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O'NEILL, NE



NCDHD ANNUAL REPORT 2021

PREPARED:
APRIL 2022

COUNTIES SERVED

Antelope, Boyd, Brown, Cherry, Holt, Keya Paha, Knox, Pierce, and Rock.



2021

From the Director



2021 remained with us as another challenging year. The responsive work of the COVID-19 Pandemic started to include the efforts for community vaccination efforts. The NCDHD saw many staff wearing many different hats and carrying out numerous responsibilities as we continued to plan for warehousing and distribution efforts of personal protective equipment and supplies, working with our schools to keep them in session and staff and students safe as possible, continuing with intense COVID case investigations and then implementation plans for localized COVID testing and vaccination efforts. The perseverance of the NCDHD Staff throughout this pandemic has been extraordinary and I am proud to be a part of this team effort.

I also want to sincerely thank our community partners that whom the NCDHD has worked so closely. From our schools, the county offices, emergency management, hospitals, health care providers, pharmacies, long-term care providers, mental health services, and community law enforcement, it has truly taken a community effort in dealing with this pandemic response. Our successful response effort in Nebraska was also accomplished because of the hard teamwork that consisted of working with the NCDHD Board of Health, Nebraska Department of Health and Human Services, and the Governor's Office. Without these solid relationships, Nebraska would not have faired as well as we have in regards to COVID response.

I am proud to be the Director of the NCDHD and will look forward to a strong 2022.



Public Health
Prevent. Promote. Protect.

Roger Wiese
Executive Director



Table of Contents

2021

NCDHD Team.....	Page 4
NCDHD Finances.....	Page 5
COVID-19 Response.....	Page 6
Communicable Diseases.....	Page 7
General Immunization Report.....	Pages 8-13
COVID 19 Testing and PPE.....	Pages 14
Substance Abuse Prevention.....	Pages 15
Miles of Smiles.....	Page 16
Minority Health (CHA/CHIP)	Page 17
CATCH, Inc. HRSA	Page 18
Radon.....	Page 19
West Nile - Vector-Borne Illness.....	Page 20
Lead.....	Page 21



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2021

NCDHD Team

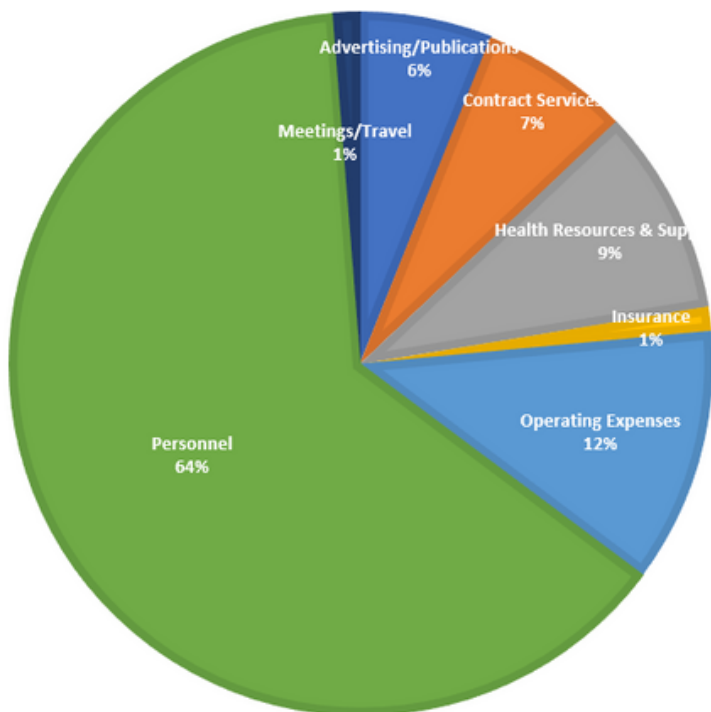


Public Health
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NCDHD Finances

2021

NCDHD experienced a year of many accomplishments. Some of our program accomplishments were increasing the clients served in our Miles Of Smiles school-based oral health program, completing our initial phase of the accreditation process, expanding our immunization and vaccination program, and expanding our substance abuse prevention activities. NCDHD continues to work on growing our disease and epidemiology reporting and is expanding worksite wellness as well. The Health Department will also be working with our community health care partners to address issues of chronic disease management by working to decrease hypertension and stroke and working to address issues of better mental health and decreasing suicide and self-harm. NCDHD had total expenditures for the office of \$2,143,335.00 for the 2021 calendar year.



Advertising/Publications	6%
Contract Services	7%
Health Resources & Supplies	9%
Insurance	1%
Operating Expenses	12%
Personnel	64%
Meetings/Travel	1%

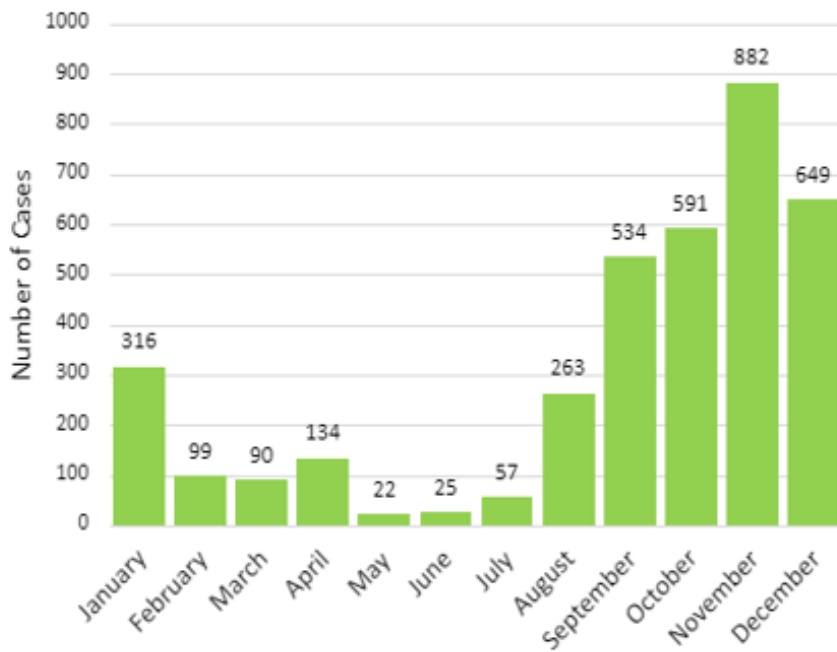


COVID Response

Epidemiology Totals

2021

2021 COVID-19 Cases by Month



NCDHD NOTICED A DECLINE IN CASES FROM LATE SPRING INTO SUMMER 2021. DUE TO DELTA'S INCREASED TRANSMISSIBILITY, NCDHD EXPERIENCED A SIGNIFICANT RESURGENCE FROM AUGUST THROUGH DECEMBER AVERAGING ALMOST 580+ CASES PER MONTH DURING THE FALL AND WINTER

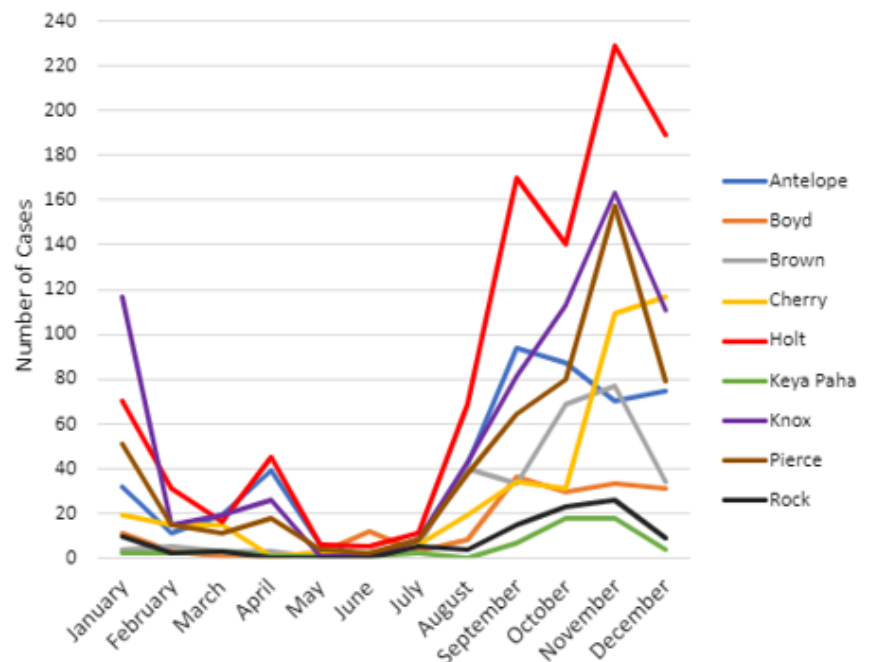
2021 NCDHD CASE COUNT

TOTAL CASES: 3662

Antelope: 484	Keya Paha: 59
Boyd: 171	Knox: 698
Brown: 276	Pierce: 527
Cherry: 369	Rock: 97
Holt: 981	

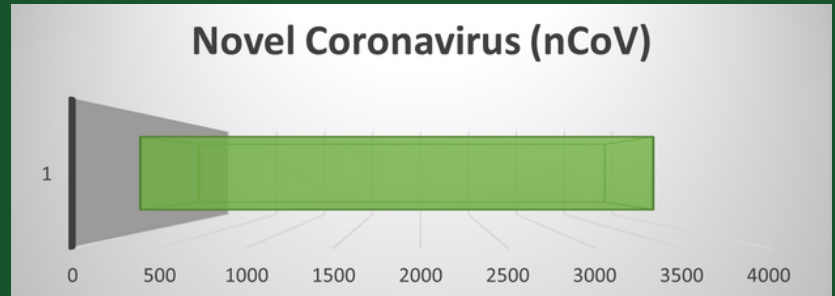
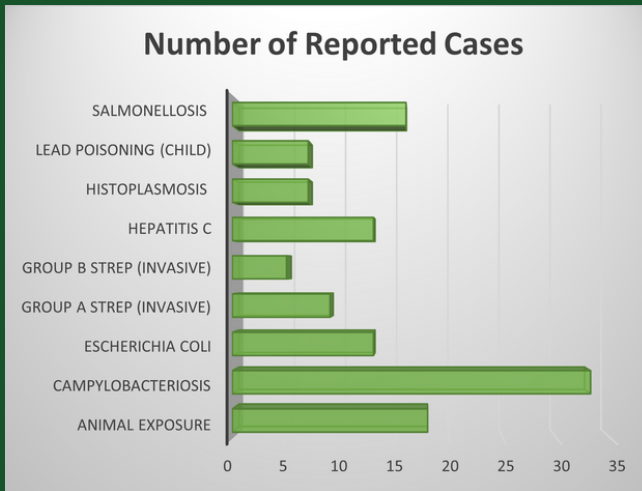
NCDHD contacted over 7600 close contacts from the cases listed above (not including schools and some employers).

2021 COVID-19 Cases per County by Month



Monitoring Community Health

2021



During the 2021 surveillance year, North Central District Health Department had 3,842 communicable diseases reported in our district. The above graph depicts 10 communicable diseases during the 2021 surveillance year (not including STIs).

*Source: NEDSS Datamart

Why it Matters:

Disease Surveillance is a critical service provided by the North Central District Health Department to help identify emerging infectious diseases, and potential pandemics, as well as provide a basis for evaluating the outcome of public health prevention programs. Communicable disease surveillance includes but is not limited to foodborne illness, vaccine-preventable diseases, influenza, vector-borne diseases, and animal-related diseases such as rabies. They can be contracted from the human living environment, including diseases passed from person to person, food or water, animals or insects.

*CDC

What NCDHD is doing:

We strive to prevent the incidence of disease by promoting healthy communities, families, and individuals through communicable disease surveillance. Surveillance intends to identify, promptly investigate, and monitor each incident of reported communicable disease. Timely recognition of the disease within the community enables the proper implementation of prevention and control activities. This action helps NCDHD contain the spread of the disease before the illness becomes a major public health crisis.

2021 continued to be a significant year for not only NCDHD but the community at large. Many changes were made including the addition of vaccines, treatment therapies as well as continued mitigation tools from 2020 to combat COVID-19. NCDHD experienced an uptick in the spring of 2021 and a significant surge in the fall of 2021 for COVID-19 cases as well as other communicable diseases throughout the district.



Immunization Report

2021

The Immunization Program's focus this year was on providing Covid-19 vaccinations to the district and its population. Covid-19 vaccinations started in December of 2020 but ramped up in January of 2021 with clinics for the 1st Tier of recipients set out by the State of Nebraska. Clinics started on January 5th with a focus on Nursing homes, assisted living facilities, and healthcare workers. We had 295 clinics this past year, 196 of which were dedicated to Covid-19 vaccinations. NCDHD started out receiving the Moderna vaccine, in March Johnson & Johnson (Janssen) vaccine was made available and NCDHD chose to offer this to area school personnel. The Center for Disease Control (CDC) and Food & Drug Administration (FDA) paused the use of this vaccination in April due to safety concerns and resumed use on April 23. In April when the Pfizer Covid-19 vaccine was approved for use in those 12 and older, NCDHD partnered with Elkhorn Logan Valley Public Health Department to procure and offered Covid-19 vaccinations through schools in the district for that population. Starting in June, all 3 Covid-19 vaccinations were offered at all public NCDHD-sponsored clinics. In August, additional doses were approved for those that were immunocompromised and had received either Moderna or Pfizer vaccine in the primary series. In September, booster doses were approved for those that had received Pfizer in the primary series, and in October, boosters were approved and recommended for all persons regardless of which vaccine they had received. Pfizer vaccine for children ages 5-11 years old was released in November and NCDHD was able to start vaccinating this group on November 4.



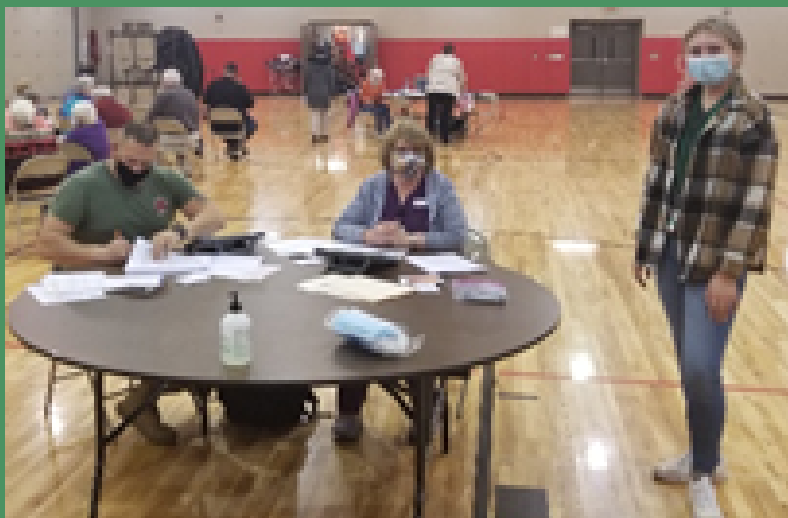


Immunization Report

2021

Covid-19 vaccination clinics offered several challenges that NCDHD had to work through, the biggest being the restrictions on who could get vaccinated and when.

The priority groups changed frequently and required NCDHD staff to continuously readjust. Due to the limited amount of vaccines available at first, appointments had to be made and all eligible persons had to be called. This required NCDHD to have staff available to make and answer these calls and a schedule had to be developed to keep track of the appointments. As restrictions eased up and vaccine supply became more available, this was no longer necessary and by late spring/early summer, it was possible to move to the walk-in style clinic that NCDHD has always used.



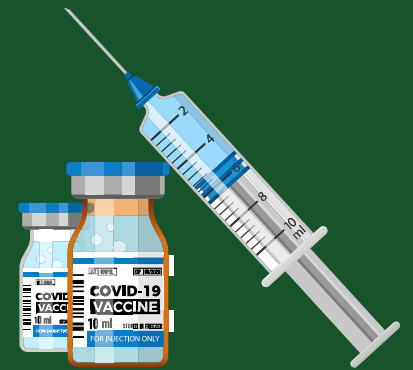
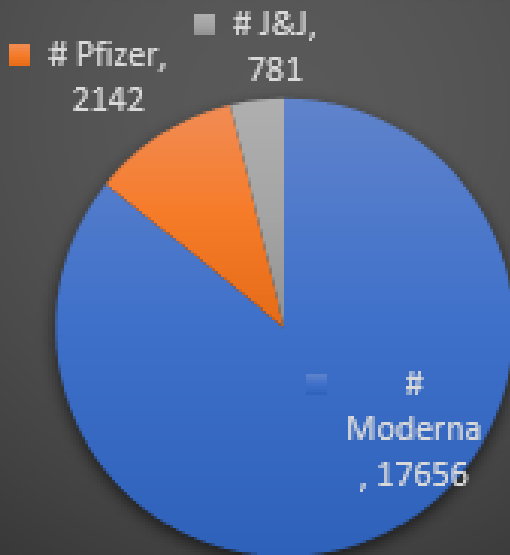
Clinic personnel was supplemented by the National Guard, volunteers from the community, and NCDHD healthcare partners. 4 guardsmen and women were deployed to assist with clinics, 2 of these persons had medical backgrounds and were able to assist with giving vaccinations and the other 2 assisted with clerical duties. The Guard started assisting with clinics in January and completed their time with NCDHD in May. NCDHD also relied heavily on our partnerships with hospitals and clinics in the area to supplement staff at mass clinics. A huge thank you goes out to the Nebraska National Guard and our local partners for their assistance!



Immunization Report

2021

Breakdown of Covid-19 vaccines by type administered by NCDHD in 2021



Overall, in 2021 NCDHD gave 20,579 Covid Vaccinations to district residents. As supply became less limited, several clinics, hospitals, and pharmacies in the NCDHD coverage area were approved to provide this service as well and this opened up opportunities and options for district residents to be vaccinated in their respective communities. NCDHD also partnered with area nursing homes to provide doses of vaccine as they had residents move in and when booster shots became available, allowing all residents the opportunity to be up to date on their vaccinations.



Immunization Report

2021

Through funding from the Nebraska Emergency Management Agency (NEMA), NCDHD acquired a 24-foot trailer and truck to use for mobile clinics. The trailer is set up to allow staff to give vaccinations inside the trailer or to be used as a shelter for staff members during the drive-through clinics. This setup was used exclusively this fall for flu/Covid-19 shot clinics, the majority of which were drive-through clinics.



NCDHD is continuing mobile clinics in strategic areas through out the district to offer all residents the opportunity and access to vaccination.



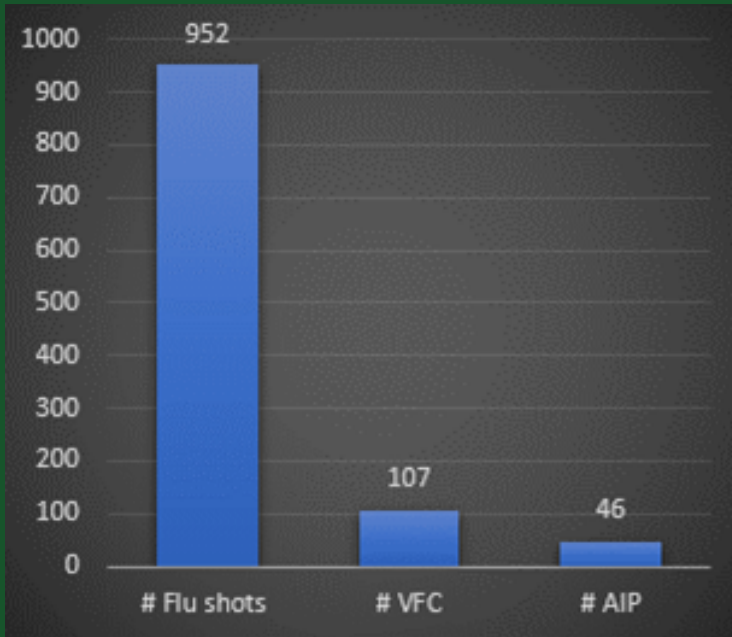
NCDHD staff nurses, Elizabeth Parks, Deb Thramer, Carolyn Gottsch and Jennifer Booker, close up the back of the trailer in preparation for departure from clinic.



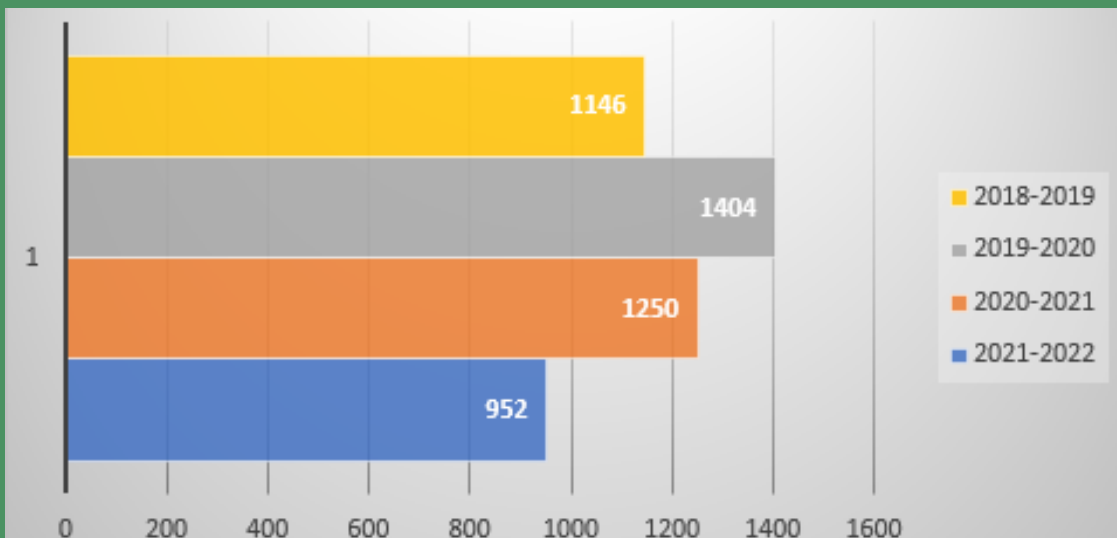
Sign to assist with traffic flow on a clinic day in O'Neill. Drive through clinics are held through the alley behind the NCDHD offices.

Immunization Report

2021



Number of flu shots given at NCDHD Clinics. Flu shot season typically runs from September-April. Disclaimer: 2021-2022 only includes those given through December 31, 2021.



Through Influenza vaccination clinics, NCDHD vaccinated 952 individuals. As shown in the chart above, influenza vaccination numbers were down this year. NCDHD is not alone in seeing reduced rates of those getting an influenza vaccination, all NCDHD healthcare partners and other healthcare entities throughout the country have reported lower than usual vaccination rates. Although a direct cause has not been identified, the Center for Disease Control (CDC) lists these possible reasons*:

- Low influenza activity last season
- Vaccine fatigue caused by ongoing COVID-19 vaccination efforts
- Confusion about the need for a flu vaccine this season or the belief that COVID-19 vaccines protect against flu
- Changes in healthcare-seeking behavior.

*Information obtained from the following source: <https://www.precisionvaccinations.com/reduced-flu-shot-rates-raise-concerns-us-cdc>



Immunization Report

2021

Shingles vaccinations have continued to be in demand at all clinics across the board, followed by Tdap and Pneumonia shots. NCDHD continues to provide and work with families to catch up children or adults that are behind in their routine vaccinations. Adult Immunization Program (AIP) and Vaccines For Children (VFC) program allow us to offer vaccinations for a donation to those without insurance or whose insurance doesn't cover vaccinations, allowing NCDHD to provide vaccinations to all residents. Through the general immunization program this year, we served 199 clients, 51 of them through the VFC or AIP programs.

Tetanus/ Diphtheria /Pertussis	Measles /Mumps /Rubella	Hep B	Hep A	HIB	Pneumonia	Varicella (Chicken Pox)	Rabies (prophylactic)	Rotavirus	HPV	Meningitis	Typhoid	Zoster (Shingles)	
72	2	1	0	3	0	18	3	0	0	2	4	0	147





COVID-19 TESTING & PPE

2021

- NCDHD still supports the long-term care facilities by issuing Abbott BinaxNOW kits. Unfortunately, due to funding and resources, we ended our drive-thru clinic for COVID testing on June 27, 2021, but you can still call NCDHD and the Cherry County Hospital for a rapid covid test if needed. The rapid test allows symptomatic individuals to get lower efficacy and fast results.



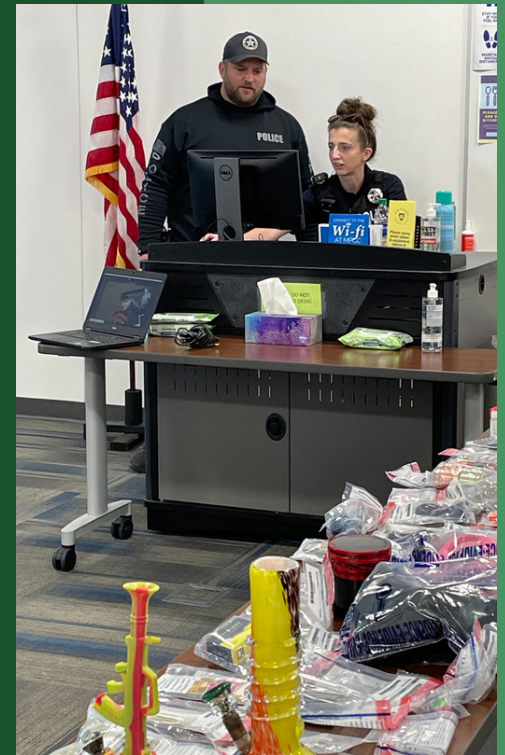
- We're still the distribution hub for Personal Protective Equipment (PPE) here in O'Neill. Our cache of supplies has doubled from last year. We still provide personal protective equipment to long-term facilities, schools, and daycare within our district.



Substance Abuse Prevention

2021

- NCDHD, through grant funding, supports and staffs Substance Abuse Prevention Coalitions in the 9-county district. These coalitions are the heartbeat of NCDHD's Substance Abuse Prevention initiatives and strategies.
- Coalitions hosted former Navy Seal, Anthony Page, with the Human Performance Project (HPP). The Human Performance Project is a program designed to be implemented in schools and other organizations to build and foster a culture of excellence. The science, principles, and structure of the HPP program have been utilized by the United States Navy Seals, professional athletic teams, college athletic teams, and high schools across the country. Anthony presented in O'Neill and 123 students and 23 adults from Bloomfield, O'Neill, O'Neill St. Mary's, Boyd County, and Chambers High Schools were in attendance. He also presented in Valentine for 42 students and 3 adults from Valentine Middle School, Valentine High School, and Keya Paha High School. Topics covered during the presentation included: sleep and performance, teamwork, leadership, and commitment, training and recovery, and substance use and performance.
- 9 Local Drug Trend and Drug Recognition and Awareness Training were provided in the area. At these trainings, participants are apprised of local drug trends and taught how to identify different classes of drugs. Local confiscated drugs and drug paraphernalia are available for trainees to see.
- 1,000 DeTerra Drug Disposal Pods were dispersed into the nine counties
- 10 Responsible Beverage Server Training were provided to local alcohol retailers at no cost to them, resulting in 62 servers/sellers being trained.



Miles of Smiles

2021



Miles of Smiles

Miles of Smiles (MOS) is a school-based oral screening and fluoride varnish program available to preschool, elementary, and middle school-age students within the nine-county health district. The MOS program contracts with 2 Public Health Authorized Registered Dental Hygienists to conduct oral screening examinations and apply fluoride varnish. In 2021 NCDHD averaged a 52% participation rate for Miles of Smiles and an average of 39% of students receiving the fluoride varnish. We were able to make it back into all schools both semesters this school year even with Covid still being an issue in our area schools. We had 118 children needing immediate referrals to a dentist and saw 20% Medicaid clientele. A total of 6 sealant programs were held in 6 different schools and 347 sealants were placed for the year. As far as our partnership with the Nebraska Community Foundation we are averaging about \$25,000 over what we need for our match funding each year, which is phenomenal. We have received so much support and funding from our district's counties, local community foundation boards, and private funders as well. With this funding, we hope to sustain this program in full and look forward to the improved progress this program will be making.



Minority Health

2021

NCDHD had several improvements this last year to enhance the current and future services for populations with the highest health concerns. In June of 2021, NCDHD hired a minority health and outreach coordinator to glean insights into the environment in which these lower health indicators exist. Based on the previous reporting from the Community Health Assessment (CHA) and the follow-up Community Health Improvement Plan (CHIP), minority groups such as Native Americans and Hispanics, along with the elderly and disabled are the most affected groups by health disparities.

According to Healthy People 2020, “Race or ethnicity, sex, sexual identity, age, disability, socioeconomic status, and geographic location all contribute to an individual’s ability to achieve good health. It is important to recognize the impact that social determinants have on health outcomes of specific populations”.

<https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities>

The CDC has also published a series of helpful “Spotlight Infographics” which highlights the current disparities in the US population.

https://www.cdc.gov/nchs/hus/hus_infographic.htm

To help close the gap, NCDHD has been tasked to address these disparities. In November 2021, two focus groups were conducted in the counties with the highest special populations (Knox and Cherry). These productive sessions yielded meaningful and important results and action items. The transportation and financial barriers to adequate and timely healthcare were one of the top issues, especially, during times of mental duress and heightened suicide risk. For children, bridging the gap to acceptable dental care is a priority, especially for our Native Populations. In terms of the elderly and disabled, getting affordable and preventative healthcare is a concern and overall, a lack of rest homes will present itself as an issue in the future. However, on a positive note, the district’s extensive and deliberate vaccination program was highlighted as a success and will continue to be a priority.

Currently, NCDHD is conducting another Community Health Assessment and another Community Health Improvement Plan will follow. The data collected, the focus group findings and public input is crucial to building financial and social resources to continue to help our special populations.





CATCH, Inc. | HRSA

2021

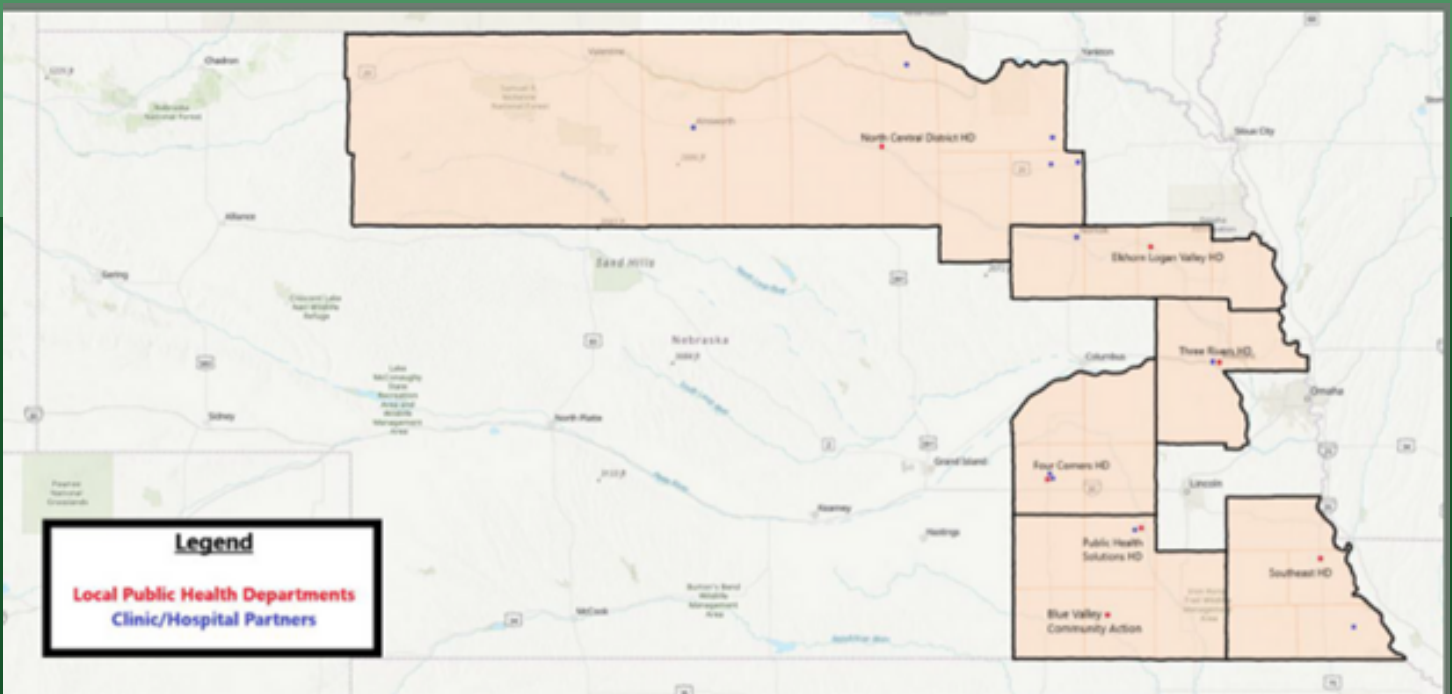
Community Access to Coordinated Healthcare, Inc. (CATCH) is a service delivery system made up of six local health departments and one Community Action Agency in Southeast Nebraska. CATCH is designed to foster improved health outcomes through health education, training, outreach, and referral services including case management and access to care. Incorporated in 1997 as a 501(c)3 non-profit membership organization, CATCH is governed by a board of directors and is a membership network of six local health departments (LHDs) and a multi-county community action agency (CAA).

NCDHD contract with Osmond General Hospital - Wausa Clinic - and developed a data-tracking document to begin collecting data

Brown County Hospital has been introduced to the project and has identified a staff member who will be the point of contact for the project.

Niobrara Valley initially showed interest in the project and NCDHD is working to reconnect with them to begin data collection.

Cherry County Hospital has identified a staff member who will be the point of contact and will hopefully begin data collection soon.

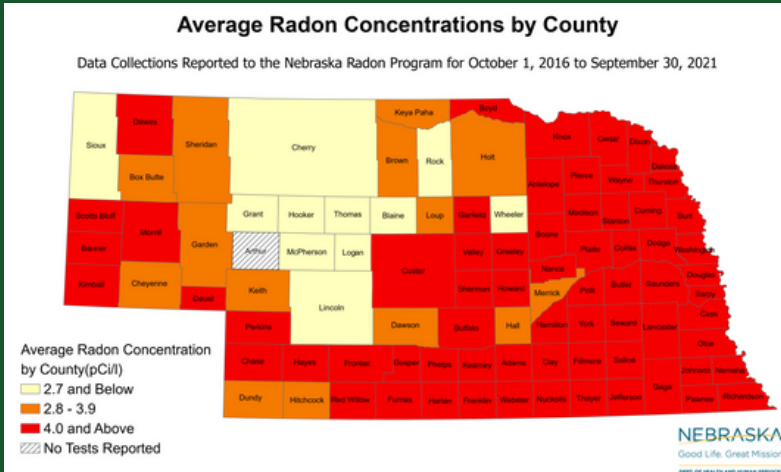




Radon



2021



Radon is prevalent at elevated levels in the soil throughout the entire NCDHD region. Hazardous levels of Radon are most common in Boyd, Knox, Antelope, and Pierce counties.

What NCDHD is doing:

NCDHD makes short-term Radon Testing Kits available for a reduced cost of \$12/kit. In 3-7 days, kits provide radon concentration levels. NCDHD follows up with test results at or above 4.0 pCi/L. This level is considered unhealthy. Typically, secondary tests are recommended for high levels. A Do-it-Yourself (DIY) mitigation guide and a list of licensed radon mitigators are also provided with secondary test kits.

In 2021, 97 kits were distributed. NCDHD also provides general education about the risk of radon gas and encourages radon testing.

Having radon levels at or above 4.0 pCi/L is considered dangerous for your health. The short-term radon tests distributed in the NCDHD area reflected that 43% of homes that were tested were at or above this level. These homes should be mitigated.

Why it Matters:

Radon is a radioactive gas that is prevalent at elevated levels in the soil throughout the entire NCDHD region. This gas is clear, odorless, and tasteless, so it is hard to detect. It seeps through the foundation of homes without residents being aware.

According to United States Environmental Protection Agency (EPA), radon is the number one cause of lung cancer among non-smokers. The EPA estimates that approximately 21,000 annual lung cancer deaths are radon.

The average radon concentration measured by short-term radon test kits distributed by NCDHD in 2020



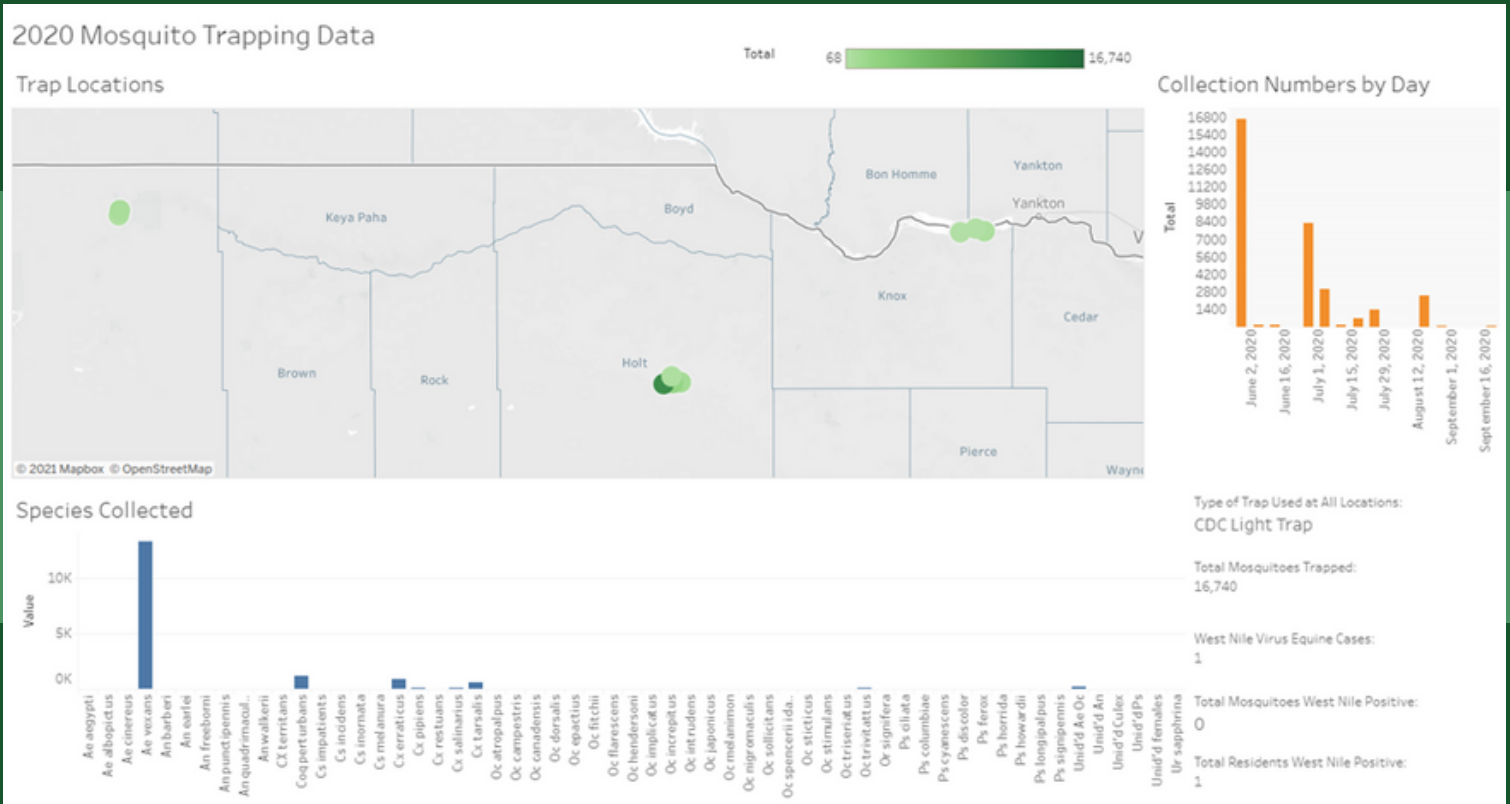
■ <2 pCi/L ■ 2-3.9 pCi/L ■ >4 pCi/L



Vector-Borne Illness

2021

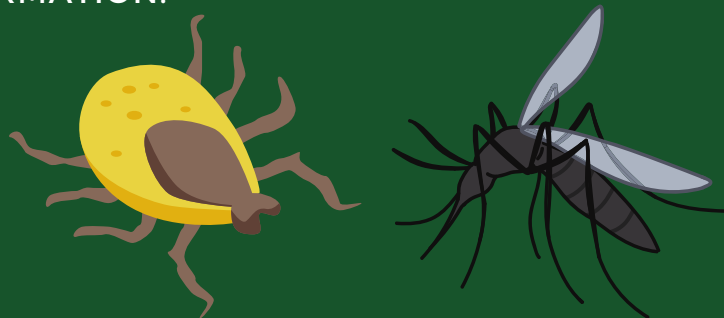
Mosquito Disease clinical cases in Nebraska 107 human clinical WNV cases were reported. Two (2) CASES IN THE NCDHD AREA.



NCDHD MOSQUITO TRAPPING DASHBOARD (ABOVE):

NCDHD CONTINUES TO USE THE DATA DASHBOARD TO ALLOW THE PUBLIC TO TRACK POSITIVE POOLS OF MOSQUITOS. THIS DATA IS USED BY THE COMMUNITY MEMBERS AND APPLICATORS. LINK IS AVAILABLE ON THE NCDHD WEBSITE.

NCDHD CONTINUES TO PRODUCE A NEWSLETTER FOR AREA APPLICATORS THAT CONTAINS UPDATED INFORMATION ON TICK AND MOSQUITO-BORNE ILLNESSES, UPCOMING TRAINING, AND OTHER PROGRAM INFORMATION.





Lead – WIIN Grant

The U.S. Environmental Protection Agency (EPA)'s 3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities was developed to help schools and childcare facilities to implement a voluntary program for reducing lead in drinking water. This EPA program is focused on promoting voluntary testing of drinking water for lead, taking corrective action if problems are identified, and sharing testing results and plans for reducing lead exposure in drinking water with parents, staff, students, and the community at large.

As recently as 2016, more than 34,000 Nebraska children under six years old were tested for lead; 411 of them had elevated levels of lead in their blood. Exposure to lead can seriously harm a child's health and cause well-documented adverse effects such as:

- Damage to the brain and nervous system
- Slowed growth and development
- Learning and behavior problems
- Hearing and speech problems

This can cause:

- Lower IQ
- Decreased ability to pay attention
- Underperformance in school

The good news: Childhood lead poisoning is 100% preventable. Identifying the sources of exposure is crucial.

Participation in this project started in September 2021. Unfortunately, with covid participation has been a challenge. In our district, 15/57 schools have submitted samples for testing and 17/116 daycares have submitted. As Covid numbers continue to go down, the hope is to reach out again and try to reconnect with area daycares and schools and try to encourage the importance of this program.

2021

