



Paul R. LePage, Governor

Mary C. Mayhew, Commissioner

Department of Health and Human Services
Commissioner's Office
221 State Street
11 State House Station
Augusta, Maine 04333-0011
Tel: (207) 287-3707
Fax (207) 287-3005; TTY: 1-800-606-0215

Cervical Cancer Prevention, Detection, and Education

Final Report to the Joint Standing Committee on Health and Human Services

Submitted pursuant to consideration of LR 914, Requiring the Maine Center for Disease Control and Prevention to Report on Activities to Implement the Recommendations of the Task Force to Study Cervical Cancer Prevention, Detection, and Education

March 15, 2011

Introduction

There has been substantial progress in the prevention, detection, and treatment of cervical cancer. These advances, combined with the persistence of both private and public health professionals, have resulted in a clear reduction of cervical cancer incidence across the United States. Maine saw a 33% drop in cervical cancer incidence from 1990 to 2003¹. As the knowledge and resources surrounding this disease change, however, so must the efforts put forth in regards to education, prevention, and detection: “while Maine is doing relatively well in the areas of cervical cancer prevention, detection, and education, there is an opportunity for the State to further reduce the rate of cervical cancer given the current technology and to move toward complete eradication of cervical cancer”¹. This sentiment was the motivation behind the formation of The Task Force to Study Cervical Cancer Prevention, Detection, and Education, and it continues to be an important part of public health programs throughout Maine.

The recommendations of the Task Force reflect the state’s continuing effort to eliminate cervical cancer among its women. As part of this effort, several programs within the Department of Health and Human Services and the Maine Center for Disease Control and Prevention dedicate time and resources to cervical cancer-related education and intervention. These programs include the Maine Immunization Program, MaineCare, Maine Breast and Cervical Health Program, Maine Comprehensive Cancer Control Program, and Maine Cancer Registry. The contributions of each of these programs are described in this report as required by Section 8 of LR 914, “Resolve, Requiring the Maine Center for Disease Control and Prevention to Report on Activities to Implement the Recommendations of the Task Force to Study Cervical Cancer Prevention, Detection, and Education.”

¹State of Maine. Task Force to Study Cervical Cancer Prevention, Detection, and Education. *Final Report*. Nov 2006.

Section 1. Human papillomavirus vaccination; MaineCare reporting.

MaineCare Data:

Paid Claims for HPV vaccine								
CY 2009 and 2010								
Limited to Female MaineCare Members with Full Benefits, Eligible at any point of the year								
Dose = Distinct Service Date								
	CY 2009				CY 2010			
	Total Eligible Members*	1 Dose	2 Doses	3 Doses	Total Eligible Members*	1 Dose	2 Doses	3 Doses
9-10 Years	6,132	3	1	0	6,648	11	0	0
11- 19 Years	26,980	349	19	5	29,411	406	47	0
20 to 26 Years	18,195	160	52	8	20,579	144	22	5
27 and Up	81,442	8	1	0	89,968	6	1	0
Total	132,749	520	73	13	146,606	567	70	5

*Full MaineCare benefits, Age calculated at the end of the year

Section 2. Human papillomavirus vaccination as a priority for future funding.

Since 2007, Maine has had insufficient funds to provide all recommended vaccines to all children in Maine. This has resulted in a patchwork of coverage, with VFC eligible children (MaineCare, Uninsured, Underinsured and American Indian/Alaskan Native) having full access to all recommended vaccines (including HPV) and insured children – including those insured by high deductible health plans – having variable access based on their insurance coverage. Many families with health insurance face high out-of-pocket costs for this vaccine, and this may contribute to decreased access and lower vaccination rates. The 124th legislature passed 2009 PL 595 (An act to establish the universal childhood immunization program) to address this problem and once again provide all recommended vaccines to all children in Maine regardless of insurance status. This program is funded through an assessment paid by insurance carriers to the newly established Maine Vaccine Board. We expect that this program will provide substantially better access to all childhood vaccines, including HPV vaccines. This program begins in FY12.

Section 3. Maine Immunization Program to report on program funding and vaccination distribution.

The Maine Immunization Program (within Maine CDC) distributed 11,280 doses of HPV vaccine in 2007, 14,730 doses in 2008, 8,450 doses in 2009, and 8,420 doses in 2010.

The first year of National Immunization Survey adolescent/teens data was reported in 2008. According to this survey, 21.4% of Maine girls age 13 to 17 years were immunized with at least

one dose of HPV vaccine (vs. the national average of 17.9%) in 2008; and 26.7% (vs. the national average of 28.0%) in 2009.

Impact2 is the State web based immunization registry in Maine. Currently, not all immunization program providers are using the system. In the recent few years, the program has been promoting the system to providers through user-friendly electronic data exchange with providers' electronic medical records. That is why in 2009 and 2010 only 50% (plus) of HPV vaccine distributed by the program was recorded in the registry. Although Impact2 data reporting was incomplete, especially for privately purchased vaccines which might be less likely reported into the system than public funded vaccines, 2009 and 2010 HPV coverage rates from Impact2 indicate that 11-18 year-old girls who received public funded vaccine were 13-14 times more likely to get the vaccine than those who were not qualified to get public funded vaccines. As of 2011, Maine is going to universal childhood vaccine supply of all ACIP recommended vaccine. We expect HPV vaccine coverage rates among children less than 18 year-old will increase in the coming years.

Section 4. Report on public education provided regarding cervical cancer.

The mission of **Maine Breast and Cervical Health Program** is to provide breast and cervical cancer screening and diagnosis services to underserved women, to provide public and professional education, and to support community partnerships to enhance statewide cancer control activities. The goals of the program are:

- To reduce breast and cervical cancer morbidity and mortality through early detection, public and professional education, quality assurance, and surveillance;
- To provide breast and cervical cancer screening and follow-up services to low-income Maine women;
- To provide public education to encourage all Maine women to obtain regular breast and cervical cancer screening;
- To provide professional education in breast and cervical cancer control issues;
- To provide assistance and support to health professionals and health care organizations to assure the quality of services delivered;
- To implement surveillance and evaluation systems to monitor the status of the diseases and progress of the program, and;
- To link women diagnosed with breast or cervical cancer to MaineCare for treatment.

Many of these are accomplished through statewide public education efforts regarding prevention and early detection. However, Maine Breast and Cervical Health Program (MBCHP) is funded by the National Breast and Cervical Cancer Early Detection Program (NBCCEDP)/Centers for

Disease Control and Prevention to implement a comprehensive breast *and* cervical cancer early detection program. Accordingly, when conducting statewide public education efforts, all activities address *both* the importance of cervical cancer *and* breast cancer screening. Also, the defined priority population for MBCHP is women between the ages of 50 and 64. As a means of cervical cancer prevention, the human papillomavirus (HPV) vaccine is only recommended for girls and women between the ages of 11 and 26 (and also approved for girls ages 9-10)². Therefore, education regarding the availability of the vaccine does not fall under the scope of the MBCHP work plan; education regarding the importance of cervical cancer screening is a major focus of the program. Examples of specific statewide public education efforts regarding cervical cancer prevention and early detection (in the context of the breast and cervical comprehensive education strategy for women age 35 and up) is provided below:

Description of Accomplishments (January, 2009 - December, 2010):

- Press Release
 - In December 2008, MBCHP prepared a Press Release for DHHS to issue for January 2009 Cervical Cancer Awareness Month;
 - In December 2009, MBCHP prepared a Press Release for DHHS to issue for January 2010 Cervical Cancer Awareness Month, and;
 - In December 2010, MBCHP prepared a Press Release for DHHS to issue for January 2011 Cervical Cancer Awareness Month.

- Media/Materials/Displays/Presentations
 - Media
 - In November, 2008, MBCHP renewed its contract with the Maine Association of Broadcasters (MAB): one new radio and TV Public Service Announcements (PSAs) were distributed to MAB member stations for airing in January through April 2009

 - In December 2009, MBCHP renewed its contract with the Maine Association of Broadcasters (MAB): two radio and two TV PSAs (both previously developed) were distributed to MAB member stations for airing in January through April 2010.

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²Markowitz LE, Dunne EF, Saraiya M, Lawson HW, Chesson H, Unger ER. “Quadrivalent human papillomavirus vaccine: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR*. 2007; 56:1-24.

○ Media - *continued*

Beginning in July 2010, the following social media outlets were initiated:

- July 2010: blog about MBCHP/Twitter/Facebook:
<http://mainepublichealth.blogspot.com/2010/07/making-mammograms-and-related-services.html>
- October 2010: press release posted to Facebook and Twitter:
<http://www.nbcam.org>
- October 2010: blog posted to Facebook and Twitter:
http://blog.usa.gov/roller/govgab/entry/2010_national_mammography_day

○ Materials

Maine Breast and Cervical Health Program distributes as needed a brochure that promotes the availability of cervical and breast cancer screening services [pelvic exam, Pap test, clinical breast exam, mammogram] at no-cost to women enrolled in the MBCHP. These brochures are consistently distributed to:

- 128 MBCHP Primary Care Provider sites
- 54 Mammography facilities
- Community Action Programs (CAP)
- Regional DHHS Eligibility Offices
- Maine Career Centers

○ Displays and Presentations

Maine Breast and Cervical Health Program staff attended and/or supported events throughout Maine with the purpose of providing public education to encourage all Maine women to obtain regular breast and cervical cancer screening. During these events print and multimedia materials were distributed to attendees [both community members and healthcare providers]. Examples of events attended include:

- 04/08/09 Kennebec Valley Organization April Workshop
- 06/04/09 MBCHP Mammography Technologist Annual Conference
- 08/07/09 Pleasant Point Passamaquoddy Community Health Fair
- 08/21/09 Maine's First Deaf Health Fair
- 09/25/09 US Department of Labor and US DHHS Office of Women's Health conference *Healthy, Wealthy and Wise*
- 10/29/09 Maine Cancer Consortium Annual Meeting
- 10/29/09 WIC Annual Conference
- 11/18/09 Maine Public Employees Retirement System Health Fair
- 04/03/10 World of Women's Wellness
- 05/15/10 MBCHP Annual Mammography Technicians Conference
- 05/05/10 American Cancer Society's *Annual Living with Cancer Conference*
- 09/18/10 Common Ground Fair
- 10/05/10 Maine Public Health Association Annual Meeting
- 10/28/10 WIC Annual Conference

- “In-Reach”

During the reporting time period [January 2009 – December 2010], 3,834 women were newly enrolled in MBCHP. Approximately 26.4% (1,011) of these women reported a history of “never/rarely screening” for cervical cancer. Maine Breast and Cervical Health Program defines “never screened for cervical cancer” to include women who have never received a Pap test and “rarely screened for cervical cancer” to include women who have not received a Pap test at any time in the last five years. In order to increase utilization of MBCHP services and to reinforce the importance of early detection for these high-risk women, MBCHP staff personally contacted all women enrolled in the program with a never/rarely cervical cancer screening history who did not receive an initial Pap test within the first six months after enrollment in the Program.

Section 5. Maine Breast and Cervical Health Program screening initiatives.

Description of Accomplishments (January, 2009 – December, 2010):

1. Family Planning Association of Maine (FPAM), Inc. Collaboration

During the specified time period, MBCHP contracted with five FPAM clinic sites:

- Augusta
- Belfast
- Damariscotta
- Waterville [new site as of March 2010]
- Rockland.

In total, FPAM sites served 225 MBCHP clients, and during the 24-month reporting period, 254 Pap tests were performed and one pre-cancerous cervical condition was detected.

In addition, the following family planning agencies also contract with MBCHP. In total, family planning agencies served approximately 40% of MBCHP’s clients and performed 43% of all Pap tests provided. Below is a summary of the clients served and Pap tests performed during the 24-month reporting period:

Aroostook Community Action Program, Inc.

- Sites in Fort Kent, Houlton, and Presque Isle
- 221 MBCHP clients currently enrolled
- 263 Pap tests performed and zero cervical cancer detected

Downeast Health Services

- Sites in Calais and Ellsworth
- 146 MBCHP clients currently enrolled
- 148 Pap tests performed and zero cervical cancer detected

Penquis Health Services

- Sites in Bangor, Dexter, Dover-Foxcroft [site closed May 2010], Lincoln, and Millinocket [site closed May 2009]
- 212 MBCHP clients currently enrolled
- 242 Pap tests performed and zero cervical cancer detected

Planned Parenthood of Northern New England

- Sites in Biddeford, Brunswick/Topsham, Portland, and Sanford
- 250 MBCHP clients currently enrolled
- 207 Pap tests performed and one pre-cancerous cervical condition was detected

Western Maine Community Action Health Services

- Sites in Farmington, Lewiston, Norway, and Rumford
- 131 MBCHP clients currently enrolled
- 126 Pap tests performed and one pre-cancerous cervical condition was detected

During the reporting period, MBCHP legislative rules and funding were restricted to payment for screening services only for women age 35 and older. Budget and staffing limitations for both the MBCHP and FPAM prevented exploration of new funding opportunities to deliver cervical cancer screening to women under age 35.

2. Special Screening Days

From January 2009 through December 2010, MBCHP collaborated with community provider sites to sponsor 16 Screening Days. Forty-four women were newly enrolled and screened through these events. Of these 44 women, 17 (38.6 %) reported a never/rarely screening history for cervical cancer.

3. Clinical Guidelines Update

In October, 2007 The American Society for Colposcopy and Cervical Pathology (ASCCP) released two Consensus Guidelines:

1. *2006 Consensus Guidelines for the Management of Women with Abnormal Cervical Cancer Screening Tests*
2. *2006 Consensus Guidelines for the Management of Women with Cervical Intraepithelia Neoplasia or Adenocarcinoma In Situ*

The National Breast and Cervical Health Program/Center for Disease Control and Prevention announced the national program will fully review the new guidelines and, if needed, will issue revisions to NBCCEDP policies. To date no revisions have been received. When/if NBCCEDP announces changes to the program's services and coverage policy, MBCHP will ensure these changes are integrated into the state program's screening and follow-up guidelines. Although the new guidelines have not changed what services are covered by MBCHP, staff have promoted the availability of the new guidelines from the ASCCP

website. MBCHP obtained permission from the national society to post the guidelines on the MBCHP website for easy access by Maine health care providers.

4. Stakeholder Group Coordination

In 2007, the Maine Comprehensive Cancer Control Program in collaboration with the Maine Cancer Consortium conducted a planning meeting with the State Employee Health Commission (SEHC) to discuss new opportunities to collaborate on projects such as client reminders for various cancer screenings (including cervical cancer). Following a complete review of current reminder protocols, the SEHC's current health plan carrier (Anthem) reported that they had maximized these efforts. Staffing limitations prevented further exploration of this strategy with additional stakeholders, but it remains a priority for future attention.

Section 6. Cervical cancer incidence and prevention in racial and ethnic minority populations.

Three objectives have been identified as imperative components of Section 6:

1. Collection of data on cervical cancer incidence among racial and ethnic minorities
2. Identification of barriers to cervical cancer screening and treatment across different racial and ethnic minorities
3. Identification of best practices in public health education and outreach to racial and ethnic minorities

Description of Accomplishments:

In December, 2006 the Manager of the **Maine Comprehensive Cancer Control Program (MCCCP)** and the Director of the **Office of Minority Health** met with members of the Native American community to assess their cancer-related needs. Cervical cancer and the need for HPV vaccination for young girls were part of this discussion. Tribal representatives reported that their communities were aware of the risk of cervical cancer and that efforts were already underway to provide further education to community members about the importance of vaccination.

Maine Breast and Cervical Health Program (MBCHP) contracts with 128 Primary Care Providers throughout Maine to provide breast and cervical cancer screening services to women eligible and enrolled in the Program. Over the 24-month reporting period, 5125 clients received a Pap test: the table below reports the race and ethnicity of these clients:

MBCHP Client Reported Race	Received Pap Test	Percent of Total Pap tests Received
White	4959	96.8%
Black	24	0.5%
Asian	40	0.8%
Pacific Islander	1	0.02%
American Indian	44	0.9%
Multi-Racial	42	0.8%
Unknown	15	0.3%
Total	5125	
MBCHP Client Reported Hispanic Origin		
Yes	72	1.4%
No	5053	98.6%

Of the 5125 clients that received a cervical cancer screening test, 15 women were subsequently diagnosed with a precancerous condition requiring treatment. Time duration from screening to diagnosis on average was 49.7 days [NBCCEDP standard 90 days], and time from diagnosis to start of treatment was 43.5 days [NBCCEDP standard 60 days]. All clients diagnosed with a cervical precancerous condition were assessed for eligibility, and if requested, were enrolled in the Breast & Cervical Cancer Prevention and Treatment Act (Maine Treatment Act) which provides full MaineCare coverage through the course of the cancer treatment.

In 2008 **Maine Cancer Registry** (MCR) was contacted by United South and Eastern Tribes (USET), a consortium of 24 federally recognized tribes including five located in Maine. USET sought collaboration to determine the rates of cancer among the American Indian (AI) populations. Maine was invited to be the pilot state with other Eastern and Southern states hopefully to follow. MCR submitted the protocol for review by the Maine CDC Institutional Review Board and received approval to move forward with linkage of our database with USET. The secure transfer of data was accomplished in June 2009. MCR has required USET to follow Maine CDC privacy rules and to share data with the cancer registry.

One goal of this collaboration is to reduce the number of misclassified American Indian cancer cases in MCR's database. Because of the small population size of each tribe, MCR anticipates that maximal aggregation of ages, diagnoses, and years of diagnosis would be necessary to develop a usable picture of the burden of cancer among Tribal members in Maine.

In 2010, the MCR director contacted the USET epidemiologist to check on progress. She had begun analyzing the data and requested help from the director who also put her in touch with two former MCR epidemiologists for technical assistance. None of the findings are ready for the public or for publication.

MCR has ongoing participation with the Indian Health Services (IHS) to increase identification of AI cancer cases in Maine, as do many other state cancer registries. As a result, in September 2008, the IHS in collaboration with the national CDC published a supplement to the journal

Cancer entitled “An Update on Cancer in American Indians and Alaska Natives, 1999 – 2004.” (*Cancer*, 2008; 113:1113-1273) Relevant chapters include “Methods for Improving Cancer Surveillance Data in AI/AN Populations” by Espey et al. and “Regional Differences in Cervical Cancer Incidence Among AI/AN, 1999-2004” by Becker et al.

Section 7. Geographic variation in cervical cancer rates.

The following table has been updated with four additional years of data (2004 -2007) to show cervical cancer incidence by county of residence. There is some geographic diversity. The same two counties (highlighted in pink below), Somerset and Washington, again had the highest incidence rates which were significantly higher than the rate for Maine as a whole.

Cervical Cancer Incidence Rates by County, Maine 1995-2007					
	Count	Population	Age- adjusted Rate	Lower 95% CI	Upper 95% CI
Androscoggin	59	699,624	8.1	6.2	10.5
Aroostook	40	490,956	7.5	5.3	10.3
Cumberland	131	1,783,812	6.8	5.7	8.1
Franklin	19	198,742	9.3	5.5	14.6
Hancock	34	344,013	8.8	6	12.4
Kennebec	72	792,340	8.4	6.6	10.6
Knox	19	263,735	6.5	3.8	10.2
Lincoln	19	225,019	8	4.7	12.7
Oxford	40	366,416	10	7.1	13.6
Penobscot	99	971,873	9.7	7.9	11.8
Piscataquis	8	115,056	6	2.5	12.3
Sagadahoc	11	234,610	4.5	2.2	8.1
Somerset	48	338,122	13.3	9.8	17.7
Waldo	32	243,450	12	8.2	17.1
Washington	34	224,966	13.4	9.2	18.9
York	87	1,264,508	6.4	5.1	7.9
Maine	752	8,557,242	8.1	7.6	8.8
Notes: Rates are per 100,000 and age-adjusted to the 2000 US Std Population. Locations with statistically higher rates than the state are highlighted. Data source: Maine Cancer Registry, Maine CDC, DHHS, 2010.					

MCR also now reports cancer data based on the eight Public Health Districts. The two data tables below each report on four years: 2000 – 2003 and 2004 – 2007. Note: Washington

County is part of the Downeast district, with Hancock County. Somerset County is included in the Central Maine district, with Kennebec County.

Cervical Cancer Incidence by Public Health District, Maine 2000-2003					
	Count	Population	Age-adjusted Rate	Lower 95% CI	Upper 95% CI
Aroostook	13	149,537	8.5	4.4	14.8
Cumberland	35	553,693	5.7	4	8
York	28	397,079	6.4	4.3	9.3
Downeast	26	174,830	13.7	8.9	20.3
Central	36	458,631	7.5	5.2	10.4
Penquis	36	333,795	10.2	7.2	14.2
Western	30	278,267	10.1	6.8	14.5
Midcoast	12	300,489	3.4	1.7	6
Maine	216	2,646,321	7.5	6.5	8.6
Rates are per 100,000 and age-adjusted to the 2000 US Std Population. Locations with statistically higher rates than the state are highlighted. Data source: Maine Cancer Registry, Maine CDC, DHHS, 2010.					

In the table above, Downeast has the highest district incidence of cervical cancer for the four years 2000 – 2003. It is significantly higher than the incidence for Maine as a whole. In the table below which combines the four years from 2004 – 2007, the Downeast rate has decreased, and is no longer significantly higher than Maine. Because of the small population size of some counties and the now low incidence of cervical cancer, we would not expect to be able to detect intercounty differences.

Cervical Cancer Incidence by Public Health District, Maine 2004-2007					
	Count	Population	Age-adjusted Rate	Lower 95% CI	Upper 95% CI
Aroostook	7	147,778	3.5	1.4	7.8
Cumberland	50	562,937	8.7	6.4	11.5
York	28	411,037	6.5	4.3	9.5
Downeast	16	175,488	7.2	4.1	12.1
Central	37	466,145	7.4	5.1	10.2
Penquis	27	336,470	7.4	4.8	10.8
Western	24	281,568	7.7	4.9	11.6
Midcoast	24	306,174	7.9	5	11.8
Maine	213	2,687,597	7.4	6.4	8.5
Rates are per 100,000 and age-adjusted to the 2000 US Std Population. Data source: Maine Cancer Registry, Maine CDC, DHHS, 2010.					

The medical director of the Maine Cancer Registry was involved in a writing project based at National Center for Disease Control and Prevention to assess the burden of HPV-associated cancers in the United States. With others she is a co-author of “Burden of Cervical Cancer in the United States, 1998-2003,” (*Cancer*, 2008; 113(10):2855-2864). There are no more recent publications on cervical cancer from the Maine CDC staff.