

Running the Numbers

*A Periodic Feature to Inform North Carolina Health Care Professionals
About Current Topics in Health Statistics*

Healthy North Carolina 2020: Are We Making Progress Toward Our Objectives?

Healthy North Carolina 2020, the state's health improvement plan, consists of 40 health-related objectives that the state is working to achieve during the current decade. In 2010 a group of subject matter experts established an aspirational yet achievable target for each objective [1]. Since the Healthy North Carolina 2020 objectives and targets were published early in 2011, quarterly updates focusing on specific sets of objectives [2] and annual data reports have been published. This article consolidates information from several recent annual data reports [3-5] in order to show trends in the data.

One challenging aspect of tracking health measures over time is that data collection sources and methodologies may change. For example, the Behavioral Risk Factor Surveillance System, which is used to measure progress on several Healthy North Carolina 2020 objectives, changed its methodology in 2011 by adding cell phone numbers and by adopting an improved weighting method. Therefore the results of the surveys conducted in 2011 or more recent years are not comparable with results from previous years [6]. In cases where the data source or data collection methodology has changed, objectives are being reviewed to determine whether updates to the targets are needed. Those potential changes have not yet been finalized, however, so this article considers only the 25 objectives for which consistent annual data are available.

To prepare this article, I reviewed each objective and determined how data for the past 3 years compared with the baseline value (see Table 1). If the most recent data for an objective reached or surpassed the target, then the objective is given the status of *target met*. If the values for all 3 years represent improvement (moving toward the target value), the status of the objective is *moving in the right direction*. If the values for all 3 years represent

worse performance (moving further from the target value), the status of the objective is *moving in the wrong direction*. The remaining objectives are not labeled with a status; for these objectives, at least 1 value has fallen on each side of the baseline value in the past 3 years.

In just 3 years, North Carolina has already met the targets for 4 objectives: the homicide rate, the rate of new HIV infection diagnoses, the percentage of children aged 1-5 years enrolled in Medicaid who received any dental service during the previous 12 months, and the percentage of the population being served by community water systems with no maximum contaminant level violations. Nine objectives are moving in the right direction: the infant mortality rate, the percentage of traffic crashes that are alcohol-related, the percentage of air monitor sites meeting the current ozone standard of 0.075 ppm, the mortality rate from work-related injuries, the 4-year high school graduation rate, the cardiovascular disease mortality rate, the colorectal cancer mortality rate, average life expectancy, and the percentage of nonelderly uninsured individuals. Six objectives are moving in the wrong direction: the unintentional falls mortality rate, the percentage of pregnancies that are unintended, the percentage of positive results among individuals aged 15-24 tested for chlamydia, the percentage of individuals aged 12 years and older reporting any illicit drug use in the past 30 days, the rate of mental health-related visits to emergency departments, and the percentage of people spending

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TABLE 1.
Trends in Progress Toward Selected Healthy North Carolina 2020 Objectives

Focus areas and objectives	Values (year)					Status of objective
	Target	Baseline	Year 1	Year 2	Year 3	
Injury and violence						
Reduce the unintentional poisoning mortality rate (per 100,000 population)	9.9	11.0 (2008)	9.9 (2010)	11.8 (2011)	11.7 (2012)	
Reduce the unintentional falls mortality rate (per 100,000 population)	5.3	8.1 (2008)	9.0 (2010)	8.9 (2011)	9.6 (2012)	Moving in the wrong direction
Reduce the homicide rate (per 100,000 population)	6.7	7.5 (2008)	5.7 (2010)	5.5 (2011)	6.0 (2012)	Target met
Maternal and infant health						
Reduce the infant mortality racial disparity between whites and African Americans	1.92 ^a	2.45 (2008)	2.40 (2010)	2.35 (2011)	2.50 (2012)	
Reduce the infant mortality rate (per 1,000 live births)	6.3	8.2 (2008)	7.0 (2010)	7.2 (2011)	7.4 (2012)	Moving in the right direction
Sexually transmitted disease and unintended pregnancy						
Decrease the percentage of pregnancies that are unintended	30.9%	39.8% (2007)	44.6% (2009)	45.2% (2010)	42.7% (2011)	Moving in the wrong direction
Reduce the percentage of positive results among individuals aged 15–24 tested for chlamydia	8.7%	9.7% (2009)	10.1% (2010)	10.9% (2011)	10.8% (2012)	Moving in the wrong direction
Reduce the rate of new HIV infection diagnoses (per 100,000 population)	22.2	24.7 (2008)	19.7 (2009)	17.8 (2010)	17.3 (2011)	Target met
Substance abuse						
Reduce the percentage of traffic crashes that are alcohol-related	4.7%	5.7% (2008)	5.5% (2009)	5.1% (2011)	5.3% (2012)	Moving in the right direction
Reduce the percentage of individuals aged 12 years and older reporting any illicit drug use in the past 30 days	6.6%	7.8% (2007–2008)	8.2% (2008–2009)	8.9% (2010–2011)	7.9% (2011–2012)	Moving in the wrong direction
Mental health						
Reduce the suicide rate (per 100,000 population)	8.3	12.4 (2008)	11.9 (2010)	12.1 (2011)	12.9 (2012)	
Reduce the rate of mental health-related visits to emergency departments (per 10,000 population)	82.8	92.0 (2008)	99.0 (2010)	106.5 (2011)	104.5 (2012)	Moving in the wrong direction
Oral health						
Increase the percentage of children aged 1–5 years enrolled in Medicaid who received any dental service during the previous 12 months	56.4%	46.9% (2008)	51.7% (2010)	53.4% (2011)	57.3% (2012)	Target met
Environmental health						
Increase the percentage of air monitor sites meeting the current ozone standard of 0.075 ppm	100%	62.5% (2007–2009)	84.6% (2008–2010)	87.2% (2009–2011)	80.5% (2010–2012)	Moving in the right direction
Increase the percentage of the population being served by community water systems (CWS) with no maximum contaminant level violations (among persons on CWS)	95.0%	92.2% (2009)	96.5% (2010)	93.8% (2011)	97.4% (2012)	Target met
Reduce the mortality rate from work-related injuries (per 100,000 equivalent full-time workers)	3.5	3.9 (2008)	3.3 (2009)	3.5 (2010)	3.7 (2011)	Moving in the right direction
Infectious disease and foodborne illness						
Increase the percentage of children aged 19–35 months who receive the recommended vaccines	91.3%	77.3% (2007)	81.6% (2010)	75.3% (2011)	76.2% (2012)	
Reduce the pneumonia and influenza mortality rate (per 100,000 population)	13.5	19.5 (2008)	17.5 (2010)	16.3 (2011)	19.6 (2012)	
Social determinants of health						
Decrease the percentage of individuals living in poverty	12.5%	16.9% (2009)	17.4% (2010)	15.4% (2011)	17.2% (2012)	
Increase the 4-year high school graduation rate	94.6%	71.8% (2008–2009)	77.9% (2010–2011)	80.4% (2011–2012)	82.5% (2012–2013)	Moving in the right direction
Decrease the percentage of people spending more than 30% of their income on rental housing	36.1%	41.8% (2008)	45.6% (2009)	47.9% (2011)	44.8% (2012)	Moving in the wrong direction
Chronic disease						
Reduce the cardiovascular disease mortality rate (per 100,000 population)	161.5	256.6 (2008)	235.8 (2010)	225.0 (2011)	237.2 (2012)	Moving in the right direction
Reduce the colorectal cancer mortality rate (per 100,000 population)	10.1	15.7 (2008)	14.7 (2010)	14.2 (2011)	15.1 (2012)	Moving in the right direction
Cross-cutting (objectives that span multiple focus areas)						
Increase average life expectancy (years)	79.5	77.5 (2008)	78.0 (2010)	78.2 (2011)	78.2 (2012)	Moving in the right direction
Reduce the percentage of nonelderly uninsured individuals (aged less than 65 years)	8.0%	20.4% (2009)	19.3% (2010)	18.8% (2011)	18.7% (2012)	Moving in the right direction

Source: North Carolina Division of Public Health [3–5].

^aAt baseline, the infant mortality rate for African Americans was 2.45 times the rate for whites; the target is for it to be 1.92 times the rate for whites.

more than 30% of their income on rental housing.

Progress toward achieving the Healthy North Carolina 2020 objectives will continue to be updated annually so that we can acknowledge improvements in health and identify the areas in which additional work may be needed. **NCMJ**

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