6] Nicotine harms the developing brain which can continue to develop through the early twenties. Vaping produces very small particles (<2.5 microns) that are easier to inhale deeply into the lungs, allowing for greater damage than larger particulates. The lungs are extremely delicate organs that can be damaged by the sustained inhalation of numerous substances, even those that seem relatively harmless such as flour dust.[7]

E-cigarettes may have the potential to benefit adult smokers if used as a complete substitute for regular cigarettes and other smoked tobacco products. However, research shows that most adult e-cigarette users do not stop smoking cigarettes and are instead continuing to use both products (known as "dual use"). In Colorado, just over 7% of the adult population use these products and only about 2% of adults have fully switched from smoking to vaping, conferring minimal health benefits. While many manufacturers of e-cigarette products claim their products aid in smoking cessation, none have filed for FDA approval for these devices to be used as such. The US and Colorado have not seen similar results with respect to the potential for harm reduction in the adult smoking population as some other countries. Those nations, such as the U.K., that do try to use vaping products to help people quit smoking, aggressively regulate those products and cap their nicotine content. Additional research is needed to understand the long-term health effects, including potential benefits.

Recently, an outbreak of severe lung injury, called by the acronym EVALI, has been linked to vapor product use. Patients presenting with this illness have reported symptoms such as cough, shortness of breath, or chest pain; nausea, vomiting, abdominal pain, or diarrhea; fever, chills, or weight loss. The CDC is investigating the cause of this outbreak. As of November 2019, more than 2,000 cases have been reported along with 42 deaths. There are 11 cases and 0 deaths in Colorado.

There are no standard regulations for vape manufacturers. The Food and Drug Administration (FDA) does not currently regulate ingredients or production standards for vapor products. The CDC has identified vitamin E acetate in THC (marijuana) vaping devices as a possible culprit,

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[4] US Department of Health and Human Services. E-cigarette use among youth and young adults: a report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, CDC; 2016.
[5] National Academies of Sciences, Engineering, and Medicine. 2018. Public Health Consequences of E-cigarettes. Washington, DC: The National Academies Press.
[6] About Electronic Cigarettes, CDC, 2018
[7] Baur X1, Degens PO, Sander I. Baker's asthma: still among the most frequent occupational respiratory disorders. Journal of Allergy and Clinical Immunology. 1998 Dec;102(6 Pt 1):984-97.

but they recommend refraining from vaping any product while their investigation continues. To keep up to date on Colorado cases, visit: https://www.colorado.gov/cdphe/vaping-lung-illness

24. Please provide separate Colorado vaping rate data for nicotine and marijuana.

RESPONSE**:**
Nicotine:

- Adults: According to 2018 Behavior Risk Factors Surveillance System (BRFSS), data 7.5% of Colorado adults use an e-cigarette product every day or some days.
- Youth: According to the 2017 Healthy Kids Colorado Survey (HKCS), 27.0% of Colorado high school youth used an e-cigarette product in the past 30 days.

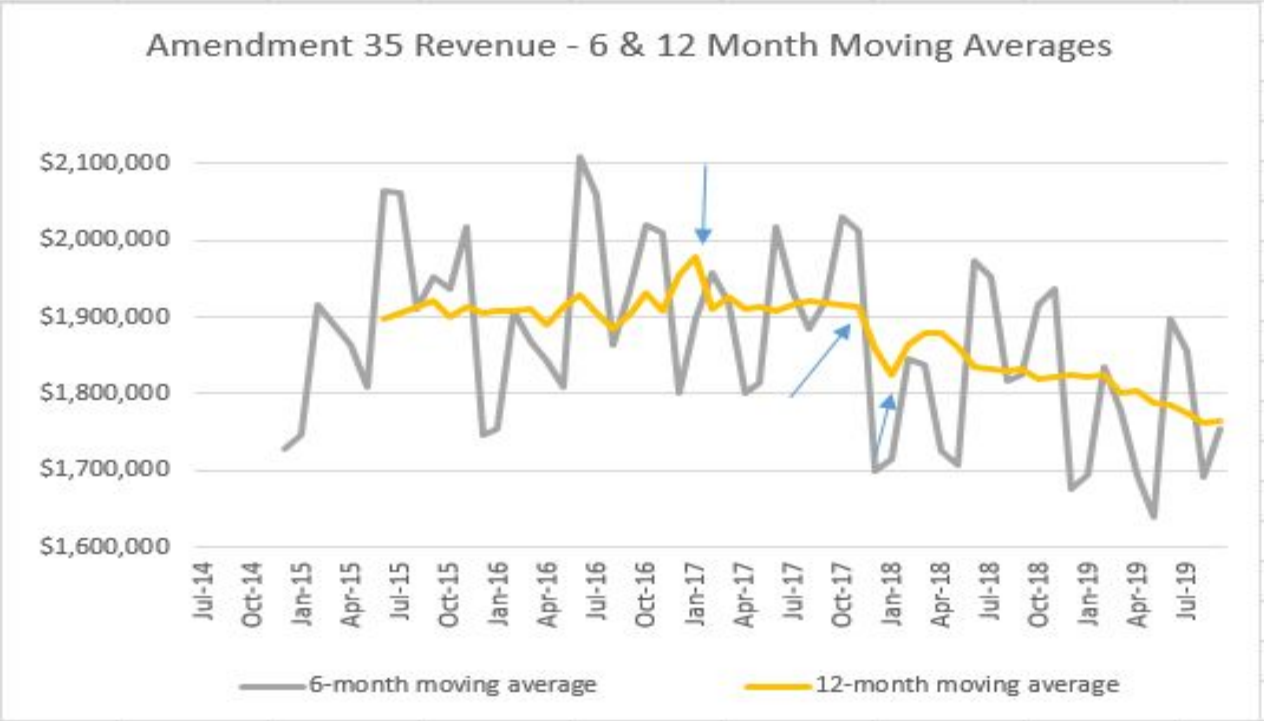
Marijuana:

- Adults: Among the 17.5% of Colorado adults who used marijuana in the past 30 days, 29.4% reported they vaped it. (2018 BRFSS)
- Youth: Among the 19.4% of Colorado high school youth who used marijuana in the past 30 days, 20.3% vaped it. (2017 HKCS)

25. What impact does declining Amendment 35 (A35) revenue have on the Departments ability to operate programs that receive A35 funds?

RESPONSE**:** The Department administers the State Tobacco Education and Prevention Partnership (STEPP) and the Cancer, Cardiovascular, and Pulmonary Disease (CCPD) Grants Programs, which are funded with Amendment 35 tobacco taxes. Each program takes into account revenue projections to manage the 3-year grant cycle in a manner to help mitigate revenue fluctuation impacts on grantees. This works well when the revenue and respective forecasts are stable.

Initial grant funding decisions for the current 3-year grant cycle were made based on the September 2017 Legislative Council Staff (LCS) Revenue forecast, which projected A35 revenue to be relatively steady or experience very modest declines. However, a sudden shift in the forecast and sharp drop in actual revenue starting in 2018 forced CDPHE to initiate several rounds of cuts to program grantees and CDPHE operations in the current three-year funding cycle (Fiscal Years 2018-19, 2019-20 and 2020-21) in order to bring expenditures in line with available revenue. The chart below, of monthly amendment 35 revenue, shows the sudden shift in actual revenue referred to above. The Department also made internal spending reductions in order to reduce the burden of cuts to grantees.



The reductions in the STEPP program included across-the-board reductions of approximately 5% to all grantees. Reductions also included the elimination of funding for a school-based tobacco cessation program that had a limited reach as well as elimination of funding for one of three innovative grants that provided cessation support for multi-unit housing residents whose buildings had gone smoke-free. The program also strategically reduced its investment in advertising to promote cessation resources. This cut ultimately resulted in a 30% reduction in enrollment for the QuitLine during this period, which meant about 1,500 fewer tobacco users received proven cessation services.

The CCPD program made a number of cuts to a diabetes prevention program and HPV vaccine promotion program. The program also reduced funding for evaluation and technical assistance to grantees. The intentions of the funding decisions were to protect health equity, maintain investments in efforts with proven effectiveness, and focus on sustainability. Additionally, the CCPD program also implemented across-the-board cuts of approximately 5%.

The Department continues to monitor LCS quarterly revenue projections as well as the monthly deposits made by Treasury. This allows the programs to respond in as strategic a manner as possible. The Department will consult with stakeholders and the community, and use the respective review committees to make adjustments to the funding portfolios as required by the changes in revenue. As declines in revenues continue, it will further reduce CDPHE's support of community-based tobacco control efforts and chronic disease prevention efforts, capacity to

educate Coloradans about the benefits of quitting smoking, and ability to provide tobacco cessation aid, including vaping cessation aid for youth.

Tobacco use continues to be the leading cause of preventable death and disease in the US and in Colorado. In addition, Colorado now faces epidemic levels of youth nicotine addiction to vaping products. Continued revenue declines will lead to further funding reductions to grants that will inhibit STEPP's ability to prevent nicotine addiction in youth and help adults to quit tobacco addiction.

26. How is the Department using available resources to address the increase in usage of vaping products across the state?

RESPONSE**:** Vape products are not taxed as tobacco products so the Department has seen no additional resources to combat tobacco, including vaping, even as the use of vaping products has exploded among youth. The CDC's public health best practices guidelines recommend that Colorado invest more than $50 million per year in its comprehensive statewide tobacco control activities such as those conducted by Colorado's State Tobacco Education and Prevention Partnership (STEPP). This is meant to combat the effects of tobacco industry marketing, which is estimated to run over $140 million a year in Colorado. The state's current resources for tobacco control total less than $25 million, causing historic tobacco cessation work to be impacted by the needs of combatting the vaping epidemic.

The tobacco program uses the entire funding disbursement of Amendment 35 funds to support a comprehensive effort to prevent and control tobacco use and included addressing vape activities as part of this work. The four pillars of the STEPP program are to educate the public about the dangers of all tobacco products, promote and provide support for tobacco cessation, support communities advancing policies that discourage people from using tobacco products and encouraging them to quit, and program evaluation and monitoring of tobacco use.

Although these activities are integral to reducing tobacco addiction, educating young Coloradans about the potential health risks of vaping and including vaping in all comprehensive tobacco control work is costly in terms of time and resources, further burdening an already declining funding stream. Youth who vape are about four times more likely to start smoking after vaping. Traditional tobacco product use is intertwined with vaping, possibly because nicotine affects the developing brain, effectively rewiring it for addiction. The Department believes the comprehensive approach described above will continue to have an impact on the use of tobacco by all Coloradans and will simultaneously support the prevention of youth vaping.

DISTRIBUTIONS TO LOCAL PUBLIC HEALTH AGENCIES

27. When did fund distributions to local public health agencies (LPHAs) become linked to the Community Provider Rate calculations?

RESPONSE: On March, 13, 2015. During JBC Staff presentation of Departmental comebacks for FY 2015-16.

28. Prior to that date, what was the growth in this line item?

RESPONSE: Prior to FY 2015-16, the 5-year average growth rate in the Distributions to Local Public Health Agencies line item was 0.0%.

Distributions to Local Public Health Agencies:
Table 1
Long Bill Appropriations & Annual Percent Change

	TOTAL	GF	CF	RAF	Yearly % change
FY07-08	$ 5,000,000	$ 5,000,000	$ -		
FY08-09 *	$ 7,243,313	$ 5,000,000	$ 2,243,313		44.9%
FY09-10 **	$ 8,578,443	$ 5,962,731	$ 2,615,712		18.4%
FY10-11	$ 8,249,086	$ 5,962,731	$ 2,286,355		-3.8%
FY11-12	$ 8,013,294	$ 5,935,190	$ 2,078,104		-2.9%
FY12-13	$ 7,924,220	$ 5,935,190	$ 1,989,030		-1.1%
FY13-14	$ 8,513,222	$ 6,531,478	$ 1,981,744		7.4%
FY14-15	$ 8,552,223	$ 6,531,478	$ 2,020,745		0.5%
FY15-16	$ 8,786,252	$ 7,027,228	$ 1,759,024		2.7%
FY16-17	$ 8,794,812	$ 7,027,228	$ 1,767,584		0.1%
FY17-18	$ 9,278,582	$ 6,765,253	$ 1,792,362	$ 720,967	5.5%
FY18-19	$ 9,371,369	$ 6,832,906	$ 1,810,286	$ 728,177	1.0%
FY19-20	$ 9,465,083	$ 6,901,235	$ 1,828,389	$ 735,459	1.0%
		Percent Change Average FY10-11 to FY14-15			0.0%

* FY08-09 Was the first year of Tobacco Master Settlement Cash Funds to the line item

**FY09-10 The Department Submitted a Decision Item to Increase Funding for LPHAs

29. If the distributions to LPHAs line item had been subject to the Community Provider Rate adjustments since FY 2008-09, what would the total be today?

RESPONSE: The Distributions to Local Public Health Agencies line item would be approximately $9,559,734. An increase of $94,651.

Distributions to Local Public Health Agencies:
Table 2
Projection of Appropriation if Tied to Community Provider Rate

	Long Bill Appropriation	Historic Community Provider Rate (from Appropriations Report)	If LPHA line were tied to Community Provider rate
FY07-08			
FY08-09	7,243,313	1.5%	7,351,963
FY09-10*	8,578,443	0.0%	8,578,443
FY10-11*	8,249,086	0.0%	8,249,086
FY11-12*	8,013,294	0.0%	8,013,294
FY12-13*	7,924,220	0.0%	7,924,220
FY13-14	8,513,222	2.0%	8,683,486
FY14-15	8,552,223	2.5%	8,766,029
FY15-16	8,786,252	1.7%	8,935,618
FY16-17	8,794,812	0.0%	8,794,812
FY17-18	9,278,582	1.4%	9,408,482
FY18-19	9,371,369	1.0%	9,465,083
FY19-20	9,465,083	1.0%	9,559,734
Difference Between FY19-20 Appropriation and Projected Community Provider Rate Appropriation			94,651
*A statewide Common Policy for Community Provider Rate was not established by the JBC for this year			

This calculation is based on the FY2007-08 appropriation of $7,525,802, and using the JBC Common Policy Community Provider Rate for each year since FY 2008-09.

30. If the distributions to LPHAs line item had grown by inflation since FY 2008-09, how much more would it be now? What inflation metric source would you use?

RESPONSE: The Distributions to Local Public Health Agencies line item would be approximately $9,720,640. An increase of $255,557.

Distributions to Local Public Health Agencies: Table 3 Projection of Appropriation if Tied to Inflation			
	Long Bill Appropriation	Historic Denver CPI	IF LPHA line was tied to CPI
FY07-08	5,000,000	2.2%	
FY08-09	7,243,313	3.9%	7,402,666
FY09-10	8,578,443	-0.6%	8,913,002
FY10-11	8,249,086	1.9%	8,199,591
FY11-12	8,013,294	3.7%	8,165,547
FY12-13	7,924,220	1.9%	8,217,416
FY13-14	8,513,222	2.8%	8,674,973
FY14-15	8,552,223	2.8%	8,791,685
FY15-16	8,786,252	1.2%	9,032,267
FY16-17	8,794,812	2.8%	8,900,350
FY17-18	9,278,582	3.4%	9,538,382
FY18-19	9,371,369	2.7%	9,689,996
FY19-20	9,465,083	2.7%	9,720,640
Difference Between FY19-20 Appropriation and Projected CPI Rate Appropriation			255,557

This calculation is based on the FY2007-08 appropriation of $7,525,802, and using the Historical Denver area Consumer Price Index found at the US Dept. of Labor, Bureau of Labor Statistics website: https://www.bls.gov/regions/mountain-plains/data/consumerpriceindexhistorical_selectedareas_table.htm

31. If the distributions to LPHAs line item had grown in relation to population growth since FY 2008-09, how much would it be now?

RESPONSE: The Distributions to Local Public Health Agencies line item would be approximately $9,502,568. An increase of $37,485.

Distributions to Local Public Health Agencies: Table 4 Projection of Appropriation if Tied to Population Growth			
	Long Bill Appropriation	Historic Denver Population Growth	If LPHA line was tied to Pop Growth
FY07-08	5,000,000		
FY08-09	7,243,313	1.6%	
FY09-10	8,578,443	1.7%	7,359,206
FY10-11	8,249,086	1.5%	8,724,277
FY11-12	8,013,294	1.5%	8,372,822
FY12-13	7,924,220	1.3%	8,133,493
FY13-14	8,513,222	1.4%	8,027,235
FY14-15	8,552,223	1.5%	8,632,407
FY15-16	8,786,252	1.5%	8,680,506
FY16-17	8,794,812	1.9%	8,918,046
FY17-18	9,278,582	1.6%	8,961,913
FY18-19	9,371,369	1.4%	9,427,039
FY19-20	9,465,083	1.4%	9,502,568
Difference Between FY19-20 Appropriation and Projected Pop Growth Rate Appropriation			37,485

This calculation is based on the FY 2008-09 appropriation of $7,525,802, and using the statewide population growth percentage found on OSPB's annual revenue forecasts.

32. How much did LPHAs receive statewide per capita in F Y2008-09 vs. FY19-20?

RESPONSE: Due to updates to the funding formula methodology for calculating the allocations to LPHAs, it is difficult to compare per capita amounts for 2019 to 2009. The above calculations indicate that LPHA funding has grown, but does not seem to be keeping pace with standard indicators such as inflation and population growth.

33. What happened to the Medicaid reappropriated funds that were allocated in the Long Bills for FYs 17-18, 18-19, and 19-20? Was the match approved by the feds? If not, what impact did that have on the line item?

RESPONSE: The federal matching component has not yet been approved by the Centers for Medicare and Medicaid Services. The General Fund which was set aside as a state match was distributed as reappropriated funds to the LPHAs.

34. What impact did this have on the actual amount distributed to LPHAs? If the funds actually distributed were less than the line item amount, how much less?

RESPONSE: Although the programs did not receive the additional funding that would have been available if the federal request was approved, the LPHAs received the same funding they would have received but for this project. The portion of the reappropriated funds that was associated with the federal funds lapsed. The Department of Health Care Policy and Financing is continuing to explore options to determine if there is a path forward.

ENVIRONMENTAL DIVISIONS

R1 STATIONARY SOURCES PROGRAM RESOURCES

MOBILE SOURCES' EMISSIONS

35. Please discuss the current regulatory and programmatic actions being implemented and considered by the Department and the Air Quality Control Commission to address emissions from mobile sources.

RESPONSE**:** The EPA is designating Colorado as serious nonattainment for ozone. Colorado's emissions inspection and maintenance program already meets the federal requirements for a serious ozone nonattainment designation, however Mobile Sources staff are researching and investigating additional cost-effective and customer convenient strategies to further improve emissions reductions from the vehicle fleet in the nonattainment area.

In a major regulatory effort in late 2018-mid 2019, Mobile and Air Division staff drafted and proposed low emission and zero emission vehicle requirements which the Air Quality Commission adopted for model years 2022, and 2023 respectively. These regulations, known as the "Colorado Low Emission Automobile Regulation" ("CLEAR"), require that new vehicles sold in Colorado meet the strictest available emission requirements, and provide that manufacturers must sell an increasing percentage of zero emission vehicles such as electric or fuel cell vehicles. CLEAR will reduce greenhouse gas emissions from the Colorado fleet by some 36 million tons, while reducing fossil fuel consumption and saving Colorado motorists thousands of dollars over the life of each of these newer vehicles in the form of fuel savings and decreased maintenance costs.

The diesel vehicle inspection and maintenance programs are undergoing extensive automation of data management. Secure internet data connectivity has improved inspection data accuracy, timeliness and access, reduced errors, saved time for the 375 inspection fleets and businesses, and enabled the vehicle owner access to online diesel vehicle registration renewals for the first time.

Illegal and clandestine tampering continues to be a growing threat to emissions reduction efforts. As technology has changed, so has the nature of emissions tampering, although the extensive capabilities of automotive On-Board Diagnostics (OBD) allow for detection of non-standard (i.e. illegal) engine management software 'tuners' or 'reflashes'. The Mobile Sources Program is actively investigating this phenomena in both the gasoline and diesel inspected fleet in an effort to quantify the extent and its effects on the mobile emissions inventory.

Other programmatic changes include improved roadside remote sensing Clean Screen criteria that enable more vehicles to avoid the trip to the inspection station. Mobile Sources Program staff were able to incorporate a data-centric analysis of OBD failures to tailpipe emissions values and thereby utilize OBD pass/fail data as a clean screen prediction criteria, thus allowing more motorists the convenience of Clean Screen. This was accomplished with no loss of emissions reduction benefit to the program.

The current I/M contract is in place until December 31, 2019. This has been extended to December 31, 2021 pursuant to 42-4-306(3)(b)(V)(A) CRS. Mobile staff has spent six months of 2019 investigating what is best for Colorado in 2022 and beyond, when this two year extension runs out.

Mobile's remote Emissions Technical Centers continue to provide a personalized, impartial, technologically current technical assistance role to both the public and the local repair businesses, guiding and advising the emissions repair process in each individualized case, while ensuring that there is no preferential or direct repair referral given. The motorist is always free to choose their own repair business, and Mobile staff will always share diagnostic findings with repair businesses and vehicle owners. The Sources Program Mobile continues to provide extensive up-to-date technical outreach to the unregulated repair industry. In particular, The Program's quarterly "Tech Night" clinics have a loyal following among knowledgeable emissions diagnostic repair technicians along the Front Range. All Mobile Sources Technical Center services are free of charge to the public and industry.

In addition to ongoing enhancements to the current I/M program and implementation of the CLEAR rule CDPHE, in collaboration with other agencies, is looking at a variety of potential new mobile source reduction strategies. R. CDPHE staff is engaged with the expansion of the electric vehicle charging infrastructure prescribed in Governor Polis' Executive Order B 2019-002 and the Volkswagen trust settlement. On a national scale, CDPHE's Mobile Sources Program participates with other states with similar air quality issues.

36. There is currently litigation between California and the federal government regarding a state's ability to set mobile emissions standards that are more stringent than the federal standards. Please provide a brief discussion regarding Colorado's position on this litigation and the status of this litigation.

RESPONSE**:** Colorado's position: Colorado opposes "The Safer Affordable Fuel-Efficient ("SAFE") Vehicles Rule Part One: One National Program," rules jointly promulgated by the

United States Environmental Protection Agency and the National Highway Traffic Safety Administration governing new vehicle emission standards and fuel efficiency standards. Specifically, Colorado opposes the new fuel economy and greenhouse gas emission standards for automobile and light duty trucks. Colorado opposes EPA's unprecedented decision to withdraw the Clean Air Act preemption waiver it granted to the State of California in January 2013, which is the basis upon which Colorado must rely to promulgate its own emission standards. Colorado also opposes NHTSA's regulations declaring state and local greenhouse gas emissions standards as well as zero emission vehicle mandates are preempted by the Energy Policy and Conservation Act, which, if it stands, would preclude Colorado from establishing its own emission standards.

Status: The SAFE Rule has been challenged as unlawful by several states, cities and nongovernmental organizations, including the State of Colorado, and it is presently under review by the U.S. Court of Appeals for the District of Columbia Circuit. Separately, NHTSA's regulations have been challenged as unlawful by several parties, including the State of Colorado, and they are presently under review by the U.S. District Court for the District of Columbia, which has jurisdiction to review NHTSA's action.

STATIONARY SOURCES INSPECTIONS

37. Under the serious nonattainment classification, stationary sources permittees will require a "first 90 days" inspection because emissions tend to be highest during this period. Please provide a brief discussion on why this period experiences the highest rate of emissions and why inspections were not previously required.

RESPONSE**:** Potential emissions are highest at the beginning stages of a new oil and gas well being brought into production (i.e. first 90 days) because wells have their highest levels of production during this initial phase. Emissions are typically directly related to the volume of oil and gas produced. Since production is highest in the initial stages of operation, so, generally, are emissions. CDPHE has not regularly conducted inspections during this time period due to a deferral that currently exists in the regulation that allows the operator to produce for 90 days before filing for a permit. CDPHE has proposed removing this deferral language from the regulation. The AQCC will consider this proposal during a hearing in December 2019. If the deferral is removed, CDPHE will have advance information on the well production locations and commencement dates, which will enable it to conduct inspections during the initial stages of production on a routine basis.

38. With the additional resources requested in this decision item, how will that frequency of infrared inspections be affected? Please provide the following information regarding infrared inspections:

- current and anticipated number of infrared inspection conducted per inspector per week; and

RESPONSE**:** With current staffing, the division plans to complete 2,000 IR inspections in FY2019-20. This averages to 38.5 IR inspections per week (38.5/3.7 FTE = 10.4 IR per week

per inspector). With the proposed staffing increase the division proposes to conduct 3,800 IR inspections annually or 73 IR inspections per week (73/6.9 = 10.6 IR per week per inspector).

- current and anticipated number of infrared inspections conducted per regulated facility per week.

RESPONSE**:** The Division does not believe that the response changes from above. It's currently 38.5 facilities per week and then 73 facilities per week on average based on current and future staffing.

39. Does the Department make inspection results available to the relevant county governments and the public? If so, what types of information are publicly published?

RESPONSE**:** Inspection results are available to the public (and relevant county governments) in a few ways. Data related to Full Compliance Evaluations (FCEs) and stack tests are entered into the division's database and then uploaded to EPA's database on a weekly basis. Much of this information, including inspection results (i.e. compliance status), is available to the public on EPA's website, Enforcement and Compliance History Online (ECHO). In addition, once inspection reports are finalized, reports are available to the public on the division's public facing records management system, WebDrawer. In some circumstances, detailed results are not immediately available to the public while the division completes further investigations and/or the formal enforcement process.

STATIONARY SOURCES CONTROL FUND

40. Statute sets a 4,000 tons per year cap on the amount of emissions subject to fees (Section 25-7-114.7 (2)(a)(II), C.R.S.). How often does the actual amount of pollutants emitted exceed this limit? How much revenue is foregone because of this statutory cap? If possible, please identify the entity(ies) to which this cap applies.

RESPONSE**:** With the latest inventory, there are two facilities that have exceeded the 4,000 ton cap.

Xcel Energy's Comanche Station exceeds the cap for NO2 by 1,199.127 tons and SO2 by 186.165 tons.

Tri-State's Craig Station exceeds the cap for NOx by 2,677.1 tons.

Collectively, this is 4,062.392 tons of criteria pollutants that are not billed because of the cap. At a rate of $28.63/ton, this calculates to $116,306.28 of revenue.

41. The Stationary Sources Control Fund is not subject to the statutory requirement to maintain a 16.5 percent uncommitted reserve balance, pursuant to Section 24-75-402 (2)(e)(V), C.R.S.

However, the Fund has had a recent history of annual deficits affecting its uncommitted and unencumbered fund balance. Please provide the following:

- A brief discussion of Division's efforts to maintain an uncommitted and unencumbered fund balance.

RESPONSE**:** The Division tracks revenue and expenditures at least monthly, and sometimes more frequently as needed, for example immediately after a large billing or near the end of the fiscal year. The Program updates projections of revenues, expenditures and fund balance on a quarterly basis, manages revenue to cover expenditures, and has procedures and controls in place to ensure the balances are correctly managed and are properly stated on an on-going basis. Invoices and bills are processed through CORE for each customer and the system automatically generates invoices for the division to mail to customers ensuring adequate notification for payment. The Division reconciles all accounts receivable balances to the details of the outstanding aged invoices. In addition, the Accounting Unit has developed and conducts training with Division fiscal staff on accounts receivable tracking, revenue analysis, understanding A/R balances, and reconciling to division sub-systems.

- A 10-year table showing the Fund's year end balance as a percentage of annual expenditures.

RESPONSE**:**

Stationary Sources Fund - Expenditure History from FY 2009 - 2019

	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Carryover - Prior Year Fund Balance	$ 1,380,165	$ 1,882,059	$ 1,877,926	$ 2,746,690	$ 4,502,433	$ 6,364,761	$ 7,414,249	$ 7,208,567	$ 3,140,313	$ 1,742,331	$ 1,103,105
Revenue	$ 9,763,529	$ 9,598,931	$ 9,871,908	$ 10,776,380	$ 12,473,057	$ 13,241,571	$ 12,754,770	$ 13,069,281	$ 12,303,458	$ 12,230,680	$ 13,702,117
Expenditure	$ 9,261,635	$ 9,603,064	$ 9,003,144	$ 9,020,637	$ 10,610,729	$ 12,192,083	$ 12,960,452	$ 13,835,031	$ 13,701,441	$ 12,869,906	$ 13,107,312
Year End Balance As % of Annual Expenses	20%	20%	31%	50%	60%	61%	56%	47%	13%	9%	13%
Cumulative Fund Balance	$ 1,882,059	$ 1,877,926	$ 2,746,690	$ 4,502,433	$ 6,364,761	$ 7,414,249	$ 7,208,567	$ 6,442,816	$ 1,742,331	$ 1,103,105	$ 1,697,910

R5 Laboratory Facility Maintenance

42. Please provide a description of the types of testing conducted by the Departments laboratory. Specifically, please identify any areas of overlap with other state owned laboratories.

RESPONSE**:** The Laboratory Services Division (LSD) provides specialized diagnostic testing not generally provided in commercial clinical labs, such as zoonotic disease (rabies, anthrax, plague), tuberculosis (TB), newborn bloodspot metabolic and genetic screening, outbreak and foodborne illness surveillance, and chemical and bioterrorism response. The laboratory also performs testing for protection of environmental health including air, food (milk, meat and fish), soil, water, and marijuana and marijuana containing products. The state laboratory does not directly compete for customers with other state owned or commercial laboratories, but does offer some overlapping test services, particularly in the area of sexually transmitted diseases and water compliance testing. These services are offered in order to support the activities of other

CDPHE programs, surveillance and emergency preparedness. Additionally, the laboratory's marijuana reference laboratory can perform test methods that overlap with the CDA laboratory such as potency testing in cannabis, but the customer base differs between the two laboratories, the CDPHE laboratory focuses on marijuana and marijuana or cannabidiol (CBD) containing products while CDA's focus is on hemp as an agricultural product.

43. During the 2019 interim, the Joint Budget Committee discussed the impact of the Colorado Bureau of Investigation providing toxicology services to local law enforcement agencies and coroners/medical examiners. This discussion touched on the impact the provision of these services by a state agency has on private businesses. Does the Department of Public Health and Environment's laboratory compete with private business in the testing services it provides? If so, please discuss the areas of private sector overlap and the impact it has on the Department's ability to provide services.

RESPONSE**:** The CDPHE lab does not perform toxicology services related to law enforcement activities. CDPHE's Lab does certify law enforcement equipment used for roadside breathalyzer stops and trains officers on how to use this equipment, but CDPHE's Lab does not charge a fee or test the breathalyzer samples.

The CDPHE laboratory does not directly compete with commercial laboratories in the testing services it provides. While the majority of testing performed at the CDPHE laboratory is considered specialized diagnostic testing not generally provided at other facilities, the laboratory does offer some test methods that overlap with services provided by commercial laboratories. Testing for sexually transmitted infection such as HIV is available through large commercial reference laboratories such as Quest and LabCorp, but is offered at the state laboratory in support of surveillance programs operated through other CDPHE Departments and local public health. The CDPHE laboratory performs testing of food such as milk, meat and fish as part of routine surveillance for foodborne illness. The laboratory also offers a full menu of EPA-compliant testing for compliance with safe drinking water regulations. Maintaining capacity for these critical tests is an important component of the Departments preparedness mission and allows staff to maintain capacity and expertise for outbreak and surge testing in response to public health emergencies such as the Listeria cantaloupe outbreak and the Gold King Mine water disaster.

44. Please provide the following information:

- The age of the laboratory facility.

RESPONSE**:** The state acquired the lab building from the Air Force in 1995. At the time of purchase the building was an old airplane hangar. The State then spent one year refurbishing the building transitioning it into the State Lab. The Lab occupied the newly renovated building in 1996.

- How does the required maintenance and its cost align with other facilities its age?

RESPONSE: CDPHE does not have data to compare the state lab against other labs that perform similar testing.

- How did the Department determine that this request should be made through the Department's operating budget instead of the capital construction budget?

RESPONSE: The Department followed guidance from OSPB and the Office of the State Architect which indicates projects below $500,000 are requested through the operating budget. Additionally, CDPHE has a dedicated line item that has traditionally been used to fund similar projects.

RECYCLING RESOURCES ECONOMIC OPPORTUNITY FUND

45. Please provide the following information since FY 2014-15:
- Number of grant requests received and awarded annually.
- Dollar amount of grant requests received and awarded annually.
- Annual Fund balance and appropriation.

RESPONSE:

	FY 15	FY 16	FY 17	FY 18	FY 19
# of grant requests received	50	42	64	111	137
# of grant requests awarded	11	13	22	37	44
Dollar amount of grant requests received	$9,568,282	$8,428,308	$14,323,227	$13,434,855	$11,453,855
Dollar amount of grant requests awarded	$2,671,802	$2,029,579	$3,688,784	$2,582,045	$3,179,990
Annual Ending Fund Balance	$1,226,045	$1,596,012	$1,207,154	$1,070,756	$2,328,593

Annual Fund Appropriation	$3,971,916	$2,308,548	$4,308,548	$3,508,548	$4,658,200

ADDENDUM: OTHER QUESTIONS FOR WHICH SOLELY WRITTEN RESPONSES ARE REQUESTED. PLEASE RETAIN THE NUMBERING IN ORDER TO MAINTAIN CONSISTENT LABELING FOR COMMON QUESTIONS ACROSS DEPARTMENTS.

1 Provide a list of any legislation that the Department has: (a) not implemented, or (b) partially implemented. Explain why the Department has not implemented or only partially implemented the legislation on this list. Please explain any problems the Department is having implementing any legislation and any suggestions you have to modify legislation.

Response: In 1988, the General Assembly passed legislation authorizing the development of child care centers in nursing homes, and encouraged private grants as the source of funding. No grant funding was ever received by the Department, and no nursing homes took advantage of the legislative authorization to create child care centers.

Also, pursuant to HB 13-1117, work pertaining to early childhood programming was transferred from the Department to the Department of Human Services; however, some of the responsibilities were erroneously maintained in the Department's statutes, creating the potential for duplication of effort.

2 Does the Department have any HIGH PRIORITY OUTSTANDING recommendations as identified in the "Annual Report: Status of Outstanding Audit Recommendations" that was published by the State Auditor's Office and dated June 30, 2019 (link below)? What is the Department doing to resolve the HIGH PRIORITY OUTSTANDING recommendations? Please indicate where in the Department's budget request actions taken towards resolving HIGH PRIORITY OUTSTANDING recommendations can be found.
http://leg.colorado.gov/audits/annual-report-status-outstanding-audit-recommendations-june-30-2019

Response: The Department has one outstanding audit recommendation in the October 2019 Informational Report issued by the Office of the State Auditor concerning audit recommendations dated on or before June 30, 2019; however, the report specifically states it is not a high priority recommendation.

3 If the Department receives federal funds of any type, please respond to the following:

a. Are you expecting any changes in federal funding with the passage of the FFY 2020-21 federal budget? If yes, in which programs, and what is the match requirement for each program?

Response: The Department has been closely monitoring budget discussions between the White House and the U.S. Congress. Because more than 49 percent of CDPHE's budget is from federal sources, changes in federal funding could have a significant impact on the agency. Two

key agencies the Department monitors are the United States Environmental Protection Agency (EPA) and the Department of Health and Human Services (HHS). The Department has identified how changes to the following could impact agency programs:

EPA Lead and Non-Point Source Grants: There should be no changes for these grants as the House and Senate Appropriations Committee markups proposed funding levels for lead ($277,000) and non-point source ($1.17 million) equal to the amounts enacted for FFY 2018-19. These programs require a state match, which are derived from local in-kind sources and/or state expenditures.

EPA Water Infrastructure Grants: The State Revolving Funds (SRFs) annually face uncertainty with federal funding levels as historically there has been great variability in the award amounts. However, for FFY 2019-20, Colorado's Drinking Water ($21.7 million) and Clean Water SRFs ($12.8 million) remained at the same funding levels as appropriated for FFY 2018-19, but there is uncertainty as to whether the same level of funding will be sustained for FFY 2020-21. The Department monitors these grants closely as they are integral to supporting the Safe Drinking Water and Clean Water programs.

The EPA Statewide Indoor Radon Program (SIRG): is currently funded at approximately $300K. There is a 25% match required which is met using the Low-Income Radon Mitigation Assistance (LIRMA) Program in addition to in-kind contributions from LPHA's. Reductions to the program would decrease the number of free radon test kits the Department can offer and limit education and outreach to the public for radon awareness.

The CDC Prevention Programs: Appropriations legislation passed in both the United States House and Senate call for no significant cuts to federal funds for Centers for Disease Control and Prevention (CDC) programs that support the Prevention Service Division programs. The federal government is currently operating under a continuing resolution through December 20, 2019, which funds the government at 2019 levels. If Congress and White House come to an agreement consistent with the existing appropriations there should be no reductions in federal appropriations to states in the 2020 budget.

The CDPHE Family Planning Program (FPP): The FPP is expecting a $520,000 increase from the current fiscal year, totaling $4.3 million from the federal Title X program. If there is an opportunity for additional Title X funds in the future, the program will request them. There is a 10% suggested cost-sharing component, which comes from State Family Planning General Fund appropriations (current appropriations to Family Planning will cover this cost sharing component).

b. Does the Department have a contingency plan if federal funds are eliminated?

Response: The Department will work with the Governor's Office and the General Assembly to identify possible alternative funding sources should federal funds be eliminated, depending on the severity of the cuts and the overall impact on the services provided to Colorado's citizens.

c. Please provide a detailed description of any federal sanctions or potential sanctions for state activities of which the Department is already aware. In addition, please provide a detailed description of any sanctions that MAY be issued against the Department by the federal government during FFY 2019-20 or 2020-21.

Response: The only federal sanction the Department received was during FFY 2018-19 in the Health Facilities and Emergency Medical Services division. The division did not complete several nursing facility reviews, thus the Department's award from the Center's For Medicare and Medicaid Services (CMS) was reduced. However, once the Department successfully worked with CMS to resolve the issue, funding was restored by the end of the fiscal year. The division also had nursing facility surveys that were not completed on time during FFY 2018-19, but CMS included these facilities in the corrective action plan that the division is implementing. While sanctions could be issued for the FFY 2019-20 funds, it is anticipated these funds will be restored by the end of the year as the division works to comply with the corrective action plan.

d. Compared to other states, Colorado ranks low in receipt of federal dollars. How can the Department increase the amount of federal money received?

Response: CDPHE currently receives 49% of its funding from federal sources. The Department diligently applies for all federal dollars that progress the Department's WIGs.

e. What state funds are currently utilized to draw down (or match) federal dollars? What state funding would be required to increase the amount of federal funding received?

Response: Please see Appendix A: State Match.

4 Is the Department spending money on public awareness campaigns? If so, please describe these campaigns, the goal of the messaging, the cost of the campaign, and distinguish between paid media and earned media. Further, please describe any metrics regarding effectiveness and whether the Department is working with other state or federal Departments to coordinate the campaign?

Response: Please see Appendix B: Public Awareness.

5 Based on the Department's most recent available record, what is the FTE vacancy and turnover rate: (1) by Department; (2) by division; (3) by program for programs with at least 20 FTE; and (4) by occupational class for classes that are located within a larger occupational group containing at least 20 FTE. To what does the Department attribute this turnover/vacancy experience? Do the statewide compensation policies or practices administered by the

Department of Personnel help or hinder the Department in addressing vacancy or turnover issues?

Response: Please see Appendix C: FTE, for the FTE vacancy and turnover rates.

The Department exit surveys, for departing employees, currently show the top 3 reasons employees leave the Department: eligible for retirement, career change, and limited or no promotional opportunities. The Department has increased training opportunities to provide skill building for career growth and increased education for supervisors and employees. The Department has also been working on career development plans.

State personnel system policies both help and hinder recruitment and retention rates. Since the deconsolidation of the General Professional Series, there has been very little movement in the salary structure. The total compensation package lags the private sector by 11.5% according to the FY 2020-21 Annual Compensation Report from DPA. This makes it challenging to compete with the private sector. The Department has been piloting 3-18 (e) (competency-based base building pay differential) over the last year for the nurse classification. These positions are difficult to recruit and retain because of the nature of the work performed. The piloted employees were awarded competency based pay; however, two of the four employees left for higher paying private sector jobs. The Department does not believe all areas within the Department, nor all employees, will be eligible for this type of incentive as funding between programs varies greatly (the initiative itself remains unfunded), and the program does not appear to increase retention. Since divisions have very different funding mechanisms and funding levels, this option could further exacerbate pay equity issues, if not implemented with a thoughtful strategy.

6Please identify how many rules you have promulgated in the past two years (FYs 2017-18 and 2018-19). With respect to these rules, have you done any cost-benefit analyses pursuant to Section 24-4-103 (2.5), C.R.S., regulatory analyses pursuant to Section 24-4-103 (4.5), C.R.S., or any other similar analysis? Have you conducted a cost-benefit analysis of the Department's rules as a whole? If so, please provide an overview of each analysis.

Response: In FY 2017-18 and FY 2018-19, the five rulemaking boards and commissions at CDPHE held 75 rulemaking hearings to repeal, revise or promulgate new rules (only 2 of these promulgated new rules) to implement new federal or state directives. For FY 2017-18 and FY 2018-19, the Department completed five cost-benefit analyses. Three regulatory analyses were completed pursuant to the Administrative Procedure Act; however, some boards and commissions incorporate a comparable assessment as part of the rulemaking process and include an economic impact statement or a regulatory analysis for rules being reviewed by the board or commission.

There is no single cost-benefit assessment of the Department's rules as a whole; however, pursuant to E.O. 12-002 and Section 24-4-103.3, C.R.S., the Department reviews its rules. The review includes an assessment of the overall costs and benefits of the rule. Staff work across the Department with other state agencies, and with stakeholders to increase efficiency and achieve or maintain alignment. For more information, please see the 2017, 2018 and 2019 Regulatory Agenda reports published by the Department, or review the Department's Regulatory Efficiency Review policy.

7 What are the major cost drivers impacting the Department? Is there a difference between the price inflation the Department is experiencing compared to the general CPI? Please describe any specific cost escalations.

Response: Please see Appendix D: Cost Drivers.

8 How is the Department's caseload changing and how does it impact the Department's budget? Are there specific population changes, demographic changes, or service needs (e.g. aging population) that are different from general population growth?

Response: Please see Appendix E: Service Demands.

9 Please provide an overview of the Department's current and future strategies for the use of outward facing technology (e.g. websites, apps), the role of these technologies in the Department's interactions with the public and other state agencies, the Department's total spending on these efforts in FY 2018-19, and expected spending in FYs 2019-20 and 2020-21.

Response: The Department has numerous efforts around the use of outward facing technologies for its interactions with the public. These include using the Department's website and social media outlets to provide information on public health and environmental issues. Staff are continually revisiting the content and developing better ways to communicate messages. The Department is working with Colorado Interactive to prepare for the migration of its website content to a new platform based on Drupal 8. Content editors are using analytics and stakeholder feedback to improve content in advance of the migration. The new platform will improve the Department's ability to link related content and present content in a more engaging way. CDPHE will work with the Colorado Interactive's User Experience designer to optimize the user experience.

The Department is investing in tools to allow for better communication of the complex datasets it houses. These data visualization tools are being integrated into existing and new public interfaces. The Department has standardized Tableau as the primary tool for data visualization

and also uses ArcGIS where appropriate. The following highlight examples of the improvements made regarding sharing data:

The Suicide Data for Colorado dashboard took data from multiple, disconnected sources (previously not viewed together) in order to allow citizens, programs, and organizations working in mental health and suicide prevention to visualize suicide data and related information for the state of Colorado. Another example includes the Environmental Public Health Tracking that has succeeded tremendously in aiding the Local Public Health Agencies that utilize the health and environmental data it displays. Previously, managing and updating the health and environmental measures (such as air quality, harmful algae blooms, drinking water, and radon) required significant effort and costs. Now, the Department shares the same data with easy-to-understand visuals, maps, and charts created in Tableau, providing efficiencies for the program.

The Department is evaluating ways to make its data, within the limits of law and regulation, more accessible to the public and more useful in mobile applications. As such, staff are working with the Office of Information Technology to test the state standard Application Program Interface (API) platform. The plan is to incorporate API access into systems as they are built or modernized. This will allow the Department and the public to access and utilize the data assets, such as air and water quality monitoring information, much more effectively.

Over the last few years, the environmental programs at the Department have been working on the Customer Interface Modernization Project for a Lean Environment (CIMPLE) Initiative to improve access to vital environmental information and streamline the permitting processes. As part of this, the Department has implemented the Colorado Environmental Online Services, also referred to as CEOS. CEOS is a web-based platform allowing regulated entities to interact with the Department's environmental programs via a single and secure web portal. Users can perform a number of activities such as applying and paying for required permits and licenses, uploading documents required by regulation or statute, and also updating and modifying information on file. In turn, the Department is able to process requests from the regulated community and provide appropriate licenses or permits through the same portal. The completed and final issuance of regulatory documents processed in CEOS are then available to the public through an online Colorado Environmental Records Management System.

Several years ago The Department noticed a rapid increase in the number of record requests, requiring additional staff time to respond to these requests. To counter this, the Department implemented the Colorado Environmental Records Management System, which stores the environmental records and allows the public to search and retrieve them via the internet. Implementation of this system provides greater transparency into Department work and decreases the need for formal records requests. The Colorado Environmental Records Management System allows citizens better access to vital environmental information, fosters quicker and more predictable interactions with businesses, and allows Department personnel to make more informed decisions based on timely and accurate information.

Another technological solution recently implemented to improve interactions with the public was the online Medical Marijuana Registry System (MMRS). Prior to January 2017, the

Medical Marijuana Registry was a completely paper based process. Paper medical marijuana applications took on average of 30-90 days to process. After the launch of the new web-based system, online applications are processed on average within 1 business day, and oftentimes, applicants receive their card the same day they submit the application.

Total spending on outward facing technology efforts for FY 2018-19 were estimated to be approximately $4 million across the Department and it is expected that spending in FYs 2019-20 and 2020-21 will be similar.

10 There are many ways in which the Department may interact with internal or external customers, including the public and other Departments. How is the Department gathering feedback and evaluating customer experience? Please address all interactions, e.g. technology, in-person, call centers, as well as total spending on these efforts in FY 2018-19 and expected spending in FYs 2019-20 and 2020-21.

Response: As the Department has a variety of customers internally and externally, multiple methods and systems are used to gather feedback and evaluate customer experience. In order to solidify these efforts, the Department developed a Customer Service Policy in 2014 which instructed programs and staff to consider the impact on customer with programs/projects, to ensure staff are empowered to resolve customer complaints, provide staff with the skills and tools needed to service customers, ensure timely response, and to collect and analyze customer feedback.

In 2016, the Department took an inventory of the customer service feedback methods and found that over 200 methods and surveys exist across all the divisions. As programs seek specific, timely and targeted feedback from customers each division has developed methods and systems to measure and use customer feedback. A sampling of the methods used include customer surveys (using SurveyMonkey, Qualtrics, Google Forms), key stakeholder and customer interviews, focus groups, and written evaluations.

Given the wide variety of programs, methods and staff involved in collecting and reviewing customer feedback across the Department, it is not possible to estimate spending on these efforts. However, the Department estimates that staff spend thousands of hours collecting and reviewing customer input and will continue to do so in future years.

11 Please highlight the long-term financial challenges of fulfilling the mission of the Department with particular attention to any scenarios identified in the Department's Long Range Financial Plan involving an economic downturn, Department-specific contingencies, emerging trends, or

major anticipated expenses (Subsections 3-6 of Section 4 of the Long Range Financial Plan submitted pursuant to H.B. 18-1430).

Response: As described in the Department's Long Range Financial Plan, an economic downturn could affect divisions in a multitude of different ways, as outlined below:

Administration and Support

As this division is funded by indirect cost recoveries it would be affected by any reductions to cash funded programs and federal reductions. As the core functions of this division are enabling functions (i.e. HR, Finance, Legal Counsel, Communications, and legislative items) there would be downstream impacts to other areas of the Department.

Center for Health and Environmental Information

This division anticipates little impact to cash funded programs (MMR and Vital Records) as they are both relatively inelastic core services. Federally funded programs (Health Data Programs and Information) would be affected in as much as an economic downturn would affect the Federal Budget, which is highly determined by Federal Legislative / Administrative priorities. General Funded programs (Health Data Programs and Information, Admin Support Program Costs) would be vulnerable as State Budgets tighten, especially if State matching funds for the Cancer Registry and funding supporting the Birth Defects Monitoring and Prevention Program were threatened. Additional cash funded programs (Health Data Programs and Information) would be affected in as much as an economic downturn would affect consumers purchasing habits. The division doesn't anticipate a significant slowdown in Marijuana consumption, however, there has already been a decline in Tobacco revenues, which appears to be a function of other factors (not economic decline). The programs these revenue based appropriations support are largely Survey Research and Health Stats. In terms of survey research, these funds support larger samples for population-based surveys, so declining funding could reduce sample sizes which could impact confidence levels/margins of error.

Additionally, an economic downturn could have an impact on survey research due to smaller samples sizes and possibly fewer data points. This has a direct impact on the Health Data and Information programs. Smaller sample size would lead to a reduction in amount / quality of data evaluation and analysis that many federally funded grants require. A reduction in data evaluation / analysis would have a direct impact on the delivery of public health services in Colorado, this is the data that drives programmatic decision making regarding where/how services are most effective. This data drives a great deal of public programming including community outreach, targeting populations where need is highest, measuring the effectiveness of Public Health interventions and programs, and providing direct services.

Laboratory Services

Based on the historical information for CDPHE Laboratory's service demand during recessionary periods, birthrates decline an average of 5% annually during difficult economic times, therefore leading to a decreased demand for newborn screening.

Air Pollution Control Division

This division receives the majority of its revenue through fees. An economic downturn would erode this revenue as the fees paid by the regulated community are closely linked to economic activity, such as construction, energy production, and oil and gas production, among others. Additionally, fees are received from drivers in the State who buy and register cars.

The demand for air pollution permits could potentially decrease during an economic downturn, but the degree of reduction is difficult to project due to many factors that may influence this change. Additionally, this division is operating with a backlog of permit applications and a reduction in demand will not immediately lead to a reduction in workload.

Water Quality Control Division

With 82 percent of this division's funding consisting of a mix between cash funds and federal funds, an economic downturn could severely impede the division's ability to issue permits, monitor permit compliance, conduct inspections, develop water quality standards, provide technical assistance to its customers, issue certifications, pursue enforcement actions, and ensure that safe drinking water is provided by public water systems.

An economic downturn could result in fewer construction projects, which would mean fewer construction permit requests and design reviews. In addition, if a contraction in private entities is assumed, this division could possibly see less demand in the areas of permit and compliance obligations associated with commercial and industrial operations that currently have permitted discharges to waters of the State.

Division of Environmental Health and Sustainability

An economic downturn resulting in a reduction of federal funding could lead to a reduction in the division's ability to administer the Supplemental Environmental Projects Program, Environmental Leadership Program, and a corresponding reduction in the ability to conduct environmental assessments/inspections of schools. Additionally, kitchen inspections in assisted living residences could be impacted or ultimately eliminated.

Disease Control and Environmental Epidemiology Division

An economic downturn would likely increase the need for outbreak response, disease intervention and treatment from the division. If citizens within the State of Colorado experience a decline in wages and/or are forced to re-prioritize how they spend money, preventative measures and treatment related to STI/HIV and other communicable diseases may decrease. This would lead to a greater need for disease control and the potential for outbreaks. If the

economic downturn is severe enough to impact the standards of living for citizens, this could lead to an increase in diseases and a related need for treatment and linkage to care. Additionally, if the economic downturn had a negative impact on smoking habits (affordability) in the state, this would in turn impact the Master Settlement Agreement funding that DCEED receives. Immunization, the State Drug Assistance Program, and HIV and AIDS Prevention activities are funded significantly through Master Settlement funds so the impact to core functions would be significant. As such, this would lead to the need for increased awareness, outreach and education activities to avoid transmission of communicable diseases.

An economic downturn could lead to the following changes in demand for this division: an increase in testing/treatment for STI/HIV and possibly increase in those diagnosed and linked to care for treatment; increase in clients enrolled in the State Drug Assistance Program and related increase in costs associated with program; increase in need for outreach and education related to immunization; and potential for increased testing for lead exposure due to decreased standards of living and inhabiting residences/buildings in which proper mitigation has not been done.

Prevention Services Division

An economic downturn would place additional pressures on federal funding for this division as less tax revenue will increase the federal deficit and a majority of this division's funding comes from federal grants.

During an economic downturn it is anticipated that demand for the direct services supported and provided by the division would increase. For example, the number of qualifying women for breast and cervical cancer screening is expected to increase. Additionally, other programs such as school-based health centers and family planning clinics would be expected to experience higher demand as household incomes declined and subsidized programs were needed in greater quantity to meet the needs of Colorado citizens. Demand for WIC and Child and Adult Care Food (CACFP) Program services may increase. Administrative funding availability for WIC and CACFP to support increases in demand is delayed for these programs by 1-2 years. Finally, demand for safety net clinical services increase when unemployment rates increase. There is no direct effect of this increased demand on programs but access to care challenges may increase.

Health Facilities and Emergency Medical Services Division

New facility construction could decrease, therefore leading to a slowing in the growth of the need for facility surveys.

The following are potential future contingency scenarios that would have a major impact on the Department's long-range forecast and its ability to meet its performance goals:

- Reduction of federal funds
- Disease outbreak
- Toxic spills

- Water and/or ground contamination

The following outlines programs within divisions that are currently funded in whole or in part with federal funds that the Department anticipates will decrease in the future:
Center for Health and Environmental Information
Cancer Registry: The agency's cancer program, in general, is intended to implement cancer prevention and control activities to reduce the burden of cancer in Colorado. CHED's Cancer Registry program, specifically, works with PSD's Cancer program to support this objective through collection and dissemination of cancer surveillance data to enhance use of cancer data for Public Health program activity planning across Colorado. The division has seen steady reductions over time in the main Cancer Prevention and Control Federal Award (Cooperative Agreement). Recently, the Federal Genomics award was not renewed resulting in a loss of $350,000. Federal funding ($1,402,379) made up 83% of the budget for this program in FY 2018-19 (this includes the Genomics funding of $350,000 which was not renewed for FY20). A reduction in the Cancer Registry program would affect collection, evaluation, and analysis of Colorado cancer surveillance data which would have direct consequences in terms of cancer prevention and control activities across the State, and potentially drive a decrease in early cancer detection in Colorado.
Birth Defects Monitoring and Prevention Program: Includes the following sections: Population-Based Surveillance of Birth Defects and Data Utilization for Public Health Action; Colorado Pulse Oximetry newborn screening program data collection and analysis; and Colorado's Newborn Hearing screening program.
The program has suffered a significant loss of federal funding over the past year; the federal award supporting the Muscular Dystrophy section of the CRCSN program was not renewed resulting in a loss of $500,000. Additionally, the federal award supporting the Autism section of the program was not renewed resulting in a loss of $569,000. Federal funding ($210,000) makes up 36% of the budget for this program. The program is currently assessing how they will continue to provide critical services and how to mitigate the consequences resulting from the recent federal grant losses. Any further reduction of funding to this program would negatively impact the ability to perform the core mission of providing statewide birth defects monitoring and data surveillance, collection and analysis. This would have direct consequences in terms of public health services around birth defect program interventions and assistance.

Laboratory Services
There are two important programs at the lab for which a future funding decrease is anticipated: Chemistry and Molecular Microbiology. Both programs will receive less federal funding effective August 2019, as well as further reductions in out years. The federal funding is projected to decrease by an estimated 15% by September 2020. For both Chemistry and Molecular Microbiology activities, the funding decreases are related to federal funding

availability, not to the ability to bring in cash funding from fee-for-service activity. Federal funding in the past has been around $5.2 million per year in total, and provided funding for approximately 95% of the molecular microbiology program's budget and for approximately 60% of the Chemistry program's budget. The consequences of federal funding decreases for both Molecular Microbiology and Chemistry are as follows:

a. Decrease and/or elimination of the laboratory testing capabilities, capacity, and human expertise.

b. Inability to conduct laboratory testing of public health concerns due to lack of highly trained staff and necessary equipment and supplies.

c. Hindering preparedness and emergency readiness for public laboratory services because federal grant funding at the state lab is used to build and maintain "competencies" for a wide array of complex diagnostic tests.

d. Scientific "staleness" - in the absence of expertise and cutting edge technology which both require stable funding, the laboratory will not be able to be one of the first public health labs in the nation to identify and develop testing for the next big issue, which it has previously been able to do (i.e. Ebola, zika, cyanotoxins, toxic foams, etc.).

Prevention Services Division

The Family Planning Program is partially funded by the Title X federal grant. New regulations have been imposed by the federal government and some clinics have already begun to decline acceptance of these federal funds. If the interpretation of the new rules becomes too onerous for the other clinics, it is possible that Colorado would have to consider its options related to continuing acceptance of the Title X grant. The Family Planning program provides subsidized contraceptive and other services, primarily to women, for reproductive health. The Family Planning program has been recognized over the past few years as greatly reducing the teen birthrate as well as reducing the number of abortions in Colorado. Reduction in this funding/program, or future inability to accept the current grant based on the new regulations, could lead to a reversal of these gains.

12 In some cases, the roles and duties of existing FTE may have changed over time. For all FY 2020-21 budget requests that include an increase in FTE:

a. Specify whether existing staff will be trained to assume these roles or these duties, and if not, why;

b. Specify why additional FTE are necessary; and

c. Describe the evaluation process you used to determine the number of FTE requested.

Response: Please see Appendix F: Decision Item FTE Requests.

13 Please describe the impact of Colorado's low unemployment rate on the Department's efforts to recruit and retain employees.

Response: CDPHE continues to struggle to recruit and retain nurses. The Department cannot compete with the private sector in matching salaries due to requirements to hire at the minimum of the salary range unless a higher salary can be justified. Even when a higher salary is authorized, CDPHE often still cannot provide an offer that matches with the private sector. especially for highly transferable careers such as nurses, contract administrators, and statistical analysts.

14 State revenues are projected to exceed the TABOR limit in each of the next two fiscal years. Thus, increases in cash fund revenues that are subject to TABOR will require an equivalent amount of General Fund for taxpayer refunds. Please:

a. List each source of non-tax revenue (e.g., fees, fines, parking revenue, etc.) collected by your Department that is subject to TABOR and that exceeds $100,000 annually. Describe the nature of the revenue, what drives the amount collected each year, and the associated fund where these revenues are deposited.

b. For each source, list actual revenues collected in FY 2018-19, and projected revenue collections for FY 2019-20 and FY 2020-21.

Response:

Department Non-Tax Revenues Subject to TABOR (excluding sources of less than $100,000/year)					
Revenue Source	Associated Cash Fund		Revenues Collected Annually		
		FY 2020-21 Decision Item?	FY 2018-19 Actual	FY 2019-20 Projection	FY 2020-21 Projection
Fees (registration fees and Certificates of Free Sale from wholesale food manufacturers)	Wholesale Food Manufacturing & Storage Protection Cash Fund	No	$723,944	$692,000	$705,840
Fees (tipping fees)	Recycling Resources Economic Opportunity Fund	No	$4,077,491	$4,130,975	$4,213,313
Fees (from enclosed animal feeding operations)	Animal Feeding Operations Cash Fund	No	$471,322	$463,167	$464,103
Fees (annual registration fees and hourly fees for plan reviews	Food Protection Cash Fund	No	$1,000,535	$1,014,772	$1,034,787
Fees (annual)	Pollution Prevention	No	$186,697	$170,000	$170,000

Fees (Annual)	Trauma Facility Cash	No	$422,417	$800,369	$474,000
Fees (Annual)	Air Ambulance Cash	No	$61,962	$140,000	$65,000
Fees (Annual)	Home Care Agency Cash Fund	No	$1,346,590	$1,285,870	$1,300,000
Fees (Annual)	Medication Administration Cash Fund	No	$106,343	$107,401	$108,000
Fees (Annual)	Assisted Living Cash Fund	No	$2,472,659	$2,846,000	$2,846,000
Fees (Annual)	General Licensure Cash Fund	No	$2,154,978	$2,169,129	$2,190,129
Fees (Annual)	Emergency Medical Services Cash Fund	No	$10,403,764	$10,550,000	$10,700,000
Fees	Commerce and Industry Sector	No	$1,325,099	$1,325,000	$1,325,000
Fees	Construction Sector	No	$2,450,916	$2,450,916	$2,450,916
Fees	Municipal Separate, Sewer, Storm, Systems.	No	$211,323	$211,323	$211,323
Fees	Public and Private Utilities	No	$3,022,779	$3,022,779	$3,022,779
Penalties	Water Quality Improvement Fund	No	$1,350,798	$1,100,000	$1,100,000
Fees	Drinking Water Cash Fund	No	$559,751	$555,000	$555,000
Laboratory testing fees	Laboratory Cash Fund	No	$942,913	$781,413	$781,413
Newborn bloodspot screening fee	Newborn Screening Cash Fund	No	$7,751,544	$7,674,029	$7,674,029
Vital Records Fees	Vital Statistics Records Cash Fund	No	$3,597,931	$3,604,272	$3,533,810
Medical Marijuana card fees	Medical Marijuana Program Cash Fund	No	$2,127,870	$2,068,780	$2,013,864
Fees	Waste Tire End-Users Fund	No	$0	$1,700,000	$3,400,000
Fees	Waste Tire Admin, Enforcement, Cleanup Fund	No	$2,991,385	$2,600,000	$2,600,000
Fees	Paint Stewardship Cash Fund	No	$120,000	$120,000	$120,000
Fees	Solid Waste Mgt. Fund	No	$4,309,272	$4,200,000	$4,200,000
	Radiation Control Fund	No	$2,703,780	$2,900,000	$2,950,000
Fees	Hazardous Waste Service Fund	No	2,184,640	2,300,000	2,300,000
Fees	Stationary Sources	Yes - R-01	13,702,117	14,656,186	14,637,697

Fees	Diesel Inspection & Maintenance Program	No	395,051	381,398	377,504
Fees	Ozone Protection	No	152,403	230,459	230,459
Fees	Air Account	No	5,738,309	6,496,954	6,496,954
TOTALS			**$79,066,583**	**$82,748,192**	**$84,251,920**

c. List each decision item that your Department has submitted that, if approved, would increase revenues subject to TABOR collected in FY 2020-21.

Response: R-01 Oil and Gas Enforcement, Compliance, and Permitting Initiative will increase revenues subject to TABOR.

15 Please describe the Department's current practice regarding employee parking and other transportation options (i.e. EcoPass). Please address the following:

a. Does the Department have adequate parking for all employees at all locations?

Response: The Department has adequate parking for employees.

b. If parking is limited, how are available spaces allocated?

Response: The Department has ample parking for all employees.

c. If free parking is not available, how is parking paid for, and who pays (employee or Department)? (e.g. stipends, subsidized parking, eco passes)

Response: Free parking is available. In addition, the Department is currently piloting an eco pass program. Approximately 650 employees have signed up for an eco pass. The decision to continue the program permanently will be determined in 2020.

d. If employees pay fees for parking, where is the revenue credited and how is it spent, and is it subject to TABOR?

Response: Employees do not pay for parking.

e. Do parking and/or transportation benefits factor into Department compensation and/or retention efforts? Response: They do not factor into fringe benefits, but they do factor into retention of employees.

Response: Parking and transportation are identified as perks in working for CDPHE.

16Please identify all continuously appropriated funds within the Department's purview with a fund balance or annual revenue of $5.0 million or more. Please indicate if these funds are reflected in the FY 2019-20 Long Bill.

Response: The Department has three continuously appropriated cash funds which meet these criteria.

- The Natural Resource Damage Recoveries Cash fund, created per Section 25-16-104.7, C.R.S., has an FY 2018-19 ending fund balance of $20,237,211. Revenues to this fund come from monies recovered through litigation by the state acting as a trustee of natural resources and associated interests are credited to the fund. The monies in the fund can only be used for the restoration, replacement or the acquisition of the equivalent of the natural resources negatively impacted by the release of a hazardous substance under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, aka Superfund) and consistent with any judicial order, decree or judgment. This fund is not reflected in the FY 2019-20 Long Bill.
- The Hazardous Substance Settlement Cash Fund, allowable per Section 25-15-309(4), C.R.S., has an FY 2018-19 ending fund balance of $6,099,896. Revenues to this fund come from settlements imposed for violations of state environmental law. Monies in this fund are used for the operations of specific Superfund sites only. This fund is not reflected in the FY 2019-20 Long Bill.
- The Small Communities Water and Wastewater Grant Fund, created in Section 25-1.5-208, C.R.S., has an FY 2018-19 ending fund balance of $14,627,054. Revenues to this fund come from statutorily authorized transfers of Severance Tax revenues pursuant to Section 39-29-109(2)(a)(III), C.R.S.. Monies in this fund are used to provide grants for the planning, design, and construction of drinking water and water treatment systems which serve a population of five-thousand people or less. This fund is not reflected in the FY 2019-20 Long Bill.

Appendix A: State Match

State Matching Funds for Federal Grants

Federal Grant Program	Federal Funding Amount	Required State Match Amount (Identified on NGA)	Match Source	Match Source Long Bill Line(s)
Hospital Preparedness Program	$ 3,255,621	$ 325,565	General Fund	(11) Office of Emergency Preparedness and Response, Administration and Support, (11) Office of Emergency Preparedness and Response, Emergency Preparedness and Response Program
Public Health Emergency Preparedness Program	$ 10,366,965	$ 1,036,814	General Fund	(11) Office of Emergency Preparedness and Response, Administration and Support, (11) Office of Emergency Preparedness and Response, Emergency Preparedness and Response Program
	$ 249,780.00	$ 140,275.91	Cash Fund	(7) Division of Environmental Health and Sustainability, Sustainability Programs
PPG - Air	$ 2,866,398.00	$ 2,025,090.00	Cash Fund	(4) Air Pollution Control Division (D) Stationary Sources
PPG HMWMD	$ 1,380,046.00	$ 550,000.00	Cash Fund	(6) Hazardous Materials and Waste Management (B) Hazardous Waste Control Program; (E) Radiation Control Program
Superfund Block IV	$ 6,677,113.00	$ 111,875.00	Cash Fund	(6) Hazardous Materials and Waste Management (D) Contaminated Site Cleanups and Remediation Programs
Summitville LTRA	$ 16,971,304.00	$ 2,496,103.00	Cash Fund	(6) Hazardous Materials and Waste Management (D) Contaminated Site Cleanups and Remediation Programs
North Clear Creek LTRA	$ 1,938,600.00	$ 1,803,742.00	Cash Fund	(6) Hazardous Materials and Waste Management (D) Contaminated Site Cleanups and Remediation Programs
Maternal and Child Health Block Grant	$ 7,397,625	$ 5,548,219	4 General Funds	(9) Prevention Services, (D) Family and Community Health, (2) Children and Youth Health, Health Care Program for Children with Special Needs, (9) Prevention Services, (D) Family and Community Health, (2) Children and Youth Health, Health Care Program for Children with Special Needs Purchase of Services (9) Prevention Services, (D) Family and Community Health, (1) Women's Health, Family Planning Purchase of Services (9) Prevention Services, (D) Family and Community Health, (2) Children and Youth Health, School-based Health Centers
Pediatric Mental Health Care Access Program	$ 445,000	$ 89,000	General Fund	(9) Prevention Services, (D) Family and Community Health, (2) Children and Youth Health, Health Care Program for Children with Special Needs
Colorado Cancer Prevention and Control Womens Wellness Connection - Breast & Cervical Cancer Sc	$ 2,150,000.00	$ 716,667.00	State Cash	(9) Prevention Services, (B) Chronic Disease Prevention Programs, Breast and Cervical Cancer Screening
Title X: Colorado Family Planning Program	$ 4,378,200.00	$ 437,820.00	General Fund	(9) Prevention Services, (D) Family and Community Health, (1) Women's Health, Family Planning Program Administration (9) Prevention Services, (D) Family and Community Health, (1) Women's Health, Family Planning Purchase of Services
Well-Integrated Screening & Evaluation Across the Nation (WISEWOMAN)	$ 795,000.00	$ 265,000.00	State Cash	(9) Prevention Services, (B) Chronic Disease Prevention Programs, Breast and Cervical Cancer Screening
Grants to States to Support Oral Health Workforce Activities	$ 400,000.00	$ 161,235.00	General Funds	(9) Prevention Services, (B) Chronic Disease Prevention Programs, Oral Health Programs (9) Prevention Services, (C) Primary Care Office, Primary Care Office
Grants to States for Loan Repayment	$ 1,000,000.00	$ 1,000,000.00	Private (with option to use State Cash and General Funds)	Off Long Bill private donations for the Primary Care Office and Loan Repayment (see fund 24L0 for match funds)
Cancer Prevention and Control Programs for State, Territorial and Tribal Organizations	$ 1,111,287.00	$ 213,828.00	General Funds	(2) Center For Health & Environmental Information (D) Health Data Programs and Information
HRSA Ryan White Part B	$ 13,174,194.00	$ 2,618,156.00	General Fund & State Cash	(8) Disease Control & Environmental Epidemiology (B) Special Purpose Disease Control Programs (4) Ryan White Act Operating Expenses

Missed Federal Funding Opportunities for Lack of State Match

Federal Grant Program	Federal Funding Opportunity Amount	Required State Match Amount	Match Source	Match Source Long Bill Line(s)
N/A				

Appendix B: Public Awareness

Common Question 4 - Public Awareness Campaigns										
Division	**Campaign Name**	**Brief Description of Campaign Objectives and Reach**	**Paid Media**	**Earned Media**	**Metrics of Effectiveness**	**Coordination with other state or federal departments?**	**Total FY 2019-20 Budget for Campaign**	**Funding Source - Include Cash Fund Number or Source of Reappropriated Funds**	**What other state agencies are we collaborating with?**	**Statutory Authority (please include statute information)**
Air Pollution Control Division	Lead Awareness Campaign	Public education materials for lead awareness. The goal is to educate the public about the dangers of childhood lead paint poisoning and how to prevent it.					$5,000	Federal Funds	The Department collaborates with local health agencies on this campaign.	25-7-11 (1101 - 1107)
Division of Environmental Health and Sustainability	Household Medication Take-Back Campaign	The statewide campaign pays for television and radio public service announcements for two months to promote the safe disposal of household medications	7,043				$7,043.00	General Fund	None	25-15-328
Disease Control and Environmental Epidemiology Division	HIV Pre-Exposure Prophylaxis (PrEP) Awareness Campaign	The goal of the campaign is to raise awareness about PrEP, a medication that can reduce HIV risk by approximately 92%, if taken as prescribed. The campaign is marketed toward transgender persons and men who have sex with men residing in the Denver Metropolitan Statistical Area.	$69,125		Delivered more than 5.4 million impressions targeted to MSM 18-34 in Colorado Drove over 80,000 clicks to Proud to be PrEPPED ads through paid digital and social placements	No	$154,716	Federal Funds	The Department is working with an advisory committee with representation from the following organizations: Denver Health, Children's Hospital, University Hospital, Colorado AIDS Project (and its outlying regional offices), Mile High Behavioral Health, It Takes A Village, Empowerment Program, and consumers.	25-4-408
Disease Control and Environmental Epidemiology Division	MMR Vaccination Outreach	Funding provided to the Tri-County Health Department to get more kindergarten age children vaccinated against Measles, Mumps and Rubella (MMR) Focus is on reaching parents/guardians of kindergarten age children in Adams, Arapahoe, Denver, Douglas and Jefferson Counties with a focus on schools with lowest vaccination rates. October 22, 2019 - January 2020.	$85,000		Increase in MMR vaccination rate along the front range, specifically in schools/zip codes targeted by the campaign. Website hits to the campaign landing page: www.keepmeaslesout.org and LPHA immunization pages.	No	$100,000	General Fund	DCEED is collaborating with Tri-County Health Department, Denver Public Health and Jefferson County Public Health.	25-1.5-101(1)(j)(I), 25-4-1708, 25-4-2301, 25-4-2403
Disease Control and Environmental Epidemiology Division	Flu Vaccination Outreach	Statewide digital media campaign promoting influenza immunizations. December 2019 - March 2020			Web Page clicks		$60,000	Federal Funds	None.	25-1.5-101(1)(j)(I), 25-4-1708, 25-4-2301, 25-4-2403
Disease Control and Environmental Epidemiology Division	Childhood blood lead testing awareness campaign	Funding provided to several local public health agencies to increase knowledge and awareness about lead poisoning through outreach and other programmatic activities that reduce population risk to lead exposure, increase blood lead testing, and/or increase provider reporting compliance. Additionally, during the second half of FY19-20, there will be a campaign targeted at reaching vulnerable populations to increase blood lead testing, with particular focus on reaching populations faced with socioeconomic disparities and other health equity and environmental justice issues.			Increase in lead screening rates, Google analytics.	No	$10,000	Federal Funds	No other state agencies collaborated on this campaign, but the division did collaborate with Prevention Services Division's Women, Infant, and Children (WIC) program and provider Kaiser Permanente Colorado to design and build the multimedia outreach plan.	25-1.5-101(1)(j)(I), 25-5-1104 (1)(a)
Disease Control and Environmental Epidemiology Division	Environmental Public Health Awareness	Produced environmental public health posters and factsheets for visitors to Colorado Parks and Wildlife parks and recreational areas. The materials included information about toxic algae that can occur in lakes, dangers of heat during outdoor activities, and staying safe when air quality is poor.			Google Analytics	Colorado Parks and Wildlife	$2,000	Federal Funds	Colorado Parks and Wildlife	
Disease Control and Environmental Epidemiology Division	Juneteenth Sponsorship	Goal of this outreach is to promote overall health. Information about general sexual health, pre- exposure prophylaxis (PrEP), immunizations, sexually transmitted infections, HIV, CDPHE career information, environmental health information, as well as information from many other areas of CDPHE was distributed. More than 30,000 people attended the festival. Over 5,000 branded items given away. Over 3,000 informational items given away.			Metrics include: Media exposure through click through rates, impressions served, and social media engagement. Direct interaction with individuals, number of branded items distributed, and number of informational items distributed.		$10,000	Cash, Gifts, Grants & Donations	No other state agencies but DCEED collaborated with other divisions throughout CDPHE including the Prevention Services Division, the Office of Health Equity, the Water Quality Division, and Human Resources.	
Disease Control and Environmental Epidemiology Division	Pride Sponsorship	Goal of this outreach is to promote overall health among the LGBTQ population. Information about general sexual health, pre-exposure prophylaxis (PrEP), immunizations, sexually transmitted infections, HIV, CDPHE career information, environmental health information, as well as information from many other areas of CDPHE was distributed. More than 525,000 people attended the festival. Media coverage: 813,000 estimated coverage views; 344 million online readership; 50,000 social shares; 253,000 circulations. Over 15,000 branded items given away. Over 8,000 informational items given away.			Metrics include: Media exposure through click through rates, impressions served, and social media engagement. Direct interaction with individuals, number of branded items distributed, and number of informational items distributed.		$15,000	Cash, Gifts, Grants & Donations	No other state agencies but DCEED collaborated with other divisions throughout CDPHE including the Prevention Services Division, the Office of Health Equity, the Water Quality Division, and Human Resources.	25-1.5-101(1)(j)(I), 25-1.5-105, 25-4-1708, 25-4-408

Common Question 4 - Public Awareness Campaigns										
Division	**Campaign Name**	**Brief Description of Campaign Objectives and Reach**	**Paid Media**	**Earned Media**	**Metrics of Effectiveness**	**Coordination with other state or federal departments?**	**Total FY 2019-20 Budget for Campaign**	**Funding Source - Include Cash Fund Number or Source of Reappropriated Funds**	**What other state agencies are we collaborating with?**	**Statutory Authority (please include statute information)**
Prevention Services Division (PSD)	Responsibility Grows Here	Encourages marijuana consumers (both Colorado residents and visitors) to use marijuana safely, legally and responsibly. Messaging is focused on not consuming marijuana in public, the importance of storing marijuana safely and not over consuming edibles. The statewide campaign uses a wide range of paid media tactics, including advanced TV (Roku, Sling, etc), digital ads, social media ads, and paid search. The campaign also includes earned media efforts.	Yes	Yes	Campaign metrics include: Click through rates, video completion rate, impressions served, cost per click. Website metrics include: Unique pageviews, sessions, time on page, city/location. Reporting includes recommendations and optimization. This campaign is also formally evaluated by third-party evaluation vendor, Research Triangle Institute (RTI) International.	Yes	$ 1,443,890	Marijuana Cash Funds	PSD's Retail Marijuana Education Program (RMEP) collaborates closely with other CDPHE programs and the Department of Transportation (CDOT) and the Department of Human Services (CDHS) on coordinated media buys to assure that the state is not outbidding itself on similar media buys. Additionally, RMEP's campaigns are guided by the work of an advisory committee set up by the Governor's Office that includes CDHS, Colorado Department of Public Safety (CDPS), CDOT, Department of Revenue's Marijuana Enforcement Division (DOR MED), and the Governor's Office of Marijuana Coordination.	25-3.5-1004
Prevention Services Division	Responsibility Grows Here: Find Your Moment Youth Campaign	Reinforces the reasons for youth to not engage in underage retail marijuana use and deter youth from trying it. This statewide campaign uses a variety of media tactics, including digital video, mobile display and social media.	Yes	No	Campaign metrics include: Click through rates, video completion rate, impressions served, cost per click. Website metrics include: Unique pageviews, sessions, time on page, city/location. Reporting includes recommendations and optimization. This campaign is also formally evaluated by third-party evaluation vendor, Research Triangle Institute (RTI) International.	Yes	$ 113,444	Marijuana Cash Funds	PSD's Retail Marijuana Education Program (RMEP) collaborates closely with other CDPHE programs and the Department of Transportation (CDOT) and the Department of Human Services (CDHS) on coordinated media buys to assure that the state is not outbidding itself on similar media buys. Additionally, RMEP's campaigns are guided by the work of an advisory committee set up by the Governor's Office that includes CDHS, Colorado Department of Public Safety (CDPS), CDOT, Department of Revenue's Marijuana Enforcement Division (DOR MED), and the Governor's Office of Marijuana Coordination.	25-3.5-1004
Prevention Services Division	Responsibility Grows Here: Trusted Adults	Empowers parents and other adults who youth trust (coaches, mentors and teachers) to reinforce the reasons for youth to not engage in underage marijuana use and deter youth from trying it. Campaign is in English and Spanish. This statewide campaign uses a variety of media tactics including advanced TV (Roku, Sling, etc.), social media and digital ads. The campaign also includes earned media efforts.	Yes	Yes	Campaign metrics include: Click through rates, impressions served, cost per click. Website metrics include: Unique pageviews, sessions, time on page, city/location. Reporting includes recommendations and optimization. This campaign is also formally evaluated by third-party evaluation vendor, Research Triangle Institute (RTI) International.	Yes	$66,444.00 (English) $41,844.00 (Spanish)	Marijuana Cash Funds	PSD's Retail Marijuana Education Program (RMEP) collaborates closely with other CDPHE programs and the Department of Transportation (CDOT) and the Department of Human Services (CDHS) on coordinated media buys to assure that the state is not outbidding itself on similar media buys. Additionally, RMEP's campaigns are guided by the work of an advisory committee set up by the Governor's Office that includes CDHS, Colorado Department of Public Safety (CDPS), CDOT, Department of Revenue's Marijuana Enforcement Division (DOR MED), and the Governor's Office of Marijuana Coordination.	25-3.5-1004
Prevention Services Division (PSD)	Responsibility Grows Here: Pregnant/ Breastfeeding Women	Provides educational information about the health effects and risks associated with using retail marijuana during pregnancy and breastfeeding to empower women to make informed decisions. Helps encourage conversations between women and their health care providers and provides resources to support a positive, open, and honest conversation. This statewide media campaign uses online tactics primarily (digital and social media ads), as that has proven to be the best strategy with this audience. The campaign also includes earned media efforts.	Yes	Yes	Campaign metrics include: Click through rates, impressions served, cost per click. Website metrics include: Unique pageviews, sessions, time on page, city/location. Reporting includes recommendations and optimization. This campaign is also formally evaluated by third-party evaluation vendor, Research Triangle Institute (RTI) International.	Yes	$ 235,778	Marijuana Cash Funds	PSD's Retail Marijuana Education Program (RMEP) collaborates closely with other CDPHE programs and the Department of Transportation (CDOT) and the Department of Human Services (CDHS) on coordinated media buys to assure that the state is not outbidding itself on similar media buys. Additionally, RMEP's campaigns are guided by the work of an advisory committee set up by the Governor's Office that includes CDHS, Colorado Department of Public Safety (CDPS), CDOT, Department of Revenue's Marijuana Enforcement Division (DOR MED), and the Governor's Office of Marijuana Coordination.	25-3.5-1004

Common Question 4 - Public Awareness Campaigns										
Division	**Campaign Name**	**Brief Description of Campaign Objectives and Reach**	**Paid Media**	**Earned Media**	**Metrics of Effectiveness**	**Coordination with other state or federal departments?**	**Total FY 2019-20 Budget for Campaign**	**Funding Source - Include Cash Fund Number or Source of Reappropriated Funds**	**What other state agencies are we collaborating with?**	**Statutory Authority (please include statute information)**
Prevention Services Division (PSD)	Vaping and tobacco awareness campaigns	Comprehensive campaigns to address the vaping issue, create awareness of the dangers of tobacco use, and support local public health action related to tobacco control. Campaigns target youth and young adults (including LGBTQ young adults) to prevent vape use, and parents and askable adults to encourage them to talk with their kids about vaping. Statewide campaign uses a variety of media tactics including online and social. The campaign also includes earned media efforts.	Yes	Yes	Campaign metrics include: Click through rates, impressions served, cost per click. Website metrics include: Unique pageviews, sessions, time on page, city/location. Reporting includes recommendations and optimization.	No	$ 1,141,375	Amendment 35 Cash Funds	Although the Department is not collaborating with other state agencies formally, it does make a suite of customizable materials available through cohealthresources.org that can be used by any other agency at the state or local level to increase the reach of campaign activities.	25-3.5-805
Prevention Services Division (PSD)	Colorado QuitLine	Cessation campaign raises awareness about the Colorado QuitLine and to get people to use this proven cessation service. It targets a variety of priority populations who smoke at disproportionate levels.	Yes	Yes	Campaign metrics include: Click through rates, impressions served, cost per click. Website metrics include: Unique pageviews, sessions, time on page, city/location. Reporting includes recommendations and optimization.	Yes	$ 2,266,875	Amendment 35 Cash Funds	The Department partners with HCPF to promote the QuitLine and other health care and local agencies to increase understanding and use of the QuitLine statewide. The Department has also collaborated with statewide pharmacy partners to decrease barriers to pharmacists promoting the QuitLine to their clients. CDPHE collaborates with CDC's Tips From a Former Smoker campaign to ensure paid media efficiency. CDPHE also licenses ads through CDC's MCRC.	25-3.5-805
Prevention Services Division (PSD)	Man Therapy website resource awareness campaign	Mental health website to change social norms related to men's mental health, increase male help seeking behavior and reduce suicide rates among working age men. Campaign materials are intended to drive traffic to the website and increase awareness of the resource. Campaign assets are not owned by CDPHE, but CDPHE is a founding member of the public/private partnership that developed Man Therapy. CDPHE disseminates project materials statewide and supports local communities in promoting and disseminating campaign materials and providing training to local individuals and organizations on men's mental health and suicide prevention. The campaign used a variety of media tactics including paid search, digital, social, and broadcast.	Yes	Yes	Website metrics include: visitors, head inspections, time spent on site; Waiting for more results from CDC-funded evaluation on campaign effectiveness in behavior change.	Yes	$ 188,000	Federal Funds- Preventive Health and Health Services Block Grant, OSP General Fund	Although there is no formal collaboration with other state agencies, OBH and HCPF help promote Man Therapy, and all project materials are available free of charge to any individual or organization in Colorado.	
Prevention Services Division	Pregnancy-Related Depression	Improves the awareness and knowledge of pregnancy-related depression (PRD) and anxiety among pregnant and postpartum women and their partners, friends and family. The overarching goal is to reduce stigma associated with maternal mental health and increase the number of women identified with pregnancy-related depression and anxiety who seek treatment. Campaign is running in select zip codes based on where there are existing partners working on PRD. Campaign is in English and Spanish. Tactics include social and online ads.	Yes	Yes	Campaign metrics include: Click through rates, impressions served, cost per click. Website metrics include: Unique pageviews, sessions, time on page, city/location. Reporting includes recommendations and optimization.	Yes	Project operates on federal fiscal year $200,000 July 1, 2019 - December 31, 2019 $100,000 January 2020 - June 30, 2020	Title V Maternal Child Health Funding	Department of Health Care Policy and Financing and Department of Human Services were notified of campaigns.	N/A
Prevention Services Division	Colorado's National Diabetes Prevention Program (NDPP)	This is an ad campaign to raise awareness about prediabetes and encourage enrollment in National Diabetes Prevention Program services at locations in nine (9) Colorado counties (Adams, Arapahoe, Boulder, Broomfield, Douglas, Denver, El Paso, Jefferson, and Chaffee). The campaign is running in English and Spanish and includes out of home (billboards), digital, and social media advertising.	Yes	Yes	Campaign metrics include: Click through rates, impressions served, cost per click, program enrollments Website metrics include: Quiz completions, unique pageviews, sessions, time on page, city/location. Reporting includes recommendations and optimization. This is a CDC-funded, rigorously evaluated campaign.	No	Project operates on federal fiscal year $90,000 July 1, 2019 - Sept 2019 $90,000 October 2019 - June 30, 2020	Federal Funds- CDC Grant	None	N/A
Prevention Services Division	Healthy Youth Campaign	The Healthy Youth Campaign will promote positive health behaviors among young people through social marketing efforts. Through this work we are aligning healthy youth messaging in order to leverage funding; align media opportunities; and streamline messaging to youth, parents, and other trusted adults in the lives of youth. We expect these efforts to impact multiple health outcomes long-term, such as tobacco, marijuana, opioid, alcohol use, mental health and risky sexual behaviors. The intention of the campaign is to have ads that use positive framing to promote connectedness between youth and trusted adults in their lives (parents, caregivers, teachers, coaches) and youth and their peers. This is an evidence-based approach. Ads will begin running at the end of this fiscal year. We have not yet determined media tactics.	Yes	Yes	Campaign metrics will likely include: Click through rates, impressions served, cost per click. Website metrics will likely include: Unique pageviews, sessions, time on page, city/location. Reporting includes recommendations and optimization. Metrics will be determined once the media plan is final.	Yes	$2.2 million (CDPHE funds) + $250,000 (CDHS funds)	Amendment 35 Cash Funds, Marijuana Cash Funds	CDPHE has an Interagency Agreement with the Department of Human Services- Office of Behavioral Health. OBH is contributing money and FTE to the campaign.	N/A

Common Question 4 - Public Awareness Campaigns										
Division	**Campaign Name**	**Brief Description of Campaign Objectives and Reach**	**Paid Media**	**Earned Media**	**Metrics of Effectiveness**	**Coordination with other state or federal departments?**	**Total FY 2019-20 Budget for Campaign**	**Funding Source - Include Cash Fund Number or Source of Reappropriated Funds**	**What other state agencies are we collaborating with?**	**Statutory Authority (please include statute information)**
Water Quality Control Division	Drinking Water Week Events	Partner with AWWA for a events centered around Drinking Water Week. This is intended to provide general information about the importance of drinking water in everyday life.	None	None	Approximately 30 event visitors	No	$50	Federal, state and cash	NA	NA
Water Quality Control Division	Aurora Children's Water Festival	Present a bottled vs tap water taste test and education around fluoride, cost, and waste with the goal of promoting tap water. Presented to approx 1600 4th and 5th graders.	None	None	Approximately 1600 students reached	Yes	$50	Federal, state and cash	Oral Health Unit	NA
Water Quality Control Division	Denver Metro Children's Water Festival	Present a bottled vs tap water taste test and education around fluoride, cost, and waste with the goal of promoting tap water. Presented to approx 100 4th and 5th graders.	None	None	Approximately 100 students reached	Yes	$50	Federal, state and cash	Oral Health Unit	NA
Water Quality Control Division	Drinking Water Week Social Media Campaign	Create social media posts for general drinking water promotion.	None	None	Number of likes and shares	No	$50	Federal, state and cash	N/A	NA
Water Quality Control Division	Tap Water Education for All	Complete needs assessment to determine existing outreach around drinking water education to refugee and immigrant populations in Denver/ Aurora metro area. Coordinated with an English teacher to add in drinking water education to curriculum, taught segment on tap water at refugee orientation classes, distributed flyers about tap water and created educational posters on the safety and benefits of tap water over bottled water.	None	None	To be tracked: Number of organizations delivering messages and their estimated program participants	Yes	$7,000	Preventative Health and Health Services Block Grant	Colorado Refugee Services Program, Early Childhood Obesity, Oral Health Unit	NA
Water Quality Control Division	CoWARN	Outreach is exclusively to water/wastewater utilities about emergency preparedness and response.	None	None	165 participating systems. It's estimated about 30 systems have used COWARN since 2012.	Yes	$330	Federal	OEPR	NA
Hazardous Materials and Waste Management Division	Radon Awareness	Increase public awareness for Radon in homes - Statewide	50,000	None	Increase in households requesting radon test kits from CDPHE and/or LPHA's	LPHA's	65,000	FF and fund 1160	None	25-11-114 C.R.S.

Appendix C: FTE

Common Question 5 - FTE Vacancy and Turnover Rates

Turnover Rate by Department and Division for FY 2019 (July 1, 2018 to June 30, 2019)												
	CDPHE Total	Administration and Support	Center for Health and Environmental Data	Laboratory Services Division	Air Pollution Control Division	Water Quality Control Division	Hazardous Materials and Waste Management Division	Division of Environmental Health and Sustainability	Disease Control and Environmental Epidemiology Division	Prevention Services Division	Health Facilities and Emergency Medical Services	Office of Emergency Preparedness and Response
Turnover Rate	13.50%	17.97%	14.49%	20.21%	6.63%	4.32%	9.68%	10.20%	13.46%	9.95%	17.21%	16.22%
Total Voluntary Separations	11.72%	17.97%	14.49%	18.09%	6.12%	4.32%	9.68%	10.20%	12.50%	9.50%	17.21%	16.22%
Total Involuntary Separations	0.38%	0.00%	0.00%	2.13%	0.51%	0.00%	0.00%	0.00%	0.96%	0.45%	0.00%	0.00%
Vacancy Rate* as of	12.40%	6.78%	17.81%	19.59%	7.18%	8.67%	8.73%	8.16%	20.44%	13.79%	8.76%	21.05%

*Human Resource Data Warehouse (HRDW) does not keep historical data for vacant positions, thus vacancy rate is a real-time snapshot though Nov 22, 2019

Program (20+ FTE)	Administration and Support	Health Statistics and Vital Records (CHED)	Chemistry and Microbiology (LSD)	Technical Services (APCD)	Mobile Sources (APCD)	Stationary Sources (APCD)	Commerce and Industry Sector (WQCD)	Construction Sector (WQCD)	Public and Private Utilities Sector (WQCD)	Drinking Water Programs (WQCD)	Hazardous Waste Control Program (HMWMD)	Solid Waste Control Program (HMWMD)
Turnover Rate												
Vacancy Rate* as of	4.98%	11.62%	5.02%	20.18%	7.95%	20.29%	37.80%	10.34%	0.92	18.45%	0.90%	16.60%

	Radiation Management (HMWMD)	Environmental Health Programs (DEHS)	Administration, General Disease Control, and Surveillance (DCEED)	Immunization (DCEED)	STI, HIV and AIDS (DCEED)	Administration (PSD)	Chronic Disease Prevention Program (PSD)	Operations Management (HFEMSD)	Home and Community Survey (HFEMSD)	Medicaid/Medicare Certification Program (HFEMSD)	Emergency Preparedness and Response Program (EPR)
Turnover Rate								*	*	*	
Vacancy Rate* as of	14.96%	12.56%	34.51%	0.00%	1.25%	21.14%	8.04%	23.46%	0.00%	14.00%	0.00%

*Turnover Rate is not available at the program level. Vacancy Rate was calculated using data provided in the Schedule 3.

Occupational Group (20+ FTE)	Health Care Services	Administrative Services and Related	Professional Services	Physical Sciences and Engineering
Turnover Rate	16.02%	20.93%	12.19%	7.93%
Vacancy Rate* as of	16.43%	12.50%	12.16%	10.25%

Appendix D: Cost Drivers

Common Question 7 - Cost Drivers by Division						
Division	**Cost Factor**	**Description of Cost Factor**	**Expenses in FY 2017-18**	**Expenses in FY 2018-19**	**Percentage Increase from 2017-18**	**Alternative Index of Specific Factors that Demonstrate Excessive Growth**
Laboratory Services Division	Medical laboratory supplies and equipment	Laboratory instruments and equipment, instrument maintenance, software, supplies, reagents, and proficiency tests to perform laboratory testing.	$ 3,641,393	$ 3,867,094	6%	Nondurable Medical Supplies and Equipment (MSE) Inflation Index by CMS (Centers for Medicare & Medicaid Services)
Air Pollution Control Division	Repair, maintenance and supplies	Air Pollution Control repair and maintenance services and supplies	$ 105,605	$ 198,321	88%	Cost of repair and supplies as compared to CPI
Disease Control and Environmental Epidemiology Division	Hepatitis A vaccine	DCEED has purchased 18,580 additional publicly-funded doses of hepatitis A vaccine.	$ 89,798	$ 184,141	105%	Due to the outbreak, costs for hepatitis A vaccine have increased since 2018. In a typical year, DCEED has 2,300 publicly-funded doses of hepatitis A vaccine available for the entire state. For FY 2019-20, $559,796 is set aside for publicly-funded hepatitis A vaccine.
Disease Control and Environmental Epidemiology Division Office of Emergency Preparedness and Response	Hepatitis A response	Due to the outbreak, portions of 16 FTE in DCEED and 7 FTE in OEPR have spent 1,687 hours responding to the hepatitis A outbreak. Activities have included: - Tracking the number of cases, outreach activities, and number of vaccines administered - Developing planning and response resources for internal and external use - Supplying vaccine for prevention and response activities - Communicating with local public health, community, and healthcare partners, and the public - Providing staffing resources to local public health partners	$ 0	$ 45,125	N/A	When large outbreaks or multiple outbreaks occur at the same time, it can quickly overwhelm DCEED staff. Program staff have attempted to capture staff time but this is a significant under-estimate as tracking staff hours began late in the outbreak and not all staff use the appropriate Kronos code. An estimated 30,063 has been expended in State Fiscal Year 20 to date.
Disease Control and Environmental Epidemiology Division	Colorado Immunization Information System (CIIS) and iSIIS Vision maintenance and support	CIIS has seen a marked increase in the number of healthcare providers and schools/childcares participating in the system. Maintenance and support for CIIS has increased because the number and complexity of CIIS enhancements needed to ensure the system remains functional, user-friendly and complies with federal requirements has increased. We have seen similar impacts with the iSIIS Vision system that serves as CIIS's contact management system, manages federal Meaningful Use attestations, HL7 electronic file testing, electronic interface project management and online CIIS enrollment.	$ 235,212	$ 298,085	27%	CIIS underwent a major transition to a new platform in 2011 and since then the number of healthcare provider clinics/systems has increased by 79% (905 in 2011 to 1,619 in 2019) Notably, the current FY19-20 M&S costs for both systems is $321,908.
Health Facilities and Emergency Medical Services	In State Travel	Costs for staff to survey (inspect) health facilities. This includes hotel and per diem	$ 527,915	$ 543,676	3%	Increase in number of facilities as well as a noted increase in hotel rates in the last year.
Health Facilities and Emergency Medical Services	Non OIT communication	This is primarily cell phones	$ 91,204	$ 90,767	-0.5%	The division has staff that are out across the state on a daily basis surveying (inspecting) health facilities. Cell phones are required in order for the staff to be reached by both internal and external persons, digitizing and securing confidential information and to allow staff to work from multiple remote locations on an ongoing basis. Many times surveyors have questions of facility staff for follow up - and they need to be accessible to talk with facility staff and clients during investigations. Also, staff use cell phones to make electronic copies of documents to avoid making paper copies. Field staff are required to communicate dependably and regularly with managers in making critical decisions regarding pt./resident safety issues as a part of the inspection/investigation

Appendix E: Service Demands

Common Question 8 - Service Demands

Division	Program	Customer/Demand Impact on the Department	Quantify Impacts (Compare growth to other factor, such as CPI)	Factors Driving Impacts
Air Pollution Control Division	Stationary Sources	The number of complaints is increasing, primarily due to growth in industry.	The Division Responded to 222 complaints in FY 15-16 and 369 in FY 17-18. The increase appears to outpace population growth in CO. The increase represents a 66% growth.	The increase in industrial activity in proximity to citizens, increased awareness of the issues and the ability to contact the agency due to social media and awareness of our programs.
Division of Environmental Health and Sustainability	Manufactured Food Inspection Program	Addition of industrial hemp (IH) extractors and IH food commodity manufacturers	IH extractors and manufactures increased facility count and inspection caseload by 215 or 10%	IH operations pay the same fee as other food manufactures. However, the extraction operations present different and more complex issues than traditional food manufacturing. That, along with the increased need for food safety training and compliance assistance to this new emerging industry, is requiring a significant investment of staff time. This time investment is well beyond what the fees pay for, thus resulting in the other fee-payers subsidizing this work.
Disease Control and Environmental Epidemiology Division	STI/HIV Branch	Increases in multiple STIs and HIV requires more work for partner services and case investigation and outreach teams, which work these cases. In addition, this creates more work for funded agencies who work with clients that are at risk and have acquired HIV and/or STIs.	--HIV: 315 cases in 2018 (Jan-Oct) and 341 cases in 2019 (Jan-Oct), which is a 14.3% increase; --Females HIV: 34 cases of new HIV diagnoses in 2018 and 60 in 2019, which is a 76.5% increase. --African American HIV: 44 cases of new HIV diagnoses in 2018 and 60 in 2019, which is a 36.4% increase. --Chlamydia: 23,147 cases in 2018 (Jan-Oct) and 24,667 cases in 2019 (Jan-Oct), which is a 6.6% increase. --Gonorrhea: 7328 cases in 2018 (Jan-Oct) and 7920 cases in 2019 (Jan-Oct), which is an 8.1% increase. --Syphilis (All Stages): 735 cases in 2018 (Jan-Oct) and 1032 cases in 2019 (Jan-Oct), which is a 40.4% increase. --Congenital Syphilis: 3 cases in 2018 (Jan-Oct) and 7 cases in 2019 (Jan-Oct), 133.3 which is a % increase in caseload from Jan-Oct 2018 to Jan-Oct 2019.	-- Increases in the number of platforms and use of social media and dating/hook-up apps to meet sexual partners. -- Increases in detection through at-home testing kits or increased participation in public health programs. -- Decreases in condom use. Some scientific literature suggests HIV pre-exposure prophylaxis (PrEP) may lead to decreased condom use. PrEP protects against HIV acquisition but does not protect against STI acquisition. -- Decreases in federal funding resulting in fewer public health campaigns that promote safe sex and condom use, and reduced public health staffing. -- Increases in STIs, which co-facilitate HIV transmission. -- Increases in injection drug use.
Disease Control and Environmental Epidemiology Division	Communicable Disease Branch/ Immunization Branch	Increased cases of rare form of meningococcal disease (W135) increases work for the department because control measures are resource intensive, including vaccinating at-risk populations, education and communication, identifying contacts of confirmed cases to offer antibiotic prophylaxis, and data entry.	- Three cases of W135 meningococcal disease (MenW) reported in people experiencing homelessness or housing instability and substance use issues in Denver County in 2019, compared to 1 case of MenW reported in Denver from 2014-2018. There is a vaccine available at $67.62 per dose. Currently, Colorado only has 1,000 of publicly funded doses of meningococcal vaccine to try and stop the outbreak.	- While these are small case counts, this is a serious illness almost always resulting in hospitalization and sometimes death - Control measures are resource intensive, including vaccinating at-risk populations and quickly identifying contacts of confirmed cases to offer antibiotic prophylaxis - The population affected in the current outbreak are challenging to identify and reach by traditional public health methods, and require an increased level of field work to properly respond
Disease Control and Environmental Epidemiology Division	Communicable Disease Branch	Increased outbreaks of Hepatitis A in general, among people experiencing homelessness and people with substance use issues increases work for the department because control measures are resource intensive, including vaccinating at-risk populations, education and communication, identifying contacts of confirmed cases to offer antibiotic prophylaxis, and data entry.	2013 - 0.95/100,000 (foodborne outbreak associated with frozen pomegranate kernels accounts for most cases; 24% report international travel) 2014 - 0.43/100,000 (sporadic cases; 27% report international travel) 2015 - 0.44/100,000 (sporadic cases; 42% report international travel) 2016 - 0.42/100,000 (sporadic cases; 43% report international travel) 2017 - 1.17/100,000 (outbreak primarily driven by transmission among men who have sex with other men accounts for most cases; 13% report international travel) 2018 - 0.54/100,000 (current outbreak began in Oct 2018) From 2013 - 2016, Colorado did not have any cases reported in people experiencing homelessness. In 2017, 2 cases occurred; 5 cases in 2018, and 166 cases in 2019 (as of Nov 20, 2019) From 2013 - 2016, Colorado had 5 cases who report substance use issues (2 report injection, 3 report non-injection). In 2017, 7 cases occurred (3 report injection, 4 report non-injection). In 2018, 8 cases occurred (at least 6 report injection). As of Nov. 20, 2019, 214 cases have occurred in people with a variety of substance use issues.	For the general population, the national Healthy People 2020 goal for Hepatitis A incidence is 0.3/100,000. Two deaths have occurred in the 2018-19 outbreak. The 2018-19 outbreak has considerable health care costs, with 73% of cases being hospitalized. As of Nov 20, 2019, over 16,000 vaccines have been provided by public health to try to control spread and prevent illnesses. The affected populations are challenging to reach for both messaging, education, and vaccination and require focused, ongoing efforts in the field.
Disease Control and Environmental Epidemiology Division	Communicable Disease Branch	First case of Candida auris reported in Colorado in Nov 2019 increases work for the department because control measures are resource intensive, including guidance on infection control procedures, education and communication, identifying other cases to offer treatment, and data entry.	1 case reported in Colorado in 2019; investigation on-going to determine if additional patients and health care facilities are affected	Candida auris (an emerging fungal infection deemed and urgent threat by the CDC due to resistance to antifungal drugs therefore difficult to treat, and propensity to cause outbreaks in health care settings) can cause large outbreaks in health care facilities and are difficult to control; 30-60% of cases with invasive infections (such as blood infections) die. The organism can spread in health care settings through contact with contaminated environmental surfaces or equipment, or person-to-person spread. The organism can persist on surfaces and some disinfecting solutions may not be effective at killing the organism.

Disease Control and Environmental Epidemiology Division	Immunization	Colorado Immunization Information System (CIIS) and iSIIS Vision maintenance and support	CIIS underwent a major transition to a new platform in 2011 and since then the number and complexity of federal requirements for system functionality has increased. This has increased staff workload to maintain the system as well as support healthcare providers using the system.	CIIS has seen a marked increase in the number and complexity of CIIS enhancements needed to comply with new federal requirements related to This has also impacted the iSIIS Vision system that serves as CIIS's contact management system, manages federal Meaningful Use attestations, HL7 electronic vaccine ordering, inventory management and dose-level accountability. file testing, electronic interface project management and online CIIS enrollment.	
Health Facilities and Emergency Medical Services	Assisted Living Program	increased assisted living facilities means the Department has to conduct more inspections. Increased complaints means the Department has to conduct more inspections	The growth rate in assisted living facilities since 2014-15 is approximately 30 per year or 5%	The population is aging, driving an increase in the growth of assisted living facilities. More engaged family members means more complaints.	ALR Facility growth from Q3 2018 to Quarter 3 2014 is 6 facilities. So growth is slightly slower in this year, but the overall trend over the last several years is increasing . However, during this time frame 16 NEW facilities have opened (with associated licensing workload for the division) and 10 facilities have closed - netting the increase of six facilities.
Health Facilities and Emergency Medical Services	Health facilities	Increased facilities (all facility types) means the Department has to conduct more inspections. Increased complaints means the Department has to conduct more inspections	Increase of 256 facilities across all sectors between July 2016 and October 2018. This is a 9.16% increase in total facilities.	Home care agencies have increased by 11% (74 facilities) Hospices have increased by 21.5% (17 facilities) Community clinics have increased 13.7% (10 facilities) and HCBS Service agencies (PASA's) have increased by 42.34% or 152 facilities.	In 2019 192 new facilities have opened (excluding ALR's) and 129 have closed with a net increase of 63 facilities. Home care agencies increased by 42 facilities - 103 opening - 61 closure). Hospices have increased by 1 (2 open, one closure). Community clinics net decrease of 5 facilities (6 closures, 1 opening). HCBS have an net increase of 35 facilities (52 open and 17 closures). All other facility types saw a net decrease of 10 facilities (44 close and 34 open).
Laboratory Services Division	Public Health Microbiology	Continuous increase in rabies sample submissions to the state lab, i.e. 915 samples in FY 2009-10 vs 1,482 in FY 2017-18 and 1375 in FY 2018-19. There is also more testing demand for tuberculosis and food-borne testing such as E. coli, salmonella, increasing from 123 samples in FY 2015-16 to 726 in FY 2018-19.	The public health laboratory testing demand is moving in sync with the CO population and urban area growth. Increasing demand for food-borne disease testing at the state public health is driven by advances in the diagnostic technology used in clinical/hospital laboratories resulting in a shift in the burden onto the public health laboratory.	The public health laboratory testing and bacteria/virus/toxin identification demand is driven by 1) population growth in CO; 2) urbanization leading to i) reduction of wildlife habitat areas and ii) higher population density with TB, hepatitis and other contagious or infectious disease outbreaks on the rise; 3) climate, for example, shorter and/or milder winters lead to a major spike in the animal activity and rabies identification demand; 4) Changing technologies have uncoupled clinical diagnosis of foodborne illness from the public health surveillance process driving more workload in the public health laboratory to achieve the same level of public health surveillance data.	

Appendix F:
Decision Item FTE Requests

Common Question 12 - Decision Item FTE Requests					
Decision Item	**Total FTE Requested**	**Will existing staff be trained to assume new roles and duties**	**If no, why?**	**Explain why additional staff are necessary**	**Describe the evaluation process used to determine the number of FTE requested**
R-01 Oil and Gas Enforcement, Compliance, and Permitting Initiative	24.9	Existing staff cannot absorb additional workload.	Existing staff are at capacity. The request is based on expanded workload that current staff cannot absorb.	The request anticipates more stringent federal requirements that will result in the need for more oversight, inspections and enforcement activities. Furthermore, in order to better protect air quality, the Department proposes to enhance oversight and technical support for the oil and gas industry.	The requested FTE were based on current staff workload and projected additional demands for the new and enhanced oversight activities.
R-03 Sustaining Essential Administrative Services	4.3	Staff duties and activities will remain the same		The request seeks to fund these activities with reappropriated funds, rather than federal block grant funds due to the on-going, Department wide nature of the activities.	The Department reviewed staff activities and determined that the functions included in the request were on-going, Department wide activities and that federal block grant funds could be better used to respond to emerging issues and Departmental strategic goals.

Joint Budget Committee Hearing

Jill Hunsaker Ryan
Executive Director

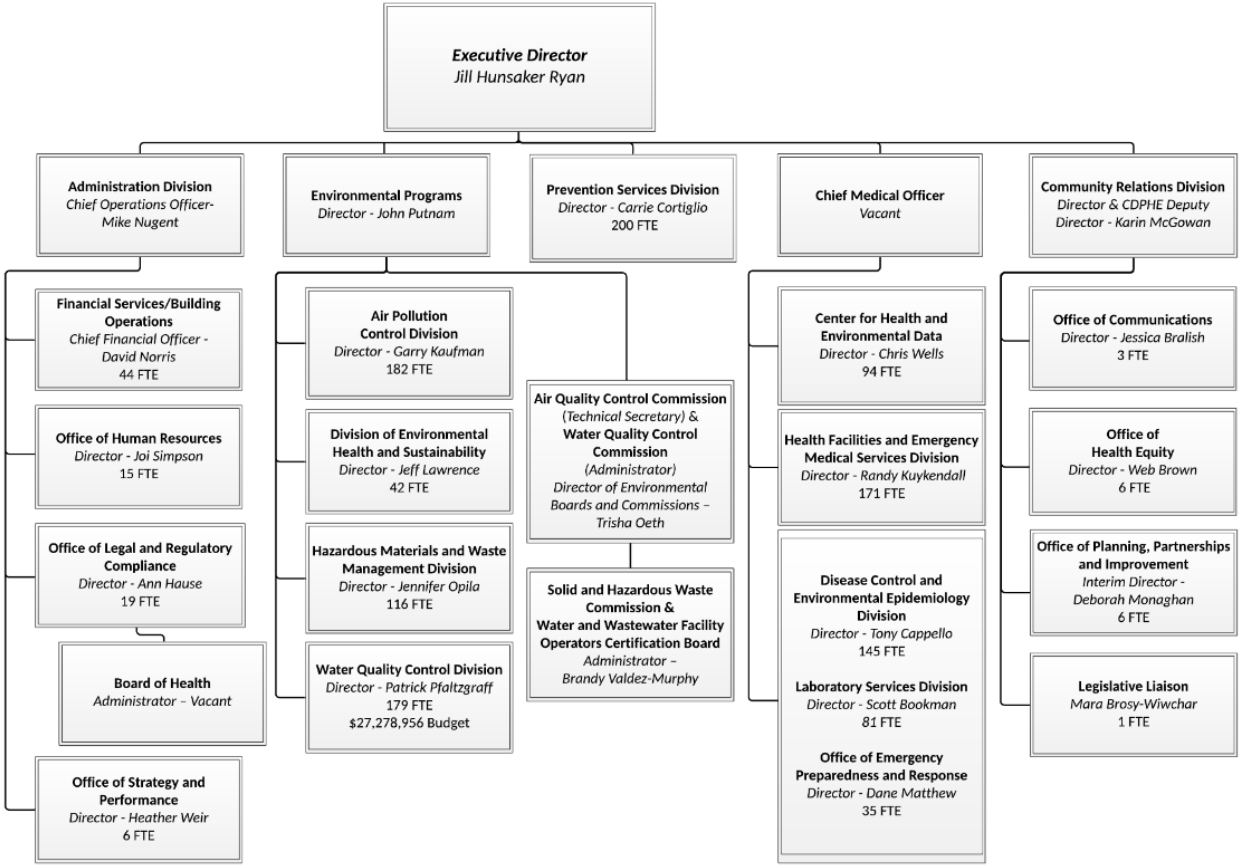
COLORADO
Department of Public Health & Environment

Mission

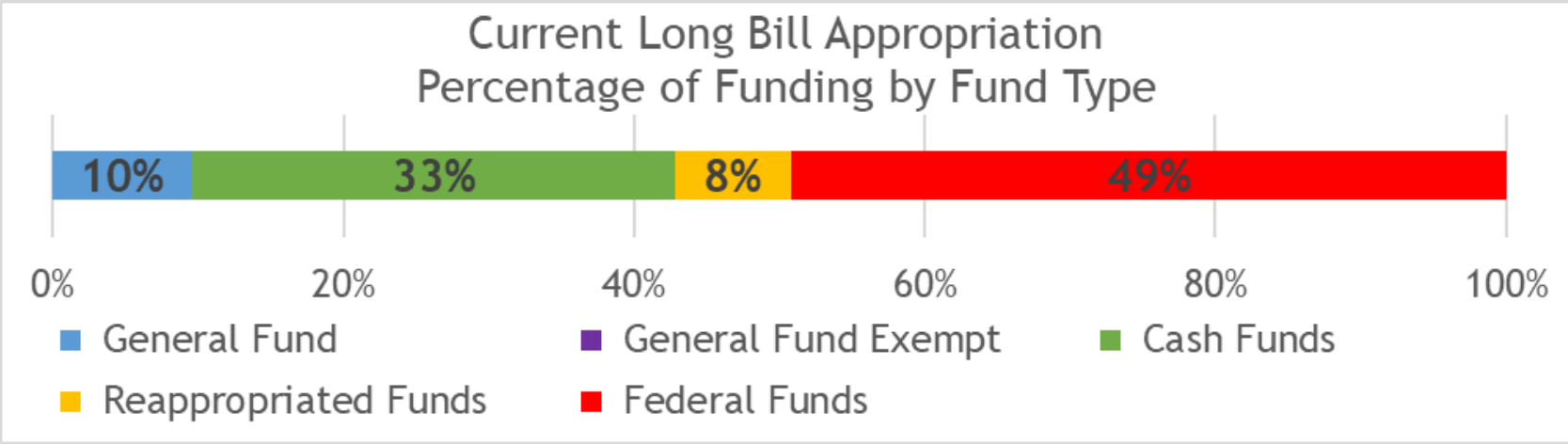
Advancing Colorado's health and protecting the places we live, learn, work, and play.

Vision

A healthy and sustainable Colorado where current and future generations thrive.

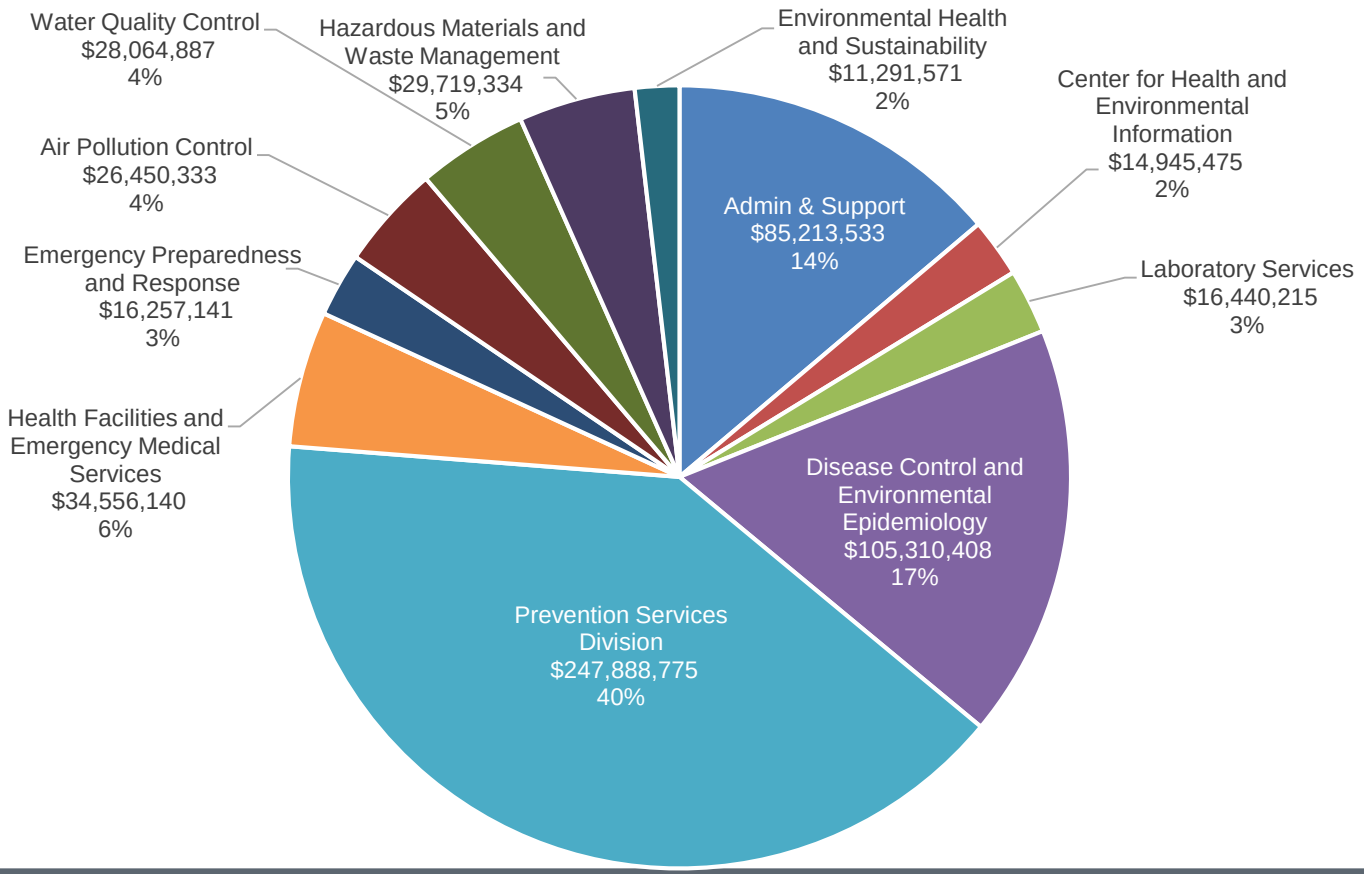


Organizational Chart



General Fund	General Fund Exempt	Cash Funds	Reappropriated Funds	Federal Funds	Total
$ 58,769,504	$ 407,703	$ 204,690,749	$ 49,291,017	$ 302,978,839	$ 616,137,812

Total Budget by Funding Sources



Budget by Division

Air Quality

Immunizations

Emergency Preparedness and Response

Healthy Eating Active Living

Suicide Prevention

Operational Excellence

WIG – Wildly Important Goals

Air Quality

WIG: Reduce Greenhouse Gas (GHG) emissions economy-wide from 125.716 million metric tons of CO2e (carbon dioxide equivalent) per year to 113.144 million metric tons of CO2e by June 30, 2023.

WIG: Reduce ozone from 83 parts per billion (ppb) to 75 ppb by June 30, 2023.

R-01 Oil and Gas Enforcement, Compliance, and Permitting Initiative

$2,417,371 CF and 19.4 FTE to expand capacity for oil and gas compliance, enforcement, permitting and ambient air quality monitoring.

Immunizations

WIG: Reverse the downward trend and increase the percent of **kindergartners protected against measles, mumps, and rubella** from 87.4% to 95% by June 30, 2023.

R-02 Immunization Outreach

$2.5M GF to increase immunization rates in counties with low kindergarten measles, mumps, rubella (MMR) vaccination coverage and to improve local response capacity through local public health agencies.

HEAL - Healthy Eating Active Living

WIG: Decrease the rate of **Colorado adults who have obesity** from 22.9% to 21.7% by June 30, 2023.

WIG: Decrease the **rate of Colorado children (age 2-4 years) who participate in the WIC Program and have obesity** from 7.5% to 6.5% by June 30, 2023.

R-03 Sustaining Essential Administrative Services

$559,864 RF and 4.3 FTE to ensure long term funding for essential administrative functions while simultaneously allowing block grant funding to be redirected to the agency's Wildly Important Goals.

Suicide Prevention

WIG: **Reduce Colorado's suicide rate** from 21.7 per 100,000 people in 2018 to 18.4 (a 15% decrease) by June 30, 2023.

R-03 Sustaining Essential Administrative Services

$559,864 RF and 4.3 FTE to ensure long term funding for essential administrative functions while simultaneously allowing block grant funding to be redirected to the agency's Wildly Important Goals.

R-01 Oil and Gas Enforcement, Compliance, and Permitting Initiative

$2,417,371 CF and 19.4 FTE to expand capacity for oil and gas compliance, enforcement, permitting and ambient air quality monitoring.

R-02 Immunization Outreach

$2.5M GF to increase immunization rates in counties with low kindergarten MMR vaccination coverage and to improve local response capacity.

R-03 Sustaining Essential Administrative Services

$559,864 RF and 4.3 FTE to ensure long term funding for essential administrative functions while allowing block grant funding to be redirected to the agency's Wildly Important Goals.

R-05 Laboratory Facility Maintenance

$301,593 RF to address audit findings at the State Laboratory Building.

R-06 Statewide 0.5% Provider Rate Increase

$47,325 (GF, CF, RAF) to increase the provider rate by 0.5% which affects the Local Public Health Agencies in the state.

R-04 Technical Reductions to Spending Authority

($6,031,844) CF and RAF and (1.0) FTE to better align appropriations to projected expenditures while still allowing the Department to implement the goals of its many programs.

R-07 Eliminate Duplicative Waste Grease Program

($100,890) CF and (0.7) FTE to eliminate a duplicative program that addressing issues surrounding sewer blockages or wastewater backups that local municipalities are effectively identifying and correcting .

R-08 External Boards Support Reduction

($44,007) GF to eliminate the Department's support for two external boards: the Stroke Advisory Board and the Colorado Coroner's Standards and Training Board.

- Approximately 60% percent of the Department’s budget for public health programs are funded through federal sources. Changes at the federal level may impact the Department’s health programs.

- Approximately 30% of the Department's budget for environmental regulatory programs comes from federal funds through the EPA. Changes in federal funding would likely impact the Department’s environmental programs.

- Superfund projects such as the Bonita Peak Mining District (Gold King), and the Colorado Smelter in Pueblo may be impacted by any funding changes to CERCLA.

- The department is working on a response plan to address PFAS, a widely-used group of chemicals known to have health effects. The use of these substances in fire fighting foam is of greatest concern because it can contaminate ground and drinking water.

- There will be more financial pressure on the Hazardous Substance Response Fund as the state's long term responsibility for operation and maintenance of Superfund sites increases.

- With increasing regulatory complexity, and as air quality continues to diminish, the APCD may need additional resources to respond appropriately which will require fees to increase.

Long Term Budgetary Issues

County Landfill Enforcement Authority

This proposal would provide legislative clarification for the Colorado Department of Public Health and Environment regarding enforcement authority for landfills, including county-owned active and closed landfills.

Small and Closed Landfill Assistance Fund

The department seeks the authority to utilize existing funds ($7M) to provide the funding to assist local governments in maintaining their landfill and/or solid waste disposal site in a compliant status aimed at protecting public health and the environment

Authority of PFAS Rulemaking

This proposal would provide CDPHE the authority to set guidelines, standards, enforcement measures, and rules around PFAS.

Proposed Changes to Water Quality Control Act (WQCA) to Align with Federal Clean Water Act and Colorado's Delegation Responsibilities

This proposal would align the Water Quality Control Act with the Federal Reporting and Enforcement guidelines

Resources for the Air Quality Control Division to protect public health from harmful emissions

This proposal would raise the statutory cap on fees set by the AQCD .

CDPHE Operating Principal #1

We are passionate about making meaningful impact

- Our efforts create, improve, and benefit a healthier Colorado
- We design, implement, and evaluate innovative solutions
- We base our decisions on available data, evidence, and best practices
- We make changes to things that are not working