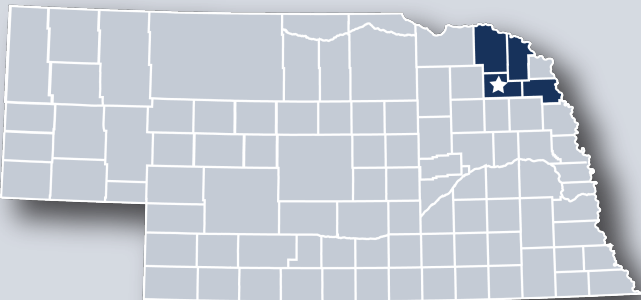
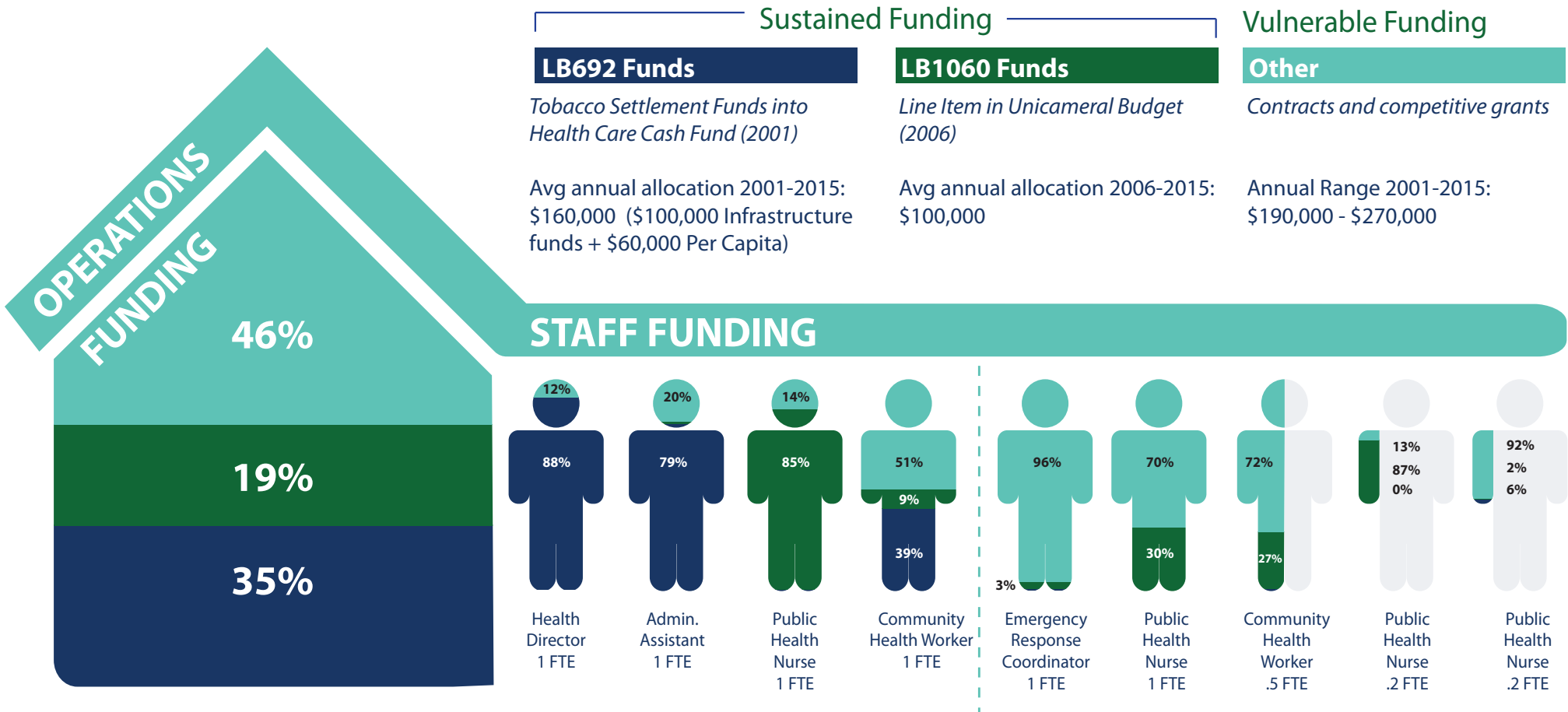


Public Health System Vulnerabilities

Northeast Nebraska Public Health Department (NNPHD)



10 Essential Public Health Services

1. Monitor health status to identify and solve community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships and action to identify and solve health problems.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure safety.
7. Link people to needed personal health services and assure the provision of health care when unavailable.
8. Assure competent public and personal health care workforce.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
10. Research for new insights and innovative solutions to health problems.

In the past 2 years, **Northeast Nebraska Public Health Department** has experienced more public health emergencies than most LHDs experience in a lifetime. These unpredictable events exposed fragility in NNPHD's (and other LHDs') capacity to respond to emergencies. Emergency Readiness requires sustainably-funded LHD staff.

H5N1 Avian Flu

On May 12, 2015, the avian influenza that had decimated producers in neighboring states was found in a large poultry facility in Northeast Nebraska. Millions of birds died of the virus or were euthanized to contain the outbreak.

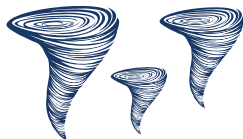


What We Did

Between May 12 – July 3, NNPHD staff implemented a monitoring system with poultry workers who were exposed to the dead and dying chickens. NNPHD interviewed 104 workers. 40 workers completed daily monitoring for the next 7 weeks to confirm proper use of personal protective equipment (PPE) and absence of flu-like symptoms. As a precaution, NNPHD nurses set up a Tamiflu prescription program for all workers and provided testing for those having symptoms.

3 Tornadoes in 8 Months

October 4, 2013: An EF4 tornado hit the town of Wayne.
June 16-17, 2014: Several EF4 tornadoes hit Cedar, Cumming, Dixon, Stanton, Thurston, and Wayne Counties. There were 20 injuries and 2 fatalities.



What We Did

NNPHD established an internal Incident Command Operations working with other response agencies. Specifically, the NNPHD identified and pressed partners to help address unmet needs for food, water, first aid, tetanus shots, and behavioral health first aid. NNPHD made certain that the Red Cross was aware of the need and established shelter for 27 people who had previously been homeless due to the tornado and were unable to access the shelter in Wisner.

Tuberculosis

An outbreak connected to a rare strain of tuberculosis (TB) occurred in NNPHD between April – October 2014.



What We Did

Over 5 months, NNPHD managed the infected patient's care. This included temporary relocation of the patient to prevent direct and secondary exposure of dozens of adults and school-aged children. NNPHD provided transportation to and from the medical appointments and follow-up case management. To ensure the virus was isolated and did not spread, NNPHD organized testing of 165 close contacts. In all, 35 NNPHD constituents tested positive and were referred for medical treatment.

Key staff
During the first 21 days of the outbreak, the avian flu interviewing and monitoring protocol required NNPHD staff be on duty 7 days a week. All staff were involved in the response. 3 of the 4 staff who were deployed nearly full-time in direct response to this outbreak are funded grant-to-grant.

An icon representing four staff members. It consists of four stylized human figures. Three are teal and one is dark blue, standing side-by-side.

Key Staff
All staff were involved in response to the tornadoes. 3 of the 4 staff who were deployed nearly full-time in direct response to the tornadoes are funded grant-to-grant.

An icon representing four staff members. It consists of four stylized human figures. Three are teal and one is dark blue, standing side-by-side.

Key Staff
With intensive case management, this outbreak required over 12 months to contain. This work required nearly 100% of one NNPHD nurse's time over 7 months and diverted her from nearly all her regular activities. Other key staff in this response are funded grant-to-grant.

An icon representing four staff members. It consists of four stylized human figures. Three are teal and one is dark blue, standing side-by-side.

How We Helped
Similar viruses have infected humans in other countries, with substantial health and economic cost. NNPHD monitored the situation and watched for potential human cases of avian flu. NNPHD was ready to prevent a wider outbreak.

How We Helped
NNPHD provided critical resources during the emergency. NNPHD maintains an ongoing coordinating role to protect the public's health as communities rebuild.

How We Helped
NNPHD targeted their response so they were able to test, monitor, and treat the people truly at risk while avoiding undue concern among the wider community. The CDC continues to provide investigation guidance and is studying the complexities of this outbreak.