

2023



Grant County Health Department

"Protecting Public Health in Grant County for 88 years"

TO: The Honorable Chairman, Robert Keeney and the
Members of the Grant County Board of Health

FROM: The Staff of the Grant County Health Department

RE: Report of the Grant County Health Department
Programs and Services for 2023

The work and efforts of a dedicated staff and Board of Health are reflected in this report. A special thank you to Dr. Neil Martin, the Grant County Board of Supervisors, Personnel Department, Emergency Management, Area Healthcare Providers, and our other partners in public health not mentioned above.

The mission of the
Grant County Health Department
is to promote
the health and wellness
of
ALL residents
of
Grant County.

“Everyone Living Better, Longer”



Ten Essential Public Health Services

1. Assess and monitor population health status, factors that influence health, and community needs and assets
2. Investigate, diagnose, and address health problems and hazards affecting the population
3. Communicate effectively to inform and educate people about health, factors that influence it, and how to improve it
4. Strengthen, support, and mobilize communities and partnerships to improve health
5. Create, champion, and implement policies, plans, and laws that impact health
6. Utilize legal and regulatory actions designed to improve and protect the public's health
7. Assure an effective system that enables equitable access to the individual services and care needed to be healthy
8. Build and support a diverse and skilled public health workforce
9. Improve and innovate public health functions through ongoing evaluation, research, and continuous quality improvement
10. Build and maintain a strong organizational infrastructure for public health.

Department Overview

In 2023, the Grant County Health Department administered over 20 programs, managing multiple grants and contracts with the State and other agencies. Additionally, we manage several multi-county regional programs. Staffing includes the following:

Full Time: 25

Full Time Staff

Professions Include: *Administrative Assistants, Registered Nurses, Certified Nursing Assistants, Registered Sanitarians, a Registered Dietitian, and a Social Worker*

Part Time: 1 (Clerical)

LTE Staff: 7 [(1) Certified Nursing Assistant, (2) Nurse Practitioners (1) Hospice Spiritual Counselor, (1) Physical Therapist, (1) Occupational Therapist, (1) Occupational Therapist Assistant]

Direct Contracts: 5 [(1) Hospice Medical Director, (2) Hospice Physician, (1) Pharmacist, (1) Translator]

Other Contracts: >~100 individual contracts for services or to provide services

Volunteers: ~5 Hospice, 1 Public Health Medical Advisor

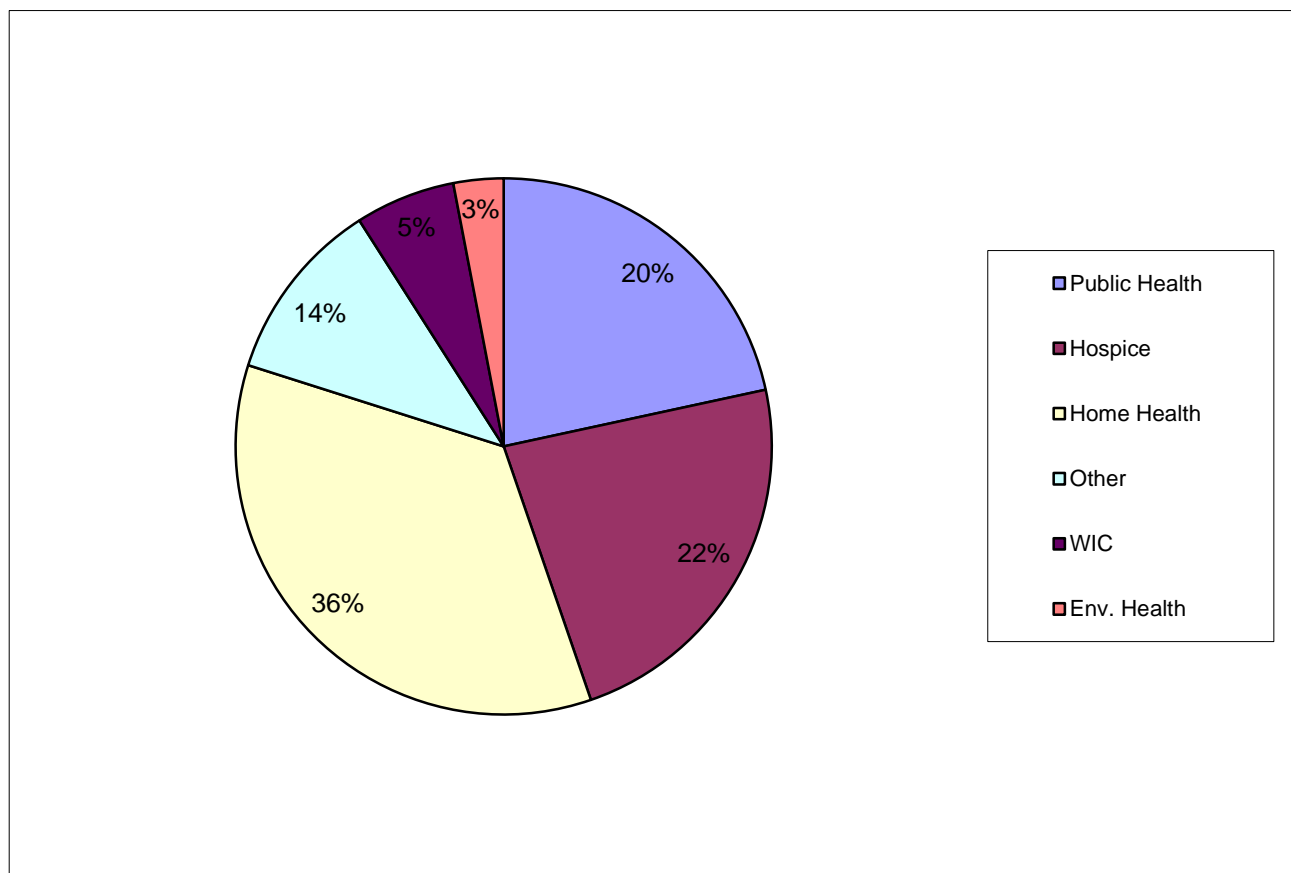
The 2023 operating budget was approximately 3.88 million dollars. Approximately 3.37 million dollars were anticipated from sources other than the local tax levy, making the health department largely funded by State and Federal funds, grants, and fee for service sources. However, the loss of staff caused many of the programs to remain idle or to be only operating partially. This resulted in the lapsing of significant amounts of funding in 2023.

In 2023, four programs were supported directly, but not entirely, by county levy funds. The vast majority of levy is used to provide public health and environmental health services which are required by the State. The remaining programs provide limited personal care services and services to low income children including lead testing and immunizations.

All programs are supported by levy funds through basic infrastructure, administration, and other ancillary activities (see the Sequoia Consulting Group Report).

Major Programs by Expense

The following pie chart illustrates budgeted expenses within the department for 2023.



Highlights and Challenges in 2023

In 2023, there was a slight improvement in staffing levels. Additionally, reorganization was used to address vacant positions that have generated no interest from applicants. A market wage review conducted in 2023 as well. However, refiling remaining vacancies will be challenging. Without staffing, programs struggle to meet the needs of county residents.

Lack of staffing also meant waiting lists of several weeks for services, the inability to help some

potential patients, lost revenue, and the lapsing of approximately \$200,000 of State and Federal funding allocated to Grant County in 2023 which could not be used. Staff turnover has also resulted in costs associated with lost productivity during orientation and training. This in turn resulted in the Department using more tax levy which is needed to cover the costs while training and orientating new staff.

Other challenges include misinformation, disinformation and vaccine hesitancy. This has resulted in many issues throughout healthcare and most notably in lower immunization rates leaving many susceptible to vaccine preventable communicable diseases. We saw a significant decrease in influenza vaccination rates resulting in reduced protection and reduced revenue for our department as well. Unfortunately, this trend is not unique to Grant County and it is expected to continue into 2024 and beyond.

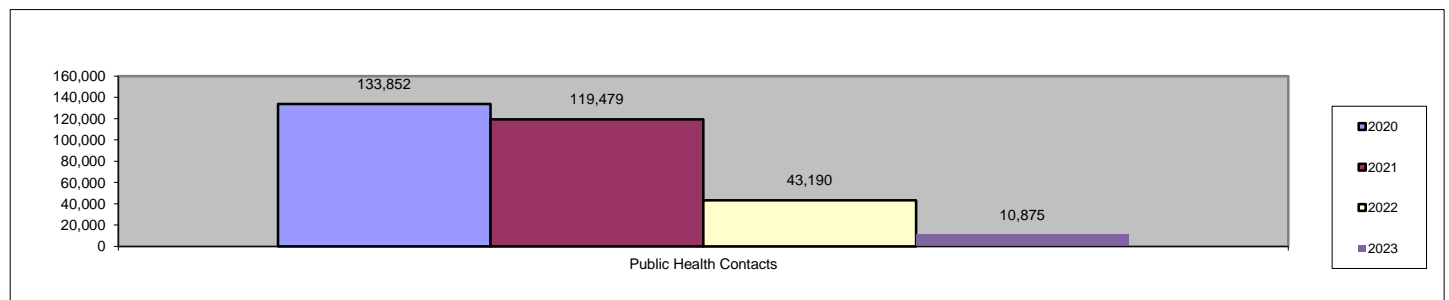
Some in person services have begun to improve slightly including WIC and immunization clinics. As a result, the department is making some changes to better serve WIC and other clientele with direct services while in person. The health department also was able to offer the updated COVID-19 vaccination and is only one of a handful of health departments in the State that was able to do so.

Public Health

Public Health programs generally focus on prevention efforts and improving the health of the community. Monitoring health indicators such as immunization rates, disease incident rates, causes of injury or death, and health behaviors are important. Much of our general programming was placed on hold or reduced due to staff vacancies.

According to the University of Wisconsin Population Health Institute, Grant County moved up in the health rankings over last year to 32nd. (see: [Grant County Health Rankings](#))

Below are the number of contacts for our Public Health staff. The significant reduction is due to lower COVID-19 levels and changes in reporting requirements.



School Health

The Grant County Health Department provides nursing services to the following schools:

Cuba City Elem. /HS	St. Clements (Lancaster)
Potosi Elem. /HS	Holy Ghost (Dickeyville)
River Ridge Elem. /HS	Immaculate Conception (Kieler)
Southwestern	St. Andrews
St. Mary's (Bloomington)	St. Joseph (Sinsinawa)
St. Rose (Cuba City)	Christian Day School (Muscoda)
Amish/Mennonite Schools	St. Charles (Cassville)

Services can include:

- General health information
- Assistance with managing health related issues such as lice, bed bugs, etc.
- Medication management assistance
- Health plan and policy development
- Vision and hearing screenings for selected grades, including rechecks and referral to appropriate health care providers as needed
- Immunization clinics for children and staff
- Follow-up on immunization requirements for entry to school
- Health resources and presentations for teachers, staff, students and parents
- Training for school staff

A total of 366 nursing hours were spent relating to school health not including immunization exercises or communicable disease control efforts. In addition, 1,399 miles were traveled by nurses relating to school health services. In 2022, 544.5 hours of nursing time were dedicated to schools and 2,061 miles were traveled. Public health aide time and administration time are not included in this total (as these hours are not specifically kept track of). There was a reduction in services due to staffing shortages and Cassville schools gaining their own nurse.

WIC (Women, Infants and Children) Program

The Women, Infants and Children (WIC) program is a supplemental nutrition program serving lower income families with children up to age five. The program also promotes and helps maintain the health and well-being of nutritionally at-risk pregnant, breastfeeding and postpartum women, infants, and children. WIC encourages and supports breastfeeding with incentives, education, and peer counseling. WIC also provides access to fresh fruits and vegetables with a farmer's market program.

Health benefits relating to WIC participation include reduced:

Premature births Low birth-weight babies Long-term medical expenses

The farmer's market program brought fresh fruits and vegetables to 85 families in 2023 by providing \$2,082 in benefits. This is up from serving 54 families with farmer's market benefits and \$1,320 in benefits in 2022.

Grant County WIC served 952 individuals in 2023 compared to 903 in 2022. WIC families spent a total of \$471,439 in benefits at local grocery stores. This is an increase over 2022's total benefits of \$364,179. Food costs increased and the benefit amounts per participant went up in 2023 as well contributing to the increase spending at our local grocery stores.

Health Check Services

The Health Check Program provides both individual services and comprehensive examinations of children aged birth to 21 years. A complete health check includes:

- | | |
|-------------------------------------|---|
| <i>✕ Head to Toe Physical Exams</i> | <i>✕ Immunizations</i> |
| <i>✕ Fluoride Varnishes</i> | <i>✕ Growth and Development Assessments</i> |
| <i>✕ Mouth Exams</i> | <i>✕ Lab Tests</i> |
| <i>✕ Nutritional Screening</i> | <i>✕ Eye Exams</i> |
| <i>✕ Blood Lead Testing</i> | <i>✕ Other Screenings</i> |

Health Check screenings, lead testing, and immunizations are offered at most clinics to compliment the WIC program. In 2023, 450 blood lead screenings were completed for children in Grant County. In comparison, 281 blood lead screenings were done in 2022.

We also provided and installed or checked 75 child passenger safety seats in 2023 (providing seats at no charge to low income families through a Wisconsin Department of Transportation grant). The number of child passenger safety seats checked or installed increased over 2022 when 59 seats were provided or checked.

Jail Health

Two nurses from the Grant County Health Department have received extensive training and continuing education on topics relating to the provision of jail health services. These nurses staff the Grant County Jail on a daily basis Monday through Friday.

In addition, the jail is included in our "intake" system and "on call" rotation allowing our department

to provide services as needed ensuring complete coverage 24 hours a day, 7 days a week including holidays on an as needed basis.

In 2023, we separated Home Health and Hospice “on call” from Public Health “on call” and the jail fell under the Public Health “on call” along with communicable disease reporting and animal bites. The main reason for doing this was due to the inability to hire or retain nurses if they had to be on call for both public health and home health/hospice issues. However, it also provides more consistency with staffing for each area. On average over 45.2 hours nursing of services were provided to the jail each week in 2023.

Nursing services increased again in 2023 due in part to mental health challenges at the jail. In 2023, 2,354.25 hours of nursing time was provided to the jail. This is an increase compared to 2022 when 2,318.5 hours of nursing time was provided to the jail. In addition, 2,565 miles were traveled to provide jail health in 2023 compared to and 2,990 in 2022.

Wisconsin Well Woman Program (WWWP)

Grant County Health Department continues to support the WWWP for women ages 45-64 years of age meeting specific income requirements. Well Woman pays for mammograms, Pap tests, cervical cancer screenings, multiple sclerosis testing for high risk women, and certain other health screenings. Early detection of breast or cervical cancer can greatly improve outcomes and significantly reduce the cost of treatment as well as shorten recovery times.

Communicable Disease Follow-Up

Local public health departments are required by law to complete follow-up activities with individuals having or suspected to have illnesses as identified in Chapter 252 of the State Statutes and in Wisconsin State Administrative Rule Chapter DHS 145, “Control of Communicable Diseases”. Public Health staff continues to educate individuals about illnesses and encourage or ensure treatment (if needed).

Steps are also taken to control and reduce the spread of diseases as well. Telephone calls, letters, emails, and/or face-to-face contacts are used to gather and distribute information.

Below is a summary of communicable diseases that were reported to the Grant County Health Department in 2023. All reported cases require follow up. However, not all reports of illness are confirmed.

Reports of COVID-19 are down significantly due to fewer cases and the removal of reporting requirements unless there are COVID-19 related hospitalizations or pediatric deaths. Syphilis, HIV, and Hepatitis B were higher than in typical years. Increases were also seen in Lyme Disease as well.

Communicable Diseases

(January 1 - December 31, 2023)

According to Wisconsin State Statute 252, any individual with knowledge or reason to believe that a person has a communicable disease must report to their local health department. This includes physician, nurses, lab workers, teachers and the general public. The Grant County Health Department has received the following reports of illness. Staff has completed follow-up on these reports and appropriate action has been taken.

COMMUNICABLE DISEASES	2018	2019	2020	2021	2022	2023
Anaplasmosis	4	3	3	8	3	3
Arboviral Illness	1	0	1	2	3	1
Asbestosis	-	-	-	-	-	1
Babesiosis	2	0	0	2	0	1
Blastomycosis	1	0	0	0	0	0
Brucellosis	0	0	0	1	0	1
Campylobacteriosis	41	29	38	37	32	31
Carbapenem-Resistant Enterobacteria	1	3	3	7	5	0
Carbon Monoxide Poisoning	3	14	10	5	7	8
Chancroid	1	0	0	0	0	0
Chemical Pneumonitis	-	2	0	0	0	0
Coccidioidomycosis	-	-	-	-	2	1
COVID-19	-	-	28,500	20,959	13,219	2,788
COVID-19 Hospitalization (newly reportable in late 2023)	-	-	-	-	-	33
Cryptosporidiosis	31	31	24	30	19	20
Cyclosporidiosis	7	0	2	1	0	1
E.Coli	38	64	55	68	52	69
Ehrlichiosis	2	1	2	2	0	0
Giardiasis	14	7	3	10	7	4
Hantavirus	-	1	0	0	0	0
Hepatitis C	25	29	30	2	33	37
Hepatitis E	1	0	0	0	1	0
Histoplasmosis	1	2	3	33	3	0
Influenza – Seasonal Reported in Error	-	210	209	812	258	104
Influenza-Associated Hospitalization	43	27	92	10	19	28
Invasive Hemophilus Influenza	0	2	1	1	6	5
Legionella	1	2	1	0	1	1
Lyme Disease	65	70	43	68	64	86
Metal Poisoning (Non-Lead)	5	1	1	0	0	0
Methemoglobinemia	1	0	0	0	0	0
Methicillin or Oxacillin Resistant Staph	2	2	1	2	1	1
Mycobacterium (Non TB)	4	6	6	2	6	1
Meningitis, Aseptic Viral	0	0	0	0	0	1
Meningitis, Bacterial	1	1	0	1	0	0
Orthopoxvirus, Mpox	-	-	-	-	1	1
Orthopoxvirus, unspecified	-	-	-	-	1	0
Parapertussis	0	3	2	20	10	4
Pneumocystis Jirovecii	1	0	0	0	0	0
Plesiomonas Infection	-	-	2	2	1	0
Q Fever	1	5	1	0	4	4

Rabies (Animal)	-	-	1	0	0	0
Rocky Mountain/ Undetermined Spotted Fever	0	1	0	0	0	2
Salmonellosis	11	7	10	8	15	20
Shigellosis	0	1	0	1	2	0
Silicosis	-	-	-	-	-	3
Strept All Types	10	8	6	11	9	22
Toxic Shock Syndrome	0	0	0	0	0	2
Toxoplasmosis	-	3	2	1	1	1
Transmissible Spongiform Encephalopathy	1	0	1	0	0	1
Trichinellosis	0	0	0	0	0	0
Tuberculosis	1	0	1	2	0	0
Tuberculosis Latent	3	10	10	6	5	10
Tularemia	1	1	0	0	0	0
Vancomycin-Resistant Enterococci	0	1	0	1	0	0
Vibriosis, Non-Cholera	-	2	1	0	0	0
West Nile Virus	0	0	0	0	0	1
Yersiniosis	0	0	0	6	4	1
Zika Virus	1	0	0	0	0	0
TOTALS	325	549	29,065	22,121	13,794	3,298

VACCINE PREVENTABLE DISEASES	2018	2019	2020	2021	2022	2023
Chickenpox	12	13	5	7	8	7
Hepatitis A	0	1	1	0	1	2
Hepatitis B	3	7	5	9	59	131
Hib	2	0	0	0	6	5
Measles (Rubeola)	1	3	3	0	0	1
Mumps	14	14	14	2	7	4
N. Meningitidis	1	0	0	0	0	1
Pertussis	41	52	25	195	4	7
Respiratory Syncytial Virus (RSV)	-	-	-	-	-	10
Respiratory Syncytial Virus (RSV) Hospitalization	-	-	-	-	-	3
Rubella	2	0	0	0	0	0
TOTALS	76	90	53	213	85	171

SEXUALLY TRANSMITTED DISEASES	2018	2019	2020	2021	2022	2023
Chlamydia	160	138	111	139	116	120
Gonorrhea	12	22	12	30	29	12
Syphilis	2	8	13	13	17	19
Human Immunodeficiency Virus (HIV)	1	2	4	2	2	5
TOTALS	175	170	140	184	164	156

Immunizations

As indicated by the continuation of vaccine preventable illness outbreaks, challenges remain in ensuring that vaccination rates are high enough to prevent the sustained transmission of many vaccine preventable diseases here and around the country. These challenges are worsened by vaccine hesitancy as well as misinformation and disinformation.

Note the reduction of both COVID 19 vaccinations and the continued reduction of influenza vaccinations in 2023.

Number of Doses of Vaccine	2018	2019	2020	2021	2022	2023
COVID-19	-	-	-	17,996	2,613	604
DTaP - Diphtheria/Tetanus/Pertussis	76	68	43	25	25	44
DTaP/Polio (Kinrix)	66	64	43	34	54	47
DTaP/HepB/Polio (Pediarix)	184	149	95	60	0	0
DTaP/Hep B Hib Polio (Vaxelis)	-	-	-	6	95	82
Polio	29	29	17	6	22	26
MMR - Measles/Mumps/Rubella	88	90	59	45	48	57
MMR - Varicella (Proquad)	76	73	42	36	46	49
Hepatitis A (pediatric)	123	103	78	61	49	40
Hepatitis B (pediatric)	18	19	3	5	16	21
Td - Tetanus/Diphtheria	48	81	37	43	86	58
Tdap (Adacel & Boostrix)	390	255	160	161	138	78
Hib - Haemophilus Influenza type B	212	169	123	59	16	15
HPV (Gardasil)	47	40	38	51	31	79
Varicella (Chickenpox)	63	66	54	29	35	45
Prevnar 13 (Pneumococcal)	208	146	128	61	91	55
Vaxneuvance (Pneumococcal)	-	-	-	-	-	22
Meningitis	306	39	34	44	21	69
Meningitis B	-	-	7	4	5	10
Rotavirus	73	57	39	20	26	21
Influenza - Seasonal	3,474	3,607	2,998	2,412	2362	2,060
Pneumonia-Prevnar 13 (adult)	16	23	3	8	5	4
Pneumo-Poly 23 (adult)	9	6	5	3	3	2
Hepatitis A (adult)	7	65	34	8	15	8
Hepatitis B (adult)	18	32	10	12	5	12
Smallpox	-	-	-	-	2	0
Total	5,531	5,181	4,050	21,189	5,809	3,508

Environmental Health (EH) Programs

Grant County lead the Southwest Wisconsin Environmental Consortium. Members of the consortium

include Grant, Crawford (limited participation), Lafayette, Iowa, Richland, and Vernon counties. We respond to human health hazards such as vermin infestations, sewage or other waste problems, water and air quality issues, or public health nuisances which may endanger the safety, health, or well-being of the public. We also conduct lead and asbestos inspections. In 2024, Grant, Iowa and Lafayette Counties will continue to work together whereas Vernon, Richland, and Crawford Counties will work together and do some activities on their own.

Local health departments are required by state statute and by local ordinance to respond to human health hazards and public health nuisances. Additionally, health departments are required to investigate lead poisoning cases. Typically, most complaints received by the local health departments are related to environmental health issues and include both public health nuisances and human health hazards.

Grant County Health Department is also a Radon Information Center (RIC) serving a six county region. Radon is a naturally occurring gas that is considered to be the second leading cause of lung cancer in the U.S. The RIC provides free consultation and radon test kits to homeowners. In 2023, a total of 678 radon test kits were distributed in the 6 county region.

Below are the EH total contacts for 2023.

<i>Number of Contacts</i>	2017	2018	2019	2020	2021	2022	2023
Water	75	94	133	116	103	66	64
Air Quality	233	138	198	199	233	168	158
Asbestos	79	142	142	119	109	72	73
Lead Hazards	86	164	138	77	113	93	108
Radiation Hazards	127	159	162	117	138	137	127
Housing	144	208	244	170	226	211	209
Rabies	116	104	105	117	126	145	133
Sewage	93	138	170	124	108	81	78
Solid Waste	102	195	179	159	189	227	208
Insects/Rodents/Animal Problems	79	125	139	100	99	82	62
Home Inspections	261	526	229	180	172	207	210
Totals	1,395	1,993	1,839	1,478	1,616	1,489	1,430

Public Health

Preparedness and Response

During 2023, Grant County Health Department continued to prepare for public health emergencies through extensive planning, training, and testing efforts. We continued to test mass clinic plans by conducting immunization exercises in schools. We also planned and exercised with the regional health care coalition. Grant County also has representation on the regional health care coalition board as well.

Tobacco-Free Coalition

In 2023, the Grant County Health Department continued a partnership with resources being provided by Family Services of Southern Wisconsin and Northern Illinois, Inc. The Multi-jurisdictional Tobacco Coalition provided tobacco control and coordination services to Grant, Iowa, and Lafayette Counties. The coalition focus continued on tobacco use among disparate groups, and electronic delivery devices.

Consolidated Grants

The Wisconsin Department of Health Services has continued to provide state and federal grant funds to local health departments in a pass through process called Consolidated Contracts. Our allocation recently increased due to becoming a level III health department. The following programs are examples of services provided using these funds:

Maternal & Child Health –The 2023 focus was improving developmental screening.

Lead – Promotes blood lead screening of children and follow-up services for children with elevated lead levels (using Grant, Iowa, Lafayette, Richland, and Vernon County funding allocations)

Radon – Provides testing, education, and consultation services for residents regarding radon risks. (Grant, Iowa, Lafayette, Richland, Vernon, and Crawford counties funds)

WIC (Women, Infants & Children) – Provides education and nutrition services, access to healthy foods, and referrals to services for pregnant women and children up to age five who meet the income guidelines.

Immunizations – Funds are used for maintaining records and for entering information into Wisconsin Immunization Registry (WIR) as well as to help ensure that children are up to date on immunizations.

Prevention - Provides some limited funding for environmental health services.

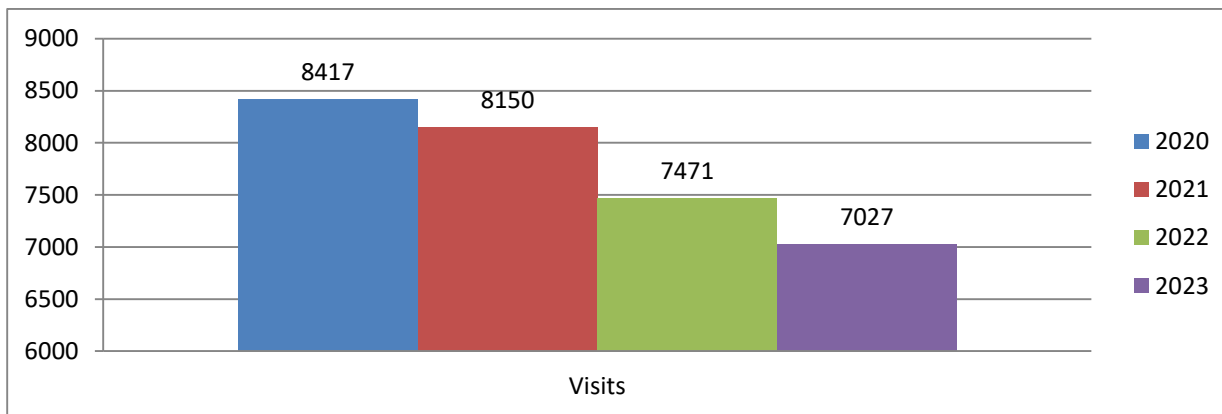
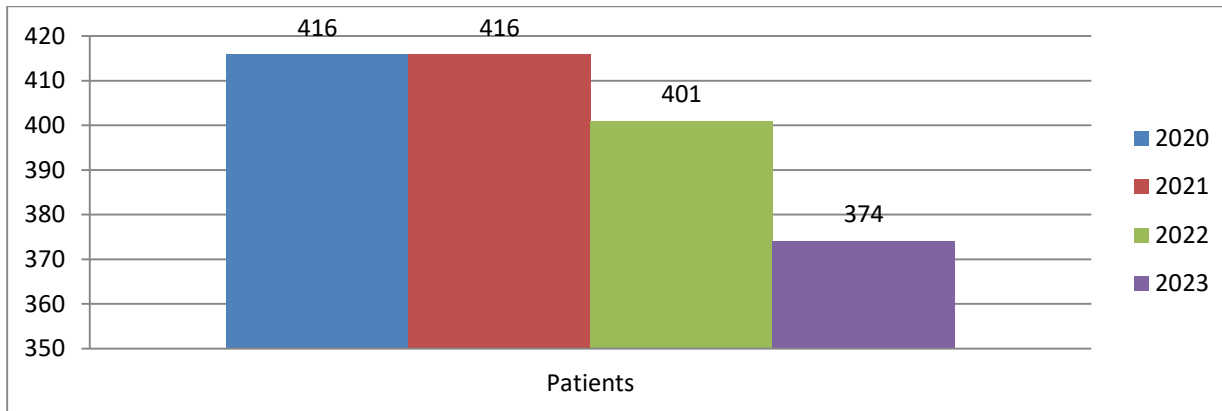
Home Nursing

In 2023, 374 clients received services from the Grant County Health Department. These clients received a total of 7,027 visits from the Department. These visits are provided by nurses, physical therapists, occupational therapists, speech therapists and home health aides. These services are paid for by Medicare, Medical Assistance, private insurance, Medicare replacement policies, private pay and Family Care. No one is denied service because of inability to pay.

The Department provides physical, occupational and speech therapy services through contracts with all three hospitals in our county or hired LTE/PRN employees. This allows the therapy services to be provided by a therapist who is in their area. It is important to note that 185 patient referrals could not be served in 2023 in most part due to staff vacancies and there were waiting periods of several weeks for admissions as well. In 2022, there were about 95 patients that could not be served for similar reasons.

No clients received personal care only services in 2023. However, we are not actively looking to provide this service since there is adequate private sector capacity.

A comparison of Home Nursing patients and visits is noted below.

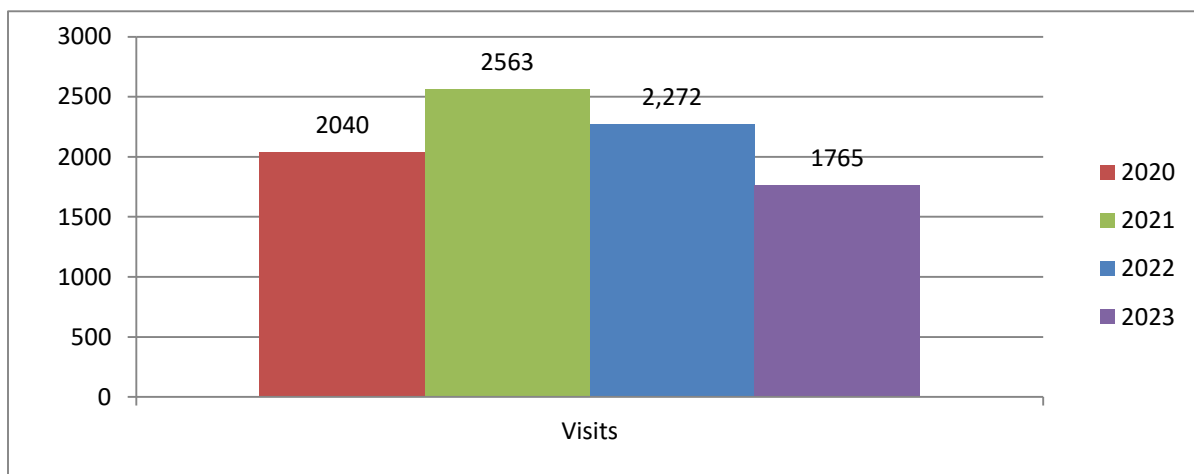
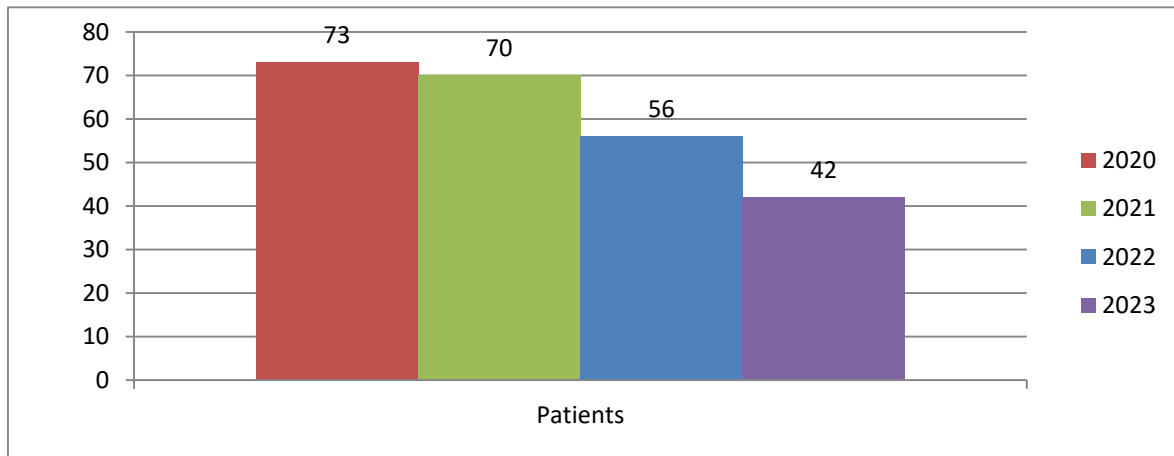


Hospice

Hospice care focuses on medical and personal comfort for people in the last months of their lives. Hospice provides comfort care so clients can live as fully as possible until the end of life. Hospice also provides support services to clients' families as well as bereavement services for at least 13 months following the clients' death.

In 2023, 42 clients were served on the Grant County Hospice Program. These clients received 1,765 visits from a multi-disciplinary support team that includes registered nurses, social workers, hospice aides, nurse practitioners and therapists. Clients choose hospice care when their physician certifies that they are terminally ill and they are no longer seeking active treatment for their illness. It should be noted that nursing capacity from Hospice was shifted to Home Nursing due to the lower patient load in Hospice and the increase in unmet needs in Home Nursing.

A comparison of Hospice patients and visits is noted below:



Board of Health Members

Carol Beals, Vice Chair
 Neil T. Martin, MD
 Diane Nelson, Chair
 Rick Sanson

Brian Lucey
 Brandon Snyder, Secretary
 Elias Cox
 Gary Ranum

Mary K. Logemann, RN, BSN
 Matt Andrews, DDS
 Richard Dhyanchand

The persons listed below are directly responsible for the activities and programs noted in this report. Their dedication and commitment to the residents of Grant County is evident in the quality of the services provided to our communities.

Health Department Staff

Jeff Kindrai, MSPH, RS, Director/Health Officer

Amy Miller, RN, BSN, Assistant Director

Kim Moore, RN, BSN, Nursing Compliance & Quality Coordinator

Amy Budworth, Administrative Assistant II

Andrew Fessler, PT

Ashley Sullivan, RN, BSN

Cari Schmidt, RN, BSN

Casey Gradel, RN, BSN

Erin Huebschman, MD Hospice Medical Director

Jamie Kreul, Administrative Assistant I

Chrissa Fecht, RN, BSN

Joanna Schindler, OT

Jolene Ziebart, LTE NP

Brittany Lee, RN, BSN

Katherine Reuter, LTE NP

Tracy Mezera, RN, BSN

Sheirlie Lamantia, MD Hospice Medical Director

Fred Naatz, MSW Hospice Social Worker

Cathy Rosch, Administrative Assistant I

Clara Kindrai, LTE CNA

Pam Strakeljahn, Spiritual Coordinator

Kim Martens, RN, BSN

Melissa Hill, SW

Jennifer Elsner, CNA

Lorna Wolf, Admission Specialist

Michelle Farrell, Contract Pharmacist

Michelle Young, RN, BSN

Kessa Klaas, RN, BSN

Troy Moris, RS Environmental Health

Nicole Runde, COTA

Robert Smith, MD Hospice Physician

Selina Baus, RN, BSN

Shawn Handfelt, Administrative Assistant I

Steve Straka, Clerical

Melissa Dunlap, RD WIC Nutritionist

Maria Kindrai, LTE NP

Della McCarville, Administrative Assistant I

Denise Davis, Administrative Assistant II

Julie Atkinson, LTE RN