Healthy Iowans: Iowa’s Health Improvement Plan 2012-2016
FINAL REPORT
Did We Make Progress?

Bureau of Planning Services
Iowa Department of Public Health

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Governor: Kim Reynolds
Lieutenant Governor: Adam Gregg
IDPH Director: Gerd W. Clabaugh

Report Contact Information:
Jonn Durbin, MA, CPM
jonathan.durbin@idph.iowa.gov
515-281-8936

Louise Lex, PhD, MS
louise.lex@idph.iowa.gov
515-281-4348
Table of Contents

Executive Summary .......................................................................................................................... 6
Introduction ...................................................................................................................................... 7
What is in this Report ......................................................................................................................... 7
Results .............................................................................................................................................. 8
    Keeping Iowa’s Young Children Healthy ...................................................................................... 8
    Maintaining Adolescents’ Health .................................................................................................... 8
    Lowering the Rate of Chronic Disease ......................................................................................... 9
    Expanding Access to Quality Health Services and Support .......................................................... 9
    Environmental Health .................................................................................................................. 9
    Preparing and Responding to Emergencies ................................................................................. 9
    A Growing Problem of Obesity ..................................................................................................... 9
    Preventing Injury and Violence ..................................................................................................... 10
Progress Measures by Status ........................................................................................................... 11
    Reaching the Targets ..................................................................................................................... 11
    Moving Toward the Targets ........................................................................................................... 12
    Not Moving .................................................................................................................................. 12
    Moving Away from the Target ....................................................................................................... 13
Measures of Progress Details .......................................................................................................... 14
    1-1 An increase in the proportion of people with health insurance ................................................. 14
    1-2 An increase in the number of direct care professionals in the state ........................................ 14
    1-3 An increase in the proportion of people who have one person as a health provider .................. 15
    1-4 An increase in the proportion of children whose parents report adequate health insurance ...... 15
    1-5 An increase in the number of counties that assess implementation of the Emergency Medical (EMS) System Standards ................................................................. 16
    1-6 A continuation of the same level of non-medical transportation services to medical appointments for the anticipated increase in Medicaid members ................................................. 16
    2-1 An increase in the annual influenza coverage levels for all Iowa hospital employees ................ 17
    2-2 An increase in the immunization coverage for all universally recommended vaccines for the following populations: .................................................................................................................. 18
        Children 19-35 months of age ..................................................................................................... 18
        Adolescents: Tdap (tetanus/diphtheria/pertussis-containing vaccine) ......................................... 19
        Adolescents: MCV (meningococcal conjugate vaccine) ............................................................... 19
        Adolescents: female HPV (human papillomavirus vaccine) ....................................................... 20
        Adolescents: male HPV (human papillomavirus vaccine) .......................................................... 20
        All adults: influenza immunization in the last 12 months ............................................................ 21
        All adults: ever received a pneumonia vaccination ........................................................................ 21
<table>
<thead>
<tr>
<th>Objective</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults age 65 and over: influenza immunization in the last 12 months</td>
<td>22</td>
</tr>
<tr>
<td>Adults age 65 and over: ever received a pneumonia vaccination</td>
<td>22</td>
</tr>
<tr>
<td>3-1 A reduction in current youth alcohol use (grades 6, 8, and 11)</td>
<td>23</td>
</tr>
<tr>
<td>3-2 A reduction in adult binge drinking</td>
<td>23</td>
</tr>
<tr>
<td>3-3 A reduction in over-the-counter drug abuse among 11th grade students</td>
<td>24</td>
</tr>
<tr>
<td>3-4 A reduction in prescription drug abuse among 11th grade students</td>
<td>24</td>
</tr>
<tr>
<td>3-5 A reduction in current marijuana use among 11th grade students</td>
<td>25</td>
</tr>
<tr>
<td>3-6 A reduction in current cigarette smoking among 11th grade students</td>
<td>25</td>
</tr>
<tr>
<td>3-7 A reduction in current smoking among adults</td>
<td>26</td>
</tr>
<tr>
<td>3-8 An increase in the proportion of homes that have rules against smoking</td>
<td>26</td>
</tr>
<tr>
<td>4-1 A decrease in the number of persons with doctor-diagnosed arthritis who experience limitations in activity due to arthritis and other joint symptoms</td>
<td>27</td>
</tr>
<tr>
<td>4-2 A decrease in the age-adjusted rate of all cancer deaths</td>
<td>27</td>
</tr>
<tr>
<td>4-3 A decrease in the age-adjusted incidence of all cancers</td>
<td>28</td>
</tr>
<tr>
<td>4-4 An increase in cancer screenings for breast, colorectal, &amp; cervical cancer in the following populations:</td>
<td>28</td>
</tr>
<tr>
<td>4-5 A decrease in the percentage of persons diagnosed with AIDS within three months of their HIV diagnosis</td>
<td>30</td>
</tr>
<tr>
<td>4-6 An increase in the proportion of persons with diabetes who report receiving a dilated eye examination in the last year</td>
<td>30</td>
</tr>
<tr>
<td>4-7 An increase in the proportion of persons with high blood pressure who are taking their medication.</td>
<td>31</td>
</tr>
<tr>
<td>4-8 A decrease in coronary heart disease deaths</td>
<td>31</td>
</tr>
<tr>
<td>4-9 A decrease in deaths attributed to stroke</td>
<td>32</td>
</tr>
<tr>
<td>4-10 An increase in the number of Medicare beneficiaries who use their annual wellness visit, which includes an assessment of cognitive function</td>
<td>32</td>
</tr>
<tr>
<td>4-11 A reduction in the rate of emergency department visits for children with asthma, ages 0 to 14</td>
<td>33</td>
</tr>
<tr>
<td>5-1 An increase in the number of lives saved from fires by smoke detectors</td>
<td>33</td>
</tr>
<tr>
<td>5-2 A decrease in the number of children who have had at least one confirmed elevated blood-lead test before age 6</td>
<td>34</td>
</tr>
<tr>
<td>5-3 An increase in the number of private drinking water wells tested for arsenic</td>
<td>34</td>
</tr>
<tr>
<td>6-1 An increase in the proportion of public high school students who graduate in 4 years or less</td>
<td>35</td>
</tr>
<tr>
<td>6-2 A reduction in the African-American infant mortality rate</td>
<td>35</td>
</tr>
<tr>
<td>6-3 An increase in the percentage of persons who eat 5 or more servings of fruits &amp; vegetables each day</td>
<td>36</td>
</tr>
<tr>
<td>6-4 An increase in the proportion of Iowa infants who are breastfed at birth</td>
<td>36</td>
</tr>
<tr>
<td>6-5 An increase in the proportion of adults who get the recommended level of aerobic physical activity</td>
<td>37</td>
</tr>
<tr>
<td>6-6 An increase in the proportion of low-income children, adolescents, and young adults aged 1 to 20 on Medicaid who receive any preventive dental service</td>
<td>37</td>
</tr>
</tbody>
</table>
6-7 An increase in the number of pre-kindergarten children who receive a comprehensive eye vision screening. ................................................................. 38
6-8 An increase in the proportion of births that are intended. ................................................................. 38
6-9 A reduction in the proportion of adults who are obese. ................................................................. 39
6-10 Reduce overweight/obesity in children ages 2 to 5 who are enrolled in the WIC program. .................. 39
6-11 A decrease in the proportion of participants in the Women, Infants, and Children (WIC) program who have low or very low food security. ................................................................. 40
6-12 A reduction in the rate of reported cases of chlamydial infection. ................................................. 40
7-1 A decrease in the hospitalization rate related to falls for those who are ages 65 and over. ............... 41
7-2 A reduction in deaths from work-related injuries. .............................................................................. 41
7-3 An increase in seatbelt use to reduce injuries and deaths from motor vehicle crashes. .................... 42
7-4 A 5% reduction in the rate of all intentional and unintentional fatal injuries. ........................................ 42
7-5 A 5% reduction in the percent of Iowa high school students who report forced sexual experience. .... 43
8-1 A reduction in the percent of 11th graders who seriously consider attempting suicide. ....................... 43
8-2 An increase in the proportion of children screened for being at risk for developmental, behavioral, and social delays using a parent-reported, standardized screening tool. ........................................ 44
9-1 An increase in the number of public health emergency volunteers. ................................................. 44
9-2 At least one general shelter that is fully accessible to persons with disabilities in 25 counties. ............ 45

List of Tables

Table 1. Number of Health Improvement Objectives by Achievement of Their Target ................................. 8
Executive Summary

This report, *Healthy Iowans: Iowa’s Health Improvement Plan 2012-2016 Final Report: Did We Make Progress?*, documents the progress made in addressing the health issues identified in *Healthy Iowans: Iowa’s Health Improvement Plan 2012-2016* (Healthy Iowans). Healthy Iowans sets the agenda for solving priority health issues facing Iowans so they can live longer, healthier, more productive lives and enjoy a rich quality of life. Each five-year plan is an outcome of a statewide needs assessment involving Iowa’s 99 counties as well as public and private partners that identify Iowa’s health issues and are committed to taking action. This collective effort, coordinated by the Iowa Department of Public Health, was designed not only to improve the health of Iowans, but also to close the gaps in health equity for Iowa’s at-risk groups.

To answer the question, “Did we make progress?” the plan’s 61 objectives (measures of health improvement) were evaluated on whether or not they achieved the target or goal, moved toward the target, did not move at all, or moved away from the target. The resulting scorecard shows that 67% of objectives were achieved or moved toward the target and that 33% moved away from the target or did not change at all. Measures of progress details include each objective with the target, baseline, most recent data, and data sources along with a chart depicting trends, the target, and, if available, an Iowa comparison with the performance of the best and worst states, as well as the national status.

When objectives were taken together, an analysis also showed the degrees of progress in child health, adolescent health, chronic disease, quality health services and support, environmental health, emergency preparedness and response, and obesity. Following are highlights of the analysis:

For the most part, prevention efforts kept Iowa children healthy through 2016. Substantial progress was made in improving healthy behaviors of Iowa’s young people. Notable improvements occurred in lower rates of death from coronary heart disease, stroke and cancer, in decreased late HIV diagnoses, and in early identification of dementia. The most impactful change in expanding quality health services and support was the increased numbers of Iowans with health insurance. In environmental health, strides were made in reducing lead poisoning among children and in increasing the number of private drinking water wells tested for arsenic. To prepare Iowans for responding to emergencies, increased access to general shelters for persons with disabilities was achieved, and there was a sizable increase in the number of public health emergency volunteers. Major steps in improving health were offset, to some extent, by lack of progress in addressing other segments of critical health issues. A prime example is obesity, which was significantly higher in 2016 than the 2011 baseline.

The results described in this report are cause to both celebrate the successes led by Healthy Iowans’ many partners and an impetus to continuing efforts to protect and improve the health of Iowans.
Introduction

*Healthy Iowans 2012-2016: Iowa’s Health Improvement Plan* is a plan of action that resulted from an assessment of Iowa’s health needs. About 70 partner organizations/advisory committees from the public and private sector along with 120 staff members from these groups worked on the improvement plan over five years. Contributors agreed to take action, submitted yearly progress reports and made revisions in the plan to maintain its currency. The [Healthy Iowans website](http://idph.iowa.gov/healthy-iowans) linked to the progress reports and a revised plan along with updated resources. A Healthy Iowans listserv also became a key information conduit.

The improvement plan focused on 39 critical health needs, identified through a number of avenues. At the local level, counties assessed their needs and identified priorities for action. These priorities in the Community Health Needs Assessment and Health Improvement Planning (CHNA & HIP) process became the basic building blocks for identifying Iowa’s critical health needs. Organizations representing more than 500 members of advisory committees and task forces, non-profit associations, universities, and professional associations also played a key role when they submitted critical health needs recommendations. An analysis of state data and national resources as well as equity issues helped determine where Iowa needed to place its improvement efforts (see *[Healthy Iowans: Iowa’s Health Improvement Plan 2012-2016](http://idph.iowa.gov/healthy-iowans)*, Appendix A, p. 48 for a list of the critical health needs and Appendix B, pp. 49-52 for a more complete discussion of the methodology used to identify the 39 critical health needs).

The 39 identified critical health needs were grouped into nine topic areas that were not mutually exclusive. In turn, each topic area was comprised of these two sections:

1. A measure of progress section with objectives to be achieved by a designated year. To track progress, the measures had a baseline and date, a data source, and a target.
2. A section on what is being done to achieve the objectives along with the responsible organization committed to taking the action.

Beginning in 2013, partners submitted annual progress reports for the action they committed to taking to achieve the objectives and move the bar on the measures of progress. The results of these progress reports can be found on [http://idph.iowa.gov/healthy-iowans/plan](http://idph.iowa.gov/healthy-iowans/plan) under the *Annual Progress Report* heading. In addition, these reports included annual updates to the measures of progress that provided a snapshot of the annual impact of all of the various actions on health results for Iowans.

What is in this Report

This report provides an in-depth review of the 61 measures of progress included in the 2015 revision of *Healthy Iowans: Iowa’s Health Improvement Plan 2012-2016*. This review includes

1. A scorecard of overall progress related to the targets for the 61 measures;
2. Summaries of progress by topic, such as healthy children, chronic disease, and injury and violence;
3. Measure by measure details including baseline, target, data source and a trend chart (including national and other state comparisons where available).

Because most data sources have a lag of one year or more, this report reflects a final evaluation of progress made through 2016. A similar report for the current Healthy Iowans: 2017-2021 plan will be published in 2022 or 2023.
Results

Objectives in the measures of progress section of the plan were used as a yardstick for determining where improvements were made and the overall results of the plan. Sixty-seven percent of the 61 objectives were either achieved (27) or moved toward the target\(^1\) (14). The rest of the objectives did not move at all\(^2\) (12) or moved away from the target\(^3\) (8) (See Table 1).

Table 1. Number of Health Improvement Objectives by Achievement of Their Target

<table>
<thead>
<tr>
<th>Target Achieved</th>
<th>Moved Toward the Target</th>
<th>Not Moving at All</th>
<th>Moving Away from the Target</th>
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<td>27 (44%)</td>
<td>14 (23%)</td>
<td>12 (20%)</td>
<td>8 (13%)</td>
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Keeping Iowa’s Young Children Healthy

Prevention efforts have kept Iowa children healthy as evidenced by the following results: nearly 83% of infants were breastfed at birth, a key factor in children’s future growth (Progress Measure 6-4); nearly 51% of low-income children, adolescents, and young adults aged 1 to 20 on Medicaid received preventive dental service in 2016 (6-6). Because 47,117 pre-kindergarten children received vision screening, preventing vision impairment was addressed early (6-7). The proportion of births that were intended increased so that children could have a healthy start (6-8). In addition, a higher proportion of children who were at risk for developmental, behavioral and social delay were screened (8-2). The reduced number of children exposed to lead was confirmed by data showing a decrease in the number of children who had at least one confirmed elevated blood-lead test before age 6 (5-2). Another important milestone still to be reached is a 90% infant immunization rate. Although the percentage of children, ages 19-35 months, receiving all universally recommended vaccines increased from 2009 to 2016, the percentage is still well below 90% (2-2).

Maintaining Adolescents’ Health

There were some major improvements in the health behaviors of Iowa’s young people. Based on the Iowa Youth Survey, alcohol use in grades 6, 8, and 11 was reduced (Progress Measure 3-1). The data showed that, among 11th grade students, over-the-counter drug abuse (3-3), prescription drug abuse (3-4), current marijuana use (3-5), and cigarette smoking (3-6) declined. At the same time, among this age group, there were a higher percentage of them seriously considered attempting suicide (17%) in 2016 than in 2010 (14%) (8-1). Other significant areas of improvement for adolescent health included adolescent immunization in tetanus/diphtheria/pertussis-containing vaccine or Tdap (61% coverage in 2009 and 89% in 2016), and coverage with meningococcal conjugate vaccine or MCV (46% coverage in 2009 and 75% in 2016) (2-2). Improvement also has occurred in both females and males covered by human papillomavirus vaccine or HPV. In 2009, 33% of girls were covered compared with 41% in 2016; for boys, 14% were covered in 2013, while in 2016, 37% were covered (2-2). Because education has such a profound impact on health and therefore is a major social determinant, it is highly significant that 91% of public high schools students graduated in four years or less (6-1).

\(^{1}\) An indicator was considered as moving toward a target if it changed in the direction of the target, when compared to the baseline, by more than 5%.

\(^{2}\) An indicator was considered not moving if it did not change by more than 5% when compared to the baseline.

\(^{3}\) An indicator was considered as moving away from a target if it changed in the opposite direction of the target, when compared to the baseline, by more than 5%.
Lowering the Rate of Chronic Disease

Positive changes occurring in lower rates of coronary heart disease, stroke, cancer and late HIV diagnosis indicated that prevention efforts might be having some effect (Progress Measures 4-2, 4-3, 4-5, 4-8, 4-9). There has been a decrease in the percentage of persons diagnosed with AIDS within three months of their HIV diagnosis (4-5). Colorectal cancer screening rates for women and men ages 50 and older reached just beyond the 2015 target (4-4). A higher proportion of persons with high blood pressure reported taking their medicine (4-7). This may be contributing to the reduction in coronary heart disease deaths as well as the decrease in deaths attributed to stroke. And, although diseases of dementia cannot be cured, slowing their progression with an early diagnosis now is possible. More Medicare beneficiaries used their annual wellness visit, which includes an assessment of cognitive function (4-10).

Expanding Access to Quality Health Services and Support

An area where there was evidence of some progress included access to health services and support, notably an increased number of Iowans with health insurance. In 2016, nearly 96% had health insurance, increasing from 88% in 2009-2010 (1-1). Despite lacking 2016 data, Iowa Medicaid Non-Emergency Transportation statistics showed maintenance of transportation services despite the increase in Medicaid members (1-6). And, compared with 70 counties in 2013, 81 counties completed an assessment in 2015 of Emergency Medical Services System Standards to improve the quality of the service system (1-5). Unfortunately, the number of direct care professionals could not be reported with any degree of timeliness or accuracy over the 5-year period. In addition, there was no significant change from the baseline in the proportion of Iowans who had one person as a health provider (1-3); or in the proportion of children whose parents reported adequate health insurance (1-4).

Environmental Health

Lead poisoning has major effects on the health of children; it is especially harmful to the developing brains and nervous systems of children under the age of six years. For this reason, an important milestone is the significant decrease in the number of children who had at least one confirmed elevated blood-lead test before they were six years old (5-2). Another achievement is the substantial number of private drinking water wells tested for arsenic (5-3). People who drink water that contains arsenic in excess of the Environmental Protection Agency’s standard over many years can experience adverse health effects. However, once detected, arsenic can be removed from drinking water in private wells.

Preparing and Responding to Emergencies

Both measures of progress in the topic area of preparedness and response were achieved. The number of public health emergency volunteers ready to respond to emergencies increased from the baseline of 1,210 to 2,043 volunteers in 2016 (9-1). This figure is substantially higher than the target of 1,515 volunteers. Another effort to provide at least one general shelter that is fully accessible to persons with disabilities indicates improved preparation for sheltering persons with disabilities. In 2011, not one county had provisions for fully accessible shelters. By 2015, 58 counties had provided at least one fully accessible shelter for this group of Iowans (9-2).

A Growing Problem of Obesity

A reduction in adult obesity was not achieved, but instead, the rate has inched upward from the baseline of 29% in 2011 to 32% in 2016 (6-9). Related measures of progress are the following:
An increase in the percentage of persons who eat five or more servings of fruits and vegetables each day: No Change from the Baseline

An increase in the proportion of adults who get the recommended levels of aerobic physical activity: Moved Toward the Target

A decrease in the proportion of participants in the WIC program who have low or very low food security: Achieved the Target

An increase in the proportion of Iowa infants who are breastfed at birth: Achieved the Target

Preventing Injury and Violence

Little progress was made in reducing injury and violence. A reduction in deaths from work-related injuries per 100,000 workers was achieved (7-2). However, hospitalization rates related to falls increased for those ages 65 and over (7-1), and the rate of all intentional and unintentional fatal injuries increased substantially (7-4). The rate of seat belt use to reduce injuries and deaths from motor vehicle crashes remained the same (7-3).
Progress Measures by Status

Reached the Targets

Targets were achieved for the following measures:

- **1-6**  A continuation of the same level of non-medical transportation services to medical appointments for the anticipated increase in Medicaid members.
- **3-1**  A reduction in current youth alcohol use (grades 6, 8 and 11).
- **3-3**  A reduction in over-the-counter drug abuse among 11th grade students.
- **3-4**  A reduction in prescription drug abuse among 11th grade students.
- **3-5**  A reduction in current marijuana use among 11th grade students.
- **3-6**  A reduction in current cigarette smoking among 11th grade students.
- **3-7**  A reduction in current smoking among adults.
- **3-8**  An increase in the proportion of homes that have rules against smoking.
- **4-2**  A decrease in the age-adjusted rate of all cancer deaths.
- **4-4**  An increase in cancer screenings for breast, colorectal, and cervical cancer for the following populations: Colorectal cancer screenings for men and women aged 50 and older.
- **4-5**  A decrease in the percentage of persons diagnosed with AIDS within three months of their HIV diagnosis.
- **4-7**  An increase in the proportion of persons with high blood pressure who are taking their medication.
- **4-8**  A decrease in coronary heart disease deaths.
- **4-9**  A decrease in deaths attributed to stroke.
- **4-10**  An increase in the number of Medicare beneficiaries who use their annual wellness visit, which includes an assessment of cognitive function.
- **4-11**  A reduction in the rate of emergency department visits for children with asthma, ages 0 to 14.
- **5-1**  An increase in the number of lives saved from fires by smoke detectors.
- **5-2**  A decrease in the number of children who have had at least one confirmed elevated blood-lead test before age 6.
- **5-3**  An increase in the number of private drinking water wells tested for arsenic.
- **6-1**  An increase in the proportion of public high school students who graduate in 4 years or less.
- **6-4**  An increase in the proportion of Iowa infants who are breastfed at birth.
- **6-6**  An increase in the proportion of low-income children, adolescents and young adults aged 1 to 20 on Medicaid who receive any preventive dental service.
- **6-11**  A decrease in the proportion of participants in the Women, Infants and Children (WIC) program who have low or very low food security.
- **7-2**  A reduction in deaths from work-related injuries.
- **8-2**  An increase in the proportion of children screened for being at risk for developmental, behavioral and social delays using a parent-reported standardized screening tool.
- **9-1**  An increase in the number of public health emergency volunteers.
- **9-2**  An increase in the number of counties with at least one general shelter that is fully accessible to persons with disabilities.
Moved Toward the Targets

Measures of progress that showed improvement of at least 5%, but did not achieve the targets:

- **1-1** An increase in the proportion of people with health insurance.
- **1-2** An increase in the number of direct care professionals in the state.
- **1-5** An increase in the number of counties that assess implementation of the Emergency Medical System (EMS).
- **2-2** An increase in the immunization coverage for all universally recommended vaccines for the following populations: Children 19-35 months of age.
- **2-2** An increase in the immunization coverage for all universally recommended vaccines for the following populations: Adolescents: Tdap.
- **2-2** An increase in the immunization coverage for all universally recommended vaccines for the following populations: Adolescents: MCV.
- **2-2** An increase in the immunization coverage for all universally recommended vaccines for the following populations: Adolescents: Female HPV.
- **2-2** An increase in the immunization coverage for all universally recommended vaccines for the following populations: Adolescents: Male HPV.
- **2-2** An increase in the immunization coverage for all universally recommended vaccines for the following populations: All adults: pneumonia.
- **3-2** A reduction in adult binge drinking.
- **4-1** A decrease in the number of persons with doctor-diagnosed arthritis who experience limitations in activity due to arthritis and other joint symptoms.
- **6-7** An increase in the number of pre-kindergarten children who receive a comprehensive eye vision screening.
- **6-8** An increase in the proportion of births that are intended.

Did Not Move

Measures of progress that did not change by at least 5%:

- **1-3** An increase in the proportion of people who have one person as a health provider.
- **1-4** An increase in the proportion of children whose parents report adequate health insurance.
- **2-1** An increase in the annual influenza coverage levels for all Iowa hospital employees.
- **2-2** An increase in the immunization coverage for all universally recommended vaccines for the following populations: All adults: influenza.
- **2-2** An increase in the immunization coverage for all universally recommended vaccines for the following populations: Adults ages 65+: pneumonia.
- **4-3** A decrease in the age-adjusted incidence of all cancers.
- **4-4** An increase in cancer screenings for breast, colorectal, and cervical cancer for the following populations: Women aged 50 and older having a mammogram in the past two years.
- **4-4** An increase in cancer screenings for breast, colorectal, and cervical cancer for the following populations: Women aged 21 and older having a Pap test within the past three years.
- **6-3** An increase in the percentage of persons who eat five or more servings of fruits and vegetables each day.
- **6-5** An increase in the proportion of adults who get the recommended levels of aerobic physical activity.
- **6-10**  A reduction in overweight/obesity in children ages 2 to 5 who are enrolled in the WIC program.
- **7-3**   An increase in seatbelt use to reduce injuries and deaths from motor vehicle crashes.

**Moved Away from the Target**

Measures of progress that moved away from the target by at least 5%:

- **4-6**   An increase in the proportion of persons with diabetes who report receiving a dilated eye examination in the last year.
- **6-2**   A reduction in the African-American infant mortality rate.
- **6-9**   A reduction in the proportion of adults who are obese.
- **6-12**  A reduction in the rate of reported cases of chlamydial infection.
- **7-1**   A decrease in the hospitalization rate related to falls for those who are ages 65 and over.
- **7-4**   A 5% reduction in the rate of all intentional and unintentional fatal injuries.
- **7-5**   A 5% reduction in the percent of Iowa high school student youth who report forced sexual experience.
- **8-1**   A reduction in the percent of 11th graders who seriously consider attempting suicide.
Measures of Progress Details

Access to Quality Health Services and Support

1-1  An increase in the proportion of people with health insurance.
Target: 100%.
Baseline: 88% (2009-2010).
Most recent data: 96% (2016).
Data Source: U.S. Census Bureau. American Community Survey Tables for Health Insurance Coverage: Health Insurance Coverage Status and Type of Coverage by State and Age for All People, Table HI05.

1-2  An increase in the number of direct care professionals in the state.
Target: 83,000.
Baseline: 73,214 (2012).
Most recent data: 78,009 (2014 estimate).
Data Source: Direct Care Workforce Initiative: Composition of the direct care workforce, 2014.
1-3 **An increase in the proportion of people who have one person as a health provider.**

Target: 82.5%.
Baseline: 75% (2011).
Most recent data: 77% (2016).
Data Source: *Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.*

![Graph showing the percentage of adults who report having one person as a health provider from 2011 to 2016.](image)

1-4 **An increase in the proportion of children whose parents report adequate health insurance.**

Target: 86%.
Baseline: 78% (2007).
Most Recent Data: 79% (2016).
Data Source: *Indicator 3.4, National Survey of Children’s Health.*

![Graph showing the percentage of children whose parents report adequate health insurance from 2007 to 2016.](image)
1-5  An increase in the number of counties that assess implementation of the Emergency Medical (EMS) System Standards.
Target: 99 counties. ✅
Baseline: 70 counties (2013).
Most Recent Data: 81 counties (2015).
Data Source: Unpublished data from the IDPH Bureau of Emergency and Trauma Services.

1-6  A continuation of the same level of non-medical transportation services to medical appointments for the anticipated increase in Medicaid members.
Target: 1.14%. ✅
Most Recent Data: 1.2% (2015)
Acute Disease

2-1  **An increase in the annual influenza coverage levels for all Iowa hospital employees.**

Target: 95%.
Baseline: 92% (2010-2011).
Most Recent Data: 92% (2015-2016).
Data Source: Centers for Medicare & Medicaid Services Hospital Compare database, Timely and Effective Care – State flat file: Preventive Care measure: Healthcare workers given influenza vaccination.

![Graph showing annual influenza vaccination coverage for hospital employees from 2011 to 2016.](Image)

- **Iowa**
- **Target**
- **Best State**
- **Worst State**
- **National**
- **Linear (Iowa)**
2-2 An increase in the immunization coverage for all universally recommended vaccines for the following populations:

**Children 19-35 months of age**

Target: 90%

Baseline: 42.5% coverage combined 7-vaccine series (2009).\(^4\)

Most Recent Data: 73.5% (2016).


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\(^4\) The combined 7-vaccine series (4:3:1\(^*\):3:1:4) includes ≥4 doses of DTaP, ≥3 doses of Polio, ≥1 dose of measles-containing vaccine, Hib full series, ≥3 HepB, ≥1 Varicella, and ≥4 PCV.
Adolescents: Tdap (tetanus/diphtheria/pertussis-containing vaccine)
Target: 90%.
Baseline: 61% (2009).
Most Recent Data: 89% (2016).
Data Source: CDC National Immunization Survey.

Adolescents: MCV (meningococcal conjugate vaccine)
Target: 90%.
Baseline: 46% (2009).
Most Recent Data: 75% (2016).
Data Source: CDC National Immunization Survey.
Adolescents: female HPV (human papillomavirus vaccine)
Target: 90%.
Baseline: 33% (2009).
Most Recent Data: 41% (2016).
Data Source: CDC National Immunization Survey.

Adolescents: male HPV (human papillomavirus vaccine)
Target: 90%.
Baseline: 14% (2013).
Most Recent Data: 37% (2016).
Data Source: CDC National Immunization Survey.
All adults: influenza immunization in the last 12 months
Target: 90%. Baseline: 47% (2011).
Most Recent Data: 47% (2016).
Data Source: Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.

All adults: ever received a pneumonia vaccination
Target: 90%.
Baseline: 31% (2011).
Most Recent Data: 35% (2016).
Data Source: Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.
Adults age 65 and over: influenza immunization in the last 12 months
Target: 90%.
Baseline: 70% (2011).
Most Recent Data: 67% (2016).
Data Source: Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.

% of adults (ages 65+) receiving an annual influenza vaccination

Adults age 65 and over: ever received a pneumonia vaccination
Target: 90%.
Baseline: 71% (2011).
Most Recent Data: 76% (2016).
Data Source: Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.

% of adults (ages 65+) receiving at least 1 pneumonia vaccination
Addictive Behaviors

3-1  A reduction in current youth alcohol use (grades 6, 8, and 11)
Target: 16%. ✓
Baseline: 17% (2010).
Most Recent Data: 9% (2016).
Data Source: Iowa Youth Survey, State of Iowa Report.

3-2  A reduction in adult binge drinking.
Target: 21%. ✓
Baseline: 23% (2011).
Most Recent Data: 21.2% (2016).
Data Source: Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.
3-3  **A reduction in over-the-counter drug abuse among 11th grade students.**

Target: 4%
Baseline: 5% (2010).
Most Recent Data: 4% (2016).
Data Source: Iowa Youth Survey, State of Iowa Report.

3-4  **A reduction in prescription drug abuse among 11th grade students.**

Target: 6%
Baseline: 7% (2010).
Most Recent Data: 4% (2016).
Data Source: Iowa Youth Survey, State of Iowa Report.
3-5 **A reduction in current marijuana use among 11th grade students.**

Target: 12%. ✔

Baseline: 13% (2010).

Most Recent Data: 10% (2016).


![Graph showing marijuana use among 11th grade students from 2010 to 2016.](image)

3-6 **A reduction in current cigarette smoking among 11th grade students.**

Target: 15.5%. ✔

Baseline: 17% (2010).

Most Recent Data: 7% (2016).


![Graph showing cigarette smoking among 11th grade students from 2010 to 2016.](image)
3-7  A reduction in current smoking among adults.
Target: 17%. ✓
Baseline: 20% (2011).
Most Recent Data: 17% (2016).
Data Source: Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.

![Graph showing percentage of Iowa adults currently smoking from 2011 to 2016]

3-8  An increase in the proportion of homes that have rules against smoking.
Target: 87%. ✓
Baseline: 83% (2011).
Most Recent Data: 87% (2015).
Data Source: Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.

![Graph showing percentage of Iowans who report homes that have rules against smoking from 2011 to 2016]
Chronic Disease

4-1  A decrease in the number of persons with doctor-diagnosed arthritis who experience limitations in activity due to arthritis and other joint symptoms.
Target: 39%.  
Baseline: 44% (2011).  
Most Recent Data: 41% (2015).
Data Source: Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.

4-2  A decrease in the age-adjusted rate of all cancer deaths.
Target: 160.4/100,000 (2017).  
Baseline: 177/100,000 (2007).  
Most Recent Data: 160/100,000 (2016).
Data Source: CDC Wonder, Compressed Mortality file.
4-3  A decrease in the age-adjusted incidence of all cancers.
Target: 465.6/100,000.  
Baseline: 489/100,000 (2007).
Most Recent Data: 471.9/100,000 (2014).
www.cdc.gov/uscs

4-4  An increase in cancer screenings for breast, colorectal, and cervical cancer in the following populations:

Women aged 50 and older having a mammogram in the past two years.
Target: 88%.  
Baseline: 77.3% (2010).
Most Recent Data: 74.8% (2016).
Data Source: Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.
Colorectal cancer screenings for men and women aged 50 and older.
Target: 70%. ✓
Baseline: 64.1% (2010).
Most Recent Data: 72.5% (2016).
Data Source: Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.

Women aged 21 to 65 having a Pap test within the past three years.
Target: 92%
Baseline: 81% (2010).
Most Recent Data: 82% (2016).
Data Source: Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.
4-5 **A decrease in the percentage of persons diagnosed with AIDS within three months of their HIV diagnosis.**

Target: 35%. 
Baseline: 42% (2009).
Most Recent Data: 24% (2016).
Data Source: Iowa Department of Public Health, Bureau of HIV, STD, and Hepatitis.

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4-6 **An increase in the proportion of persons with diabetes who report receiving a dilated eye examination in the last year.**

Target: 85%.
Baseline: 77%
Most recent data: 71% (2015).
Data Source: Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.
4-7 An increase in the proportion of persons with high blood pressure who are taking their medication.

Target: 75%. ✔
Baseline: 66% (2009).
Most Recent Data: 78.5% (2015).
Data Source: Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.

4-8 A decrease in coronary heart disease deaths.

Target: 111/100,000 (age-adjusted rate). ✔
Baseline: 126/100,000 (2010 age-adjusted rate).
Most Recent Data: 103/100,000 (2016).
Data Source: CDC Wonder, Compressed Mortality file, ICD-10 codes I20-I25.
4-9  A decrease in deaths attributed to stroke.
Target: 35/100,000 population (age-adjusted rate).
Baseline: 38/100,000 population (2010 age-adjusted rate).
Most Recent Data: 32/100,000 population (2016 age-adjusted rate).
Data Source: CDC Wonder, Compressed Mortality file, ICD-10 codes I60-I69.

4-10  An increase in the number of Medicare beneficiaries who use their annual wellness visit, which includes an assessment of cognitive function.
Target: 37,950.
Most Recent Data: 70,538 (2016).
4-11  A reduction in the rate of emergency department visits for children with asthma, ages 0 to 14.

Target: 60.6/10,000. ✔
Baseline: 67.3/10,000 (2008).
Most Recent Data: 50.8/10,000 (2016).
Data Source: Iowa Department of Public Health, Public Health Tracking Portal.

Environmental Health

5-1  An increase in the number of lives saved from fires by smoke detectors.

Target: 204 Lives Saved. ✔
Data Source: Reports to the State Fire Marshal
The Iowa Department of Public Safety is no longer collecting this data.
5-2  A decrease in the number of children who have had at least one confirmed elevated blood-lead test before age 6.

Revised Target: 461. ✔
Most Recent Data: 244 (2010 Birth Cohort).
Data Source: Iowa Department of Public Health, [Public Health Tracking Portal](#).

An increase in the number of private drinking water wells tested for arsenic.

Target: 150 wells tested per year. ✔
Baseline: 473 wells tested from 2006 to 2008 (average 158 per year).
Most recent data: 652 (2016).
Baseline Data Source: [Arsenic in Iowa's Water Sources: Surveillance, Research, Education, and Policy](#).
Recent Data Source: Iowa Department of Natural Resources, Private Well Tracking System database; and Iowa Department of Public Health, [Public Health Tracking Portal](#).
Healthy Living

6-1 An increase in the proportion of public high school students who graduate in 4 years or less.
Target: 90%. ✔
Baseline: 89% (2010).
Most Recent Data: 91% (2016).
Data Source: Iowa Department of Education, Student Performance Reports, Cohort Graduation Rates, 4 Year Graduation Data by District, by Subgroup.

6-2 A reduction in the African-American infant mortality rate.
Target: 9 per 1,000 live births.
Baseline: 12 per 1,000 live births (2010).
Most Recent Data: 14.2 per 1,000 live births (2016).
Data Source: Vital Statistics of Iowa, Table 4B, 2016.
6-3  An increase in the percentage of persons who eat 5 or more servings of fruits and vegetables each day.
Target: 20%.  
Baseline: 13.5% (2011).  
Most Recent Data: 13.5% (2015).  
Data Source: *Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System*.

![Graph showing percentage of Iowa adults who eat 5+ portions of fruits & vegetables each day.]

6-4  An increase in the proportion of Iowa infants who are breastfed at birth.
Target: 80%.  
Baseline: 74.5% (2011).  
Most Recent Data: 82.7% (2016).  
Data Source: CDC, National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition, Physical Activity, and Obesity. Data, Trend and Maps [online].  
6-5  An increase in the proportion of adults who get the recommended level of aerobic physical activity.
   Target: 53%.  
   Most Recent Data: 48.8% (2015).
   Data Source:  Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.

6-6  An increase in the proportion of low-income children, adolescents and young adults aged 1 to 20 on Medicaid who receive any preventive dental service.
   Target: 45%.  
   Baseline: 40% (2010).
   Most Recent Data: 51% (2016)
   Data Source:  IDPH Oral Health Center EPSDT Dental Services Reports.
6-7  An increase in the number of pre-kindergarten children who receive a comprehensive eye vision screening.
Target: 48,172. 
Most Recent Data: 47,117 (2016).
Data Source: Iowa KidSight. A Statewide Vision Screening Program for Infants and Children, Iowa Children Screened by Year/Month.

6-8  An increase in the proportion of births that are intended.
Target: 75%.
Baseline: 66% (2010).
Most Recent Data: 71% (2016).
Data Source: Iowa's Barriers to Prenatal Care Project, p. 8
6-9 **A reduction in the proportion of adults who are obese.**

Target: 27%. ▼
Baseline: 29% (2011).
Most Recent Data: 32% (2016).
Data Source: *Health in Iowa: Annual Report from the Behavioral Risk Factor Surveillance System.*

![Graph showing percentage of adults who are obese](image)

6-10 **Reduce overweight/obesity in children ages 2 to 5 who are enrolled in the WIC program.**

Target: 17%
Baseline: 22.2% (2010).
Most Recent Data: 22.9% (2016).
Data Source: Iowa Department of Public Health, IWIN, and Iowa WIC Data System (unpublished analysis).

![Graph showing percentage of Iowa WIC-enrolled children ages 2-5 who are overweight/obese](image)
6-11  A decrease in the proportion of participants in the Women, Infants and Children (WIC) program who have low or very low food security.\textsuperscript{5}

Target: 39%.  
Baseline: 41% (2011).  
Most Recent Data: 34.5% (2016)  
Data Source:

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{food_security_graph.png}
\caption{\% of Iowa WIC participants who have low or very low food security}
\end{figure}

6-12  A reduction in the rate of reported cases of chlamydial infection.  
Target: 300 cases/100,000 population.  
Baseline: 350 cases/100,000 population (2010).  
Most Recent Data: 416/100,000 population (2016).  

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chlamydia_graph.png}
\caption{\# of reported cases of chlamydial infection (per 100,000 Iowans)}
\end{figure}

\textsuperscript{5} Food security is defined as access by all people at all times to enough food for an active, healthy life. Low food security means that individuals may go hungry. Very low food security means that hunger is an even greater problem.
Injury and Violence

7-1  A decrease in the hospitalization rate related to falls for those who are ages 65 and over.

Target: 1,013/100,000 population. 
Baseline: 1,125/100,000 population (Average annual rate, 2006-2010).
Most Recent Data: 1,724/100,000 population (Average annual rate 2010-2014).
Data Source: Falls in Iowa: County Deaths and Hospitalizations (2010-2014 data).
https://idph.iowa.gov/falls-prevention

![Graph showing hospitalizations due to falls for Iowans ages 65+ per 100,000 population]

7-2  A reduction in deaths from work-related injuries.

Target: 5.4/100,000 FTE workers. ✓
Baseline: 6.0/100,000 FTE workers (Annual Crude Fatality Rate, 2008).
Most Recent Data: 4.8/100,000 FTE workers (2016).

![Graph showing deaths from work-related injuries per 100,000 FTEs]
7-3 An increase in seatbelt use to reduce injuries and deaths from motor vehicle crashes.
Data Source: Iowa Governor’s Traffic Safety Bureau Survey, p. 7.

7-4 A 5% reduction in the rate of all intentional and unintentional fatal injuries.
Target: 49.5/100,000 population (age-adjusted rate). Baseline: 52/100,000 population (age-adjusted rate, 2010).
Most Recent Data: 64/100,000 population (age-adjusted rate, 2016).
Data Source: National Center for Injury Prevention and Control, CDC. WISQARS Online Database.
7-5  A 5% reduction in the percent of Iowa high school students who report forced sexual experience.
Target: 6%.  
Baseline: 6.3% (2007).  
Most Recent Data: 6.9% (2011).  
Data Source: CDC Youth Risk Behavior Surveillance System.  
Data is not available for Iowa for 2013 or 2015.

Mental Health and Mental Disorders

8-1  A reduction in the percent of 11th graders who seriously consider attempting suicide.  
Target: 13%.  
Baseline: 14% (2010).  
Most Recent Data: 16.9% (2016).  
8-2  An increase in the proportion of children screened for being at risk for developmental, behavioral and social delays using a parent-reported, standardized screening tool.

Target: 23%. ✓
Baseline: 19% (2007).
Most Recent Data: 34% (2016).
Data Source: Indicator 4.16, National Survey on Children's Health.

<table>
<thead>
<tr>
<th>Year</th>
<th>% of children screened</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>19% (Baseline)</td>
</tr>
<tr>
<td>2012</td>
<td>32% (Most Recent)</td>
</tr>
<tr>
<td>2016</td>
<td>34% (Most Recent)</td>
</tr>
</tbody>
</table>

Preparedness and Response

9-1  An increase in the number of public health emergency volunteers.

Target: 1,515 volunteers. ✓
Baseline: 1,210 volunteers (2011).
Most Recent Data: 2,043 volunteers (2016).
Data Source: Iowa Statewide Emergency Registry of Volunteers.

<table>
<thead>
<tr>
<th>Year</th>
<th># of volunteers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>1,210</td>
</tr>
<tr>
<td>2012</td>
<td>1,515</td>
</tr>
<tr>
<td>2014</td>
<td>1,750</td>
</tr>
<tr>
<td>2015</td>
<td>2,000</td>
</tr>
<tr>
<td>2016</td>
<td>2,043</td>
</tr>
</tbody>
</table>
9-2 At least one general shelter that is fully accessible to persons with disabilities in 25 counties.
Target: 25 counties.
Baseline: 0 (2011).
Data Source: Iowa Department of Public Health Disability and Health Program Assessment Data (unpublished).

![Graph showing progress towards target number of counties with fully accessible shelters.]