## Friendship Village

Summary of 19 years of public health projects

James Li MD Local health officer

### Overview of projects

- Set up public automated external defibrillators (AEDs)
- Sponsor town first aid courses
- Conduct annual free health clinic (vaccines: flu, Tdap, pneumonia; cholesterol, diabetes, blood pressure checks)
- Coordinate purchase of equipment for ambulance service
- Write public health-oriented annual town report

# Set up public automated external defibrillators (AEDs)







### Sponsor town first aid courses

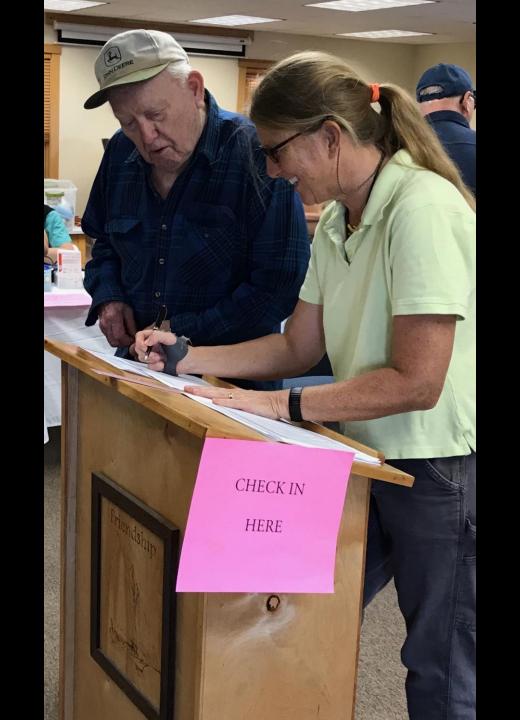




#### Conduct annual free health clinic

Vaccines: flu, Tdap, pneumonia;

Tests: cholesterol, diabetes, blood pressure









# Coordinate purchase of equipment for ambulance service





# Write public health-oriented annual town report

UPCOMING 2022 ANNUAL FREE TOWN HEALTH CLINIC. Mark your calendars now for Saturday, September 17, 2022 at the town hall from 08:00 am until 12:30 pm.

Free town health clinic. We held a successful and enthusiastic town health clinic in September that was attended by nearly two hundred residents. This year, we were able to provide both the standard injectable flu vaccine as well as a no-shot alternative administered by painless nasal spray. Many thanks to the five volunteers – Jackie Eschle, Kim Newby, Cecily Havener, Carol Samuels, and Donna Sutphin (left to right in photo) – who helped me administer flu vaccines and provide free blood testing to town residents.

For those who are new to Friendship, this health clinic is provided as a service to anyone who lives, permanently or temporarily, in our town. We hold it once a year on a Saturday in late September and, at a minimum, provide flu vaccines, comprehensive cholesterol testing, diabetes screening, and blood pressure checks, all at no cost to participants. The funds for medical test and vaccine equipment to run this clinic average \$6,000 to \$9,000 per year and are generously covered by contributions from the town and the Friendship Ambulance Auxiliary Foundation. All of the staffing is done by medical volunteers, both nurses and physicians, who live in town. In prior years, we also have offered Pneumovax vaccine, and booster vaccines for tetanus and whooping cough.

Tick bites. Due to weather conditions that were perfect for propagating ticks, Friendship and its surrounding islands experienced unusually large hatches of deer ticks (*Ixodes scapularis*) in the spring and early summer months of 2021. Unlike recent years, nymph-stage ticks predominated over adults. I treated several Friendship residents with full-blown cases of Lyme disease, and provided prophylactic doxycycline (the standard for a tick bite that has not progressed to Lyme) to many others. Most people had difficulty seeing these young deer ticks because of their minute size, much smaller than a pinhead. Friendship is located in the state's zone of highest risk for Lyme disease due to environmental conditions that make ticks flourish. If you are bitten by a tick, remove it completely as soon as possible, apply an antibiotic ointment liberally around the bite area for several days (bacitracin, triple antibiotic, or similar), and contact your doctor about getting a single 200-mg dose of doxycycline, which greatly reduces the likelihood of contracting Lyme disease (New England Journal of Medicine, July 2001). People who contract Lyme (usually evidenced by fever or a growing red rash after a tick bite) need 14 days of doxycycline and testing for other infections associated with tick bites.

Heart attacks and cardiac arrest. Friendship residents contributed a generous portion toward the purchase a new ambulance device that provides automated chest compressions (CPR) during resuscitation efforts. This state-of-the-art device, the LUCAS 3, allowed our paramedics to successfully resuscitate a young woman in cardiac arrest shortly after it was donated to the ambulance service. Additionally, two more automated external defibrillators (AEDs) were installed this year at Davis Point. AEDs are vitally important to ensure that heart attack victims in cardiac arrest can receive defibrillation within minutes of their collapse. Without CPR, the death rate without defibrillation is 100% only 8 minutes after collapse. Given that our rural town averages a 12-minute ambulance response time, having accessible AEDs in town is one

way we can improve outcomes for residents with cardiac conditions. I encourage everyone in town to learn where their nearest public AED is located, so it can be rapidly retrieved in an emergency. Use is straightforward, even if you've never been trained. Simply push the on button and follow the voice prompts.

**Historical notes.** For those reading my report in the distant future, our community and the greater world are now in the second year of the pandemic caused by the severe acute respiratory syndrome coronavirus 2, also known as SARS-CoV-2. When I wrote last year's report, one in every thousand Americans had died of coronavirus infection, two vaccines had just been released to curb the spread of the virus, and no specific treatments were yet available for those who became sick.

As I write this today, 25 vaccines are in use around the world and another 42 are in final human clinical trials. Three injectable coronavirus-specific treatments are in general hospital use (bamlanivimab-etesevimab, casirivimab-imdevimab, and sotrovimab) and a fourth pill-based treatment that can be taken at home is on the way (molnupiravir). Because of widespread vaccination campaigns and these specific treatments, the chance of dying from SARS-CoV-2 infection is now well under 1%.

Nevertheless, the coronavirus has proven so contagious that more than one in seven Americans have had the illness. Because it is so easily spread by invisible aerosols, the number of deaths more than doubled this year – to one in every 400 Americans – as the coronavirus ran through vulnerable populations. In absolute terms, more Americans have died as a result of SARS-CoV-2 than died in combat from all of America's wars combined.

The good news is that as a pandemic-level pathogen, the death rate from SARS-CoV-2 is more than a hundred-fold lower than three prior viruses that, within the last 20 years, also threatened to become global pandemics. All three of these viruses – Ebola, MERS, and SARS-CoV-1 – were contained within the global regions where they appeared – Africa, the Middle East, and Southeast Asia. Death rates for each of these were in the double digits and as high as 50% for Ebola. In each case, aggressive public health measures prevented global spread of these viruses and proved effective in eradicating them all. In contrast, attempts to contain SARS-CoV-2 were unsuccessful. Like the historical pandemics of polio, smallpox, and the bubonic plague, once SARS-CoV-2 spread beyond a critical mass, the opportunity for containment was lost forever and eradication attempts will likely go on for many years.

**Final thoughts.** This report marks my 17<sup>th</sup> year of service as your town health officer. During this time I've come to treasure our town and those who live here. Recent events remind me that we are all vulnerable, as mortal individuals and as a community. Changes in our economy, health, and environment can rapidly bring about changes in how we think and feel about our lives. Yet what keeps us going, and what I most treasure about our rural fishing village, is our default inclination to help each other out whenever the need arises, in any season, at any time. Our name, Friendship, proclaims what's most important to us all.

UPCOMING 2023 ANNUAL FREE TOWN HEALTH CLINIC. Mark your calendars now for Saturday, September 16, 2023 at the town hall from 08:00 am until 12:30 pm.

Free town health clinic. We held another successful and well-attended free town health clinic in September. This year, we were able to process the cholesterol testing much more efficiently thanks to the addition of new testing equipment. We also provided a broader array of vaccinations, including Pneumovax (for bacterial pneumonia), and boosters for tetanus and whooping cough. Many thanks to the six volunteers – Kim Newby, Carol Samuels, Jackie Eschle, Carrie Gordon, Cecily Havener, and Donna Sutphin – who helped me administer flu vaccines and provide free blood testing to town residents.





**Narcan overdose kits.** Despite enormous efforts at state and federal efforts for the past decade, Maine drug overdoses from illicit opioids continued to increase in 2022. Most of the overdoses were due to fentanyl, a synthetic relative of heroin that has enormous addiction potential. Due to great variations in the potency of street fentanyl, small volumes can kill even healthy users very quickly. Unfortunately, even Friendship has suffered many overdose deaths over the past few years.

In 2022, some 9,000 lives were saved through the use of naloxone (Narcan), a direct antidote for opioid overdoses. Opioid overdose victims die because they stop breathing, so to save someone's life, Narcan must be used very quickly. Once breathing stops, an overdose victim's brain dies in about 4 minutes.

To this end, with the help of the Friendship Ambulance Auxiliary Foundation and Waldoboro EMS, we've placed two Narcan overdose kits in the AED cabinets at Wallace's Market and the town wharf. As is the case of the AEDs, these Narcan kits are available for use by anyone in an emergency. For those with friends or relatives who are addicted, additional kits are available to anyone through the following website: https://getmainenaloxone.org.

**Ambulance service.** Due to tremendous difficulty in maintaining trained paramedics to respond to emergency 911 calls 24 hours a day, the price for our ambulance coverage greatly increased in 2022. Since the pandemic started, the sole ambulance service providing coverage for Friendship, Waldoboro, Jefferson, and Warren had become stretched beyond its limit. Our

### Overview of projects

- Set up public automated external defibrillators (AEDs)
- Sponsor town first aid courses
- Conduct annual free health clinic (vaccines: flu, Tdap, pneumonia; cholesterol, diabetes, blood pressure checks)
- Coordinate purchase of equipment for ambulance service
- Write public health-oriented annual town report

Contact for James: wb7qni@gmail.com