



Data Collection, Scoring and Grading Methods

In 2005, Women In Government published its first report to provide a baseline assessment of states' performances on eight measurable activities and outcomes regarding cervical cancer prevention. The same measures — updated from the same sources — were included in the 2006 edition so that direct comparisons can be made for each state. In addition, wherever possible, data stratified by race or income were highlighted to highlight disparities in some of the key determinants of cervical cancer. Furthermore, descriptive information was added (that does not contribute to the score for each state), including state population and state resource contacts.

Scored Categories

The report analyzed each state's performance in cervical cancer prevention efforts based on these eight factors: incidence, mortality, Pap screening rates, Medicaid coverage of HPV testing, uninsured rates (by income), legislation mandating cervical cancer screening coverage, legislation creating cervical cancer task forces/commissions and miscellaneous legislation.

These indicators were chosen to reflect current performance in cervical cancer prevention efforts and included both screening-related data and legislative activity relating to cervical cancer prevention in each state. Each factor was scored from 0 to 2 points for a total of 16 possible points. Grades were assigned to scores as follows: Excellent (14-16), Very Good (11-13), Good (8-10) and Fair (<8).

Incidence and Mortality

The most direct indicators of cervical cancer prevention were the rates of incidence (new cases) and mortality (deaths) per year. In theory, as tracking systems improve and compliance with the most up-to-date guidelines increase, so will detection rates.

Increased detection of precancerous cells or lesions, and adequate treatment and follow-up care, should decrease incidence and mortality rates from cervical cancer. Detecting late-stage invasive cervical cancer indicates that women have not received adequate screening, treatment or follow-up care, and that legislative and programmatic interventions may be needed to detect disease at earlier and more curable stages.

Cervical cancer incidence rates cited (the number of new cases of disease per 100,000 women per year) were for invasive cancer only. Data were collected from the Center for Disease Control and Prevention's (CDC) 2004 State Cancer Registry and the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS).⁴⁵ Incidence rates were age-adjusted to the 2000 U.S. standard population by five-year age groups. The following states did not meet United States Cancer Statistics (USCS) data quality standards for one or more years during the period of data collection: Delaware, Georgia, Maryland, Mississippi, North Dakota, South Dakota, Tennessee and Virginia. For these states, data were collected from the most current period available from the North American Association of Central Cancer Registries.⁴⁶ Stratifications by race were derived from the same sources. Cervical cancer incidence scoring ranges were replicated from last year's report to facilitate comparing data from 2005 to 2006. Incidence rates in last year's report ranged from 5.5 to 14.3 cases per 100,000 women. The lowest rate was used as the top score, and the range was divided into three equal increments.

Scoring cervical cancer incidence rates:

- 2 points for rates of 5.0 to 8.3 per 100,000 women
- 1 point for rates of 8.4 to 11.7 per 100,000 women
- 0 points for rates of 11.8 to 15.0 per 100,000 women



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Cervical cancer mortality rate data were provided by National Cancer Institute (NCI) and CDC's State Cancer Profiles.⁴⁷ Death rates were calculated by the NCI, using its SEER*Stat system, and were age-adjusted to the 2000 U.S. standard population by five-year age groups. Some states had fewer than 15 cases in one year and so data were suppressed to ensure confidentiality. For these states, data from the same source were used; however, the collection time period was typically four years rather than one so that cases could be collectively reported and confidentiality preserved. States using these data were: Alaska, District of Columbia, Hawaii, Montana, North Dakota, South Dakota, Utah, Vermont, and Wyoming. Stratifications by race were derived from the same sources. As noted in the previous section of this report, one goal of the Healthy People 2010 initiative was to decrease the cervical cancer mortality rate to two deaths per 100,000 women. Consistent with the scoring of last year's report, this goal was used to determine scoring increments for cervical cancer mortality.

Scoring cervical cancer mortality rates:

- 2 points for rates of 0.0 to 2.0 per 100,000 women
- 1 point for rates of 2.1 to 4.1 per 100,000 women
- 0 points for rates of 4.2 to 6.2 per 100,000 women

Access and Utilization

Last year, three factors were selected to represent and measure access and utilization of cervical cancer preventive healthcare services. The same measures were used for this year's report: rates of Pap testing, Medicaid coverage of HPV testing, and insurance coverage of women.

Monitoring Pap test rates over time was selected as one indicator of overall screening practices. Rates of women screened for cervical cancer were collected from the CDC's 2004 Behavioral Risk Factor Surveillance System (BRFSS) Data.⁴⁸ All states and the District of Columbia collected this information, with the exception of Hawaii. Stratification by race was derived from the same source. The Pap test rate for Hawaii was collected from the most recent data available (2002) reported in the National Healthcare Quality Report.⁴⁹

Scoring % of women screened for cervical cancer in past three years:

- 2 points if 85.8 to 90.0% of women were screened
- 1 point if 81.4 to 85.7% of women were screened
- 0 points if 77.0 to 81.3% of women were screened

An additional target of Healthy People 2010 was to increase the proportion of women aged 18 and older who had received a Pap test within the preceding three years to 90%. Therefore, that goal was used to establish the scoring ranges for the 2005 report and was replicated for this report.

Scoring unrestricted Medicaid coverage of HPV tests:

- 2 points if coverage was 100% unrestricted
- 0 points if coverage was restricted

HPV testing has been included as an option in the screening guidelines of leading medical groups as an adjunct to the Pap test for women age 30 and over, or to follow up an ASC-US (inconclusive) Pap test result.



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Conducting an HPV test at the same time as a Pap test in women 30 and over can increase accuracy and enable screening intervals to be extended (which could be more cost-effective than conducting multiple Pap tests).^{50, 51} All state Medicaid plans cover Pap testing, yet not all cover “unrestricted” HPV testing. “Unrestricted” coverage means that Medicaid would reimburse healthcare providers when they used the HPV test for primary screening when deemed medically necessary. “Restricted” use would indicate reimbursement only when an HPV test was used as a follow-up test to resolve an ASC-US Pap test result. Therefore, only coverage of HPV testing by state Medicaid plans was included as an indicator, and not coverage of Pap testing. Data for this measure were based on the Medicaid Coverage Survey 2004-2005, Boston Healthcare Associates.

Studies have found that insurance coverage — even after adjustments were made for age, race, education, and regular source of care — was a strong predictor of obtaining recommended screening and preventive services. Insurance coverage was included as an indicator for preventing cervical cancer in last year’s and this year’s report. Insurance coverage data for women, ages 18 to 64, by state, were based on Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates derived from data pooled from the March 2003 and 2004 Current Population Surveys; U.S. figures were based on March 2004 Survey data.⁵² A clinical preventive care target of Healthy People 2010 was to increase the proportion of people with health insurance to 100%, and thus have 0% uninsured in each state. Therefore, this was used as the goal for scoring health insurance coverage. Numbers were rounded to the nearest whole number.

Scoring % of women not covered by insurance:

- 2 points for 0 to 10% uninsured
- 1 point for 11 to 20% uninsured
- 0 points for 21 to 30% uninsured





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Policy Initiatives and Infrastructure

Three items measured policy initiatives and infrastructure. Of note, the data collection time periods varied dramatically from last year's report to this year's report. The first edition took into account legislation that was in place from 1990 to November 5, 2004; this report covers legislation for 2005.

1 Legislation mandating cervical cancer screening coverage by public payers and private insurance companies. For the 2006 report, legislation was awarded 2 points for mandated coverage of HPV and Pap tests, 1 point for coverage of Pap testing only or for legislation introduced (but not enacted) covering the Pap and HPV tests, and 0 points for no coverage of either type of testing.

Scoring legislation for mandating cervical cancer screening coverage:

- 2 points for enacted legislation mandating coverage of HPV and Pap testing
- 1 point for legislation introduced (not enacted) covering Pap and HPV tests OR covering Pap test alone
- 0 points for no legislation

2

Legislation or resolutions creating a central accountable entity (e.g., task force, commission, study committee or council) to address cervical cancer prevention. For the 2005 report, this indicator was worded as follows: "Legislation or resolutions creating a task force or commission to evaluate new opportunities to eliminate cervical cancer." In 2006, states received 2 points for enacted legislation, 1 point for enacted resolutions or introduced legislation that was not enacted and 0 points for no activity.

For this report, the terms "study committee" and "council" were added to the terms "task force" and "commission" to denote a broader concept of forming, funding, maintaining and using a central core of authorities who were motivated to address and eliminate cervical cancer.

Scoring legislation or resolutions to create and maintain a central accountable entity to address cervical cancer prevention:

- 2 points for enacted legislation
- 1 point for enacted resolutions or legislation introduced but not enacted
- 0 points for no legislation



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3 Legislation or resolutions for additional support of cervical cancer prevention initiatives. For examples of additional prevention initiatives, refer to individual State Profiles.

Scoring legislation or resolutions for additional support of cervical cancer prevention initiatives:

- 2 points for enacted legislation
- 1 point for resolutions introduced or passed OR legislation introduced but not enacted
- 0 points for no legislation

For these measures, a LexisNexis® State Capital search was conducted using the keywords “cervical cancer” and “HPV” as search criteria. All states were searched and legislation was collected for the time period January 1, 2005 to October 1, 2005. The cumulative score represents the highest score achieved in either year under observation, up to a maximum of 2 points for each measure. It should be noted that the maximum number of points a state could achieve for introducing, but not passing, an initiative was 1 point (i.e., states that introduced, but did not pass initiatives in both 2005 and 2006 could only achieve 1 point total).

Overall Grade and Awarding Point Values

A state’s overall rating resulted from summing the total points from each of the eight measures for a combined total score. The maximum possible state score was 16 points. Last year, out of the 16 available points, the results ranged from 4 to 12 points (25 to 75%). This range of results was then divided into four value-ordered groups, with each group given a grade based on percentage breakdowns:

- Grades of 84 to 100% Excellent
- Grades of 67 to 83% Very Good
- Grades of 50 to 66% Good
- Grades below 50% Fair

This same rating strategy was used for this report to facilitate yearly comparisons. Thus, for each state, the overall score and grade for 2005 was included in parentheses next to the 2006 score and grade. See Appendix A for individual state profiles. See Appendix B for a comparison chart of all states.





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Additional Information Reported but Not Scored

The U.S. Census estimates the current population to include 293,655,404 people.⁵³ Population figures for each state were included in this report to provide a relative context for numbers of women affected and to provide a basis for comparing all states. Within each state, approximately one third of the total population was women, aged 18 to 64. Incidence and mortality rates were reported by race when available; data were not available by race for all states. Insurance rates were depicted by income levels.

Resources and Contacts

This edition of the report includes an extensive annotated resource section with web links to national organizations that have an interest in cervical cancer prevention (see Appendix C). In addition, within each state profile, information was compiled to provide resources for collaboration. Information about state Breast and Cervical Cancer Early Detection Programs was provided by the CDC's website.

Data Limitations and Future Changes to Methodology

Data collection and analysis inherently contain limitations. For example, the incidence and mortality data for this report were collected from several sources and from different time periods. This limits the true comparability across states within one year. However, as data tracking and reporting systems improve at the state level, so will the ability to compare same-year data across states.

Women In Government expects the methods and measures for future editions of this report to evolve as data collection efforts are improved and enhanced; new preventive technologies are introduced, available and recommended by the medical community (e.g., vaccine); and more factors are measured (e.g., HPV test rates in screening). Further, as states begin implementing legislative measures, Women In Government will track and monitor legislative outcomes. Finally, it is expected that as states improve their ratings each year, the bar will be raised, and metrics and measures will change accordingly.

