What was the issue?

Life expectancy is an easily-understood and all-encompassing measure of the overall health of a population. However, life expectancy can vary widely even within cities and counties, underscoring the need for estimates that represent small geographic areas. Understanding how life expectancy estimates vary from place to place can help public health officials identify areas of most concern and work to address these disparities. The need for life expectancy estimates at the sub-county level in New Hampshire was accentuated by local public health partners requesting this data to implement targeted outreach programs.

What did the NH Tracking Program do?

The Environmental Public Health Tracking (EPHT) Program collected death records of New Hampshire residents, including those that occurred out-of-state. The records were cleaned and assigned to their census tract as part of the calculation. Some records could not be definitively assigned to a census tract due to incomplete information in the address; these records were assigned proportionally to census tracts based on available address information.

Additionally, EPHT obtained population estimates at the census tract level from the 2010 U.S. Census. Using the death records and the population estimates, life expectancy was calculated for each census tract and county in New Hampshire. These estimates are displayed on the NH Health WISDOM data portal.

Public health officials throughout the state can view maps of life expectancy data by census tract or by county in an easy-to-use interface. This provides an intuitive way to look at the overall health of people in small geographic areas in New Hampshire and compare different areas, increasing awareness of potential health disparities and areas that might benefit from allocation of additional resources.

How did this improve public health?

Public health officials in Manchester and Nashua were the first to incorporate census tract level life expectancy data into their community health assessments to aid in planning and prioritizing where to target health improvement efforts. Manchester health officials are integrating life expectancy estimates into neighborhood-level dashboards that will provide an overall picture of community health. In nearby Nashua, health officials will be studying the influence of opioid-related deaths on life expectancy to better understand and target interventions.