

# Data Reports: They Can Always Get What They Want

(But do they get what they need?)

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## Background

Central cancer registries have been criticized for not providing timely data to address cancer control efforts. The Massachusetts Cancer Registry (MCR) is experimenting with releasing preliminary data.

## Purpose

To provide preliminary 2013 cancer incidence data as well as trend data, incidence (2003-2013) and mortality (2003-2014) for four major cancers in Massachusetts. The trends report was a collaborative effort between the Massachusetts Cancer Registry (MCR), the Behavioral Risk Factor Surveillance System (BRFSS), the Massachusetts Comprehensive Cancer Prevention and Control Network (MCCPCN), the Women's Health Network Care Coordination Program (WHNCCP) and the Massachusetts Tobacco Cessation and Prevention Program (MTCPP) to provide within a single source the most recent available data on trends and program information for the following four major types of cancer: prostate, female breast, bronchus and lung, and colorectal.

### Data Brief:

**Trends in Cancer Incidence (2003-2013) and Mortality (2003-2014) for Four Major Cancers**

## Methods

Cancer incidence and mortality trends were analyzed using Joinpoint regression. The BRFSS provided prevalence, expressed as the proportion of the population found to have some factor of interest (such as screening or smoking).

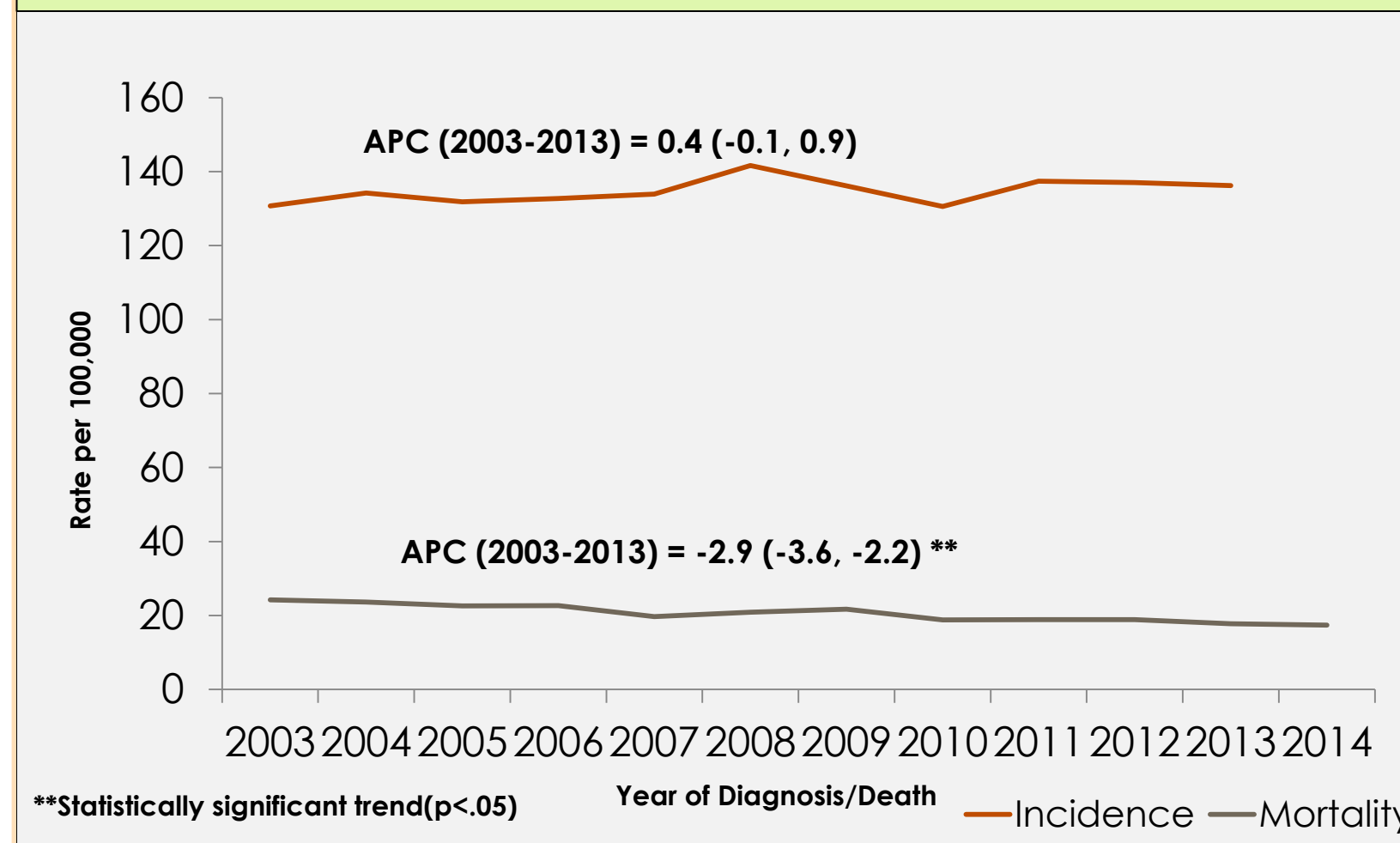
## Results

Based on incidence 2003-2013 (2013 preliminary) and mortality 2003-2014 (2014 preliminary):

- Incidence of prostate, bronchus and lung, and colorectal cancer dropped.
- Breast cancer incidence among all women combined remained stable.
- Death rate for prostate, female breast, bronchus and lung, and colorectal cancer have all dropped.
- Report also included information about health disparities, screening procedures, cancer-related behaviors and efforts by Massachusetts Department of Public Health and its partners to decrease incidence and likelihood of death from these four major cancers.

## Example of Report Contents – Female Breast Cancer

### Invasive Breast Cancer Incidence (2003-2013) and Mortality Rates\* (2003-2014) among Massachusetts Females

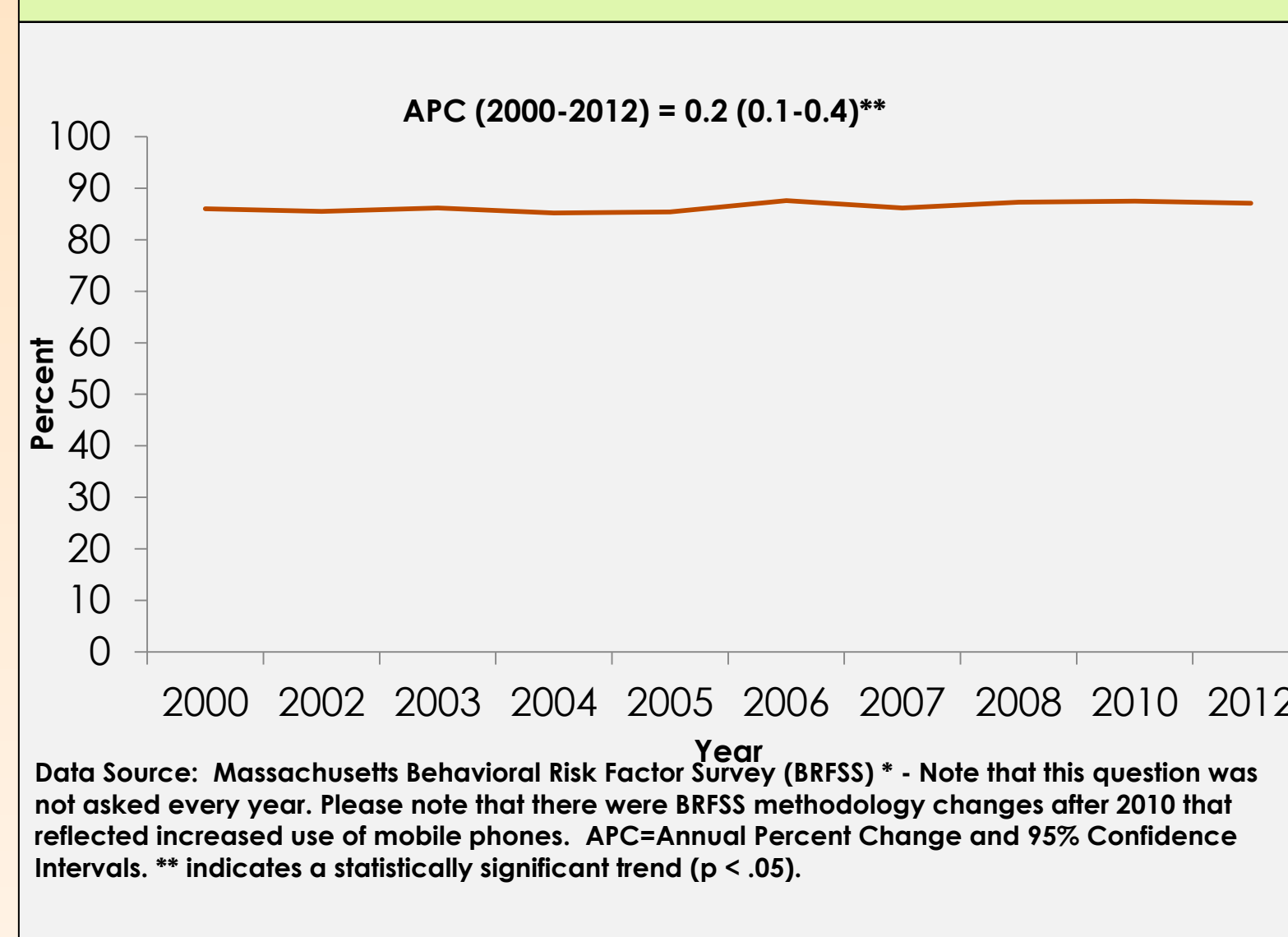


The incidence rate for invasive breast cancer for all women did not change significantly from 2003 to 2013.

The mortality rate for all women dropped significantly by 2.9% per year from 24.3 per 100,000 in 2003 to 18.7 per 100,000 in 2014.

The percentage of women age 50 and older who reported having a mammogram during the previous two years increased from 86.1% in 2000 to 87.1% in 2012 – a significantly increasing trend of 0.2% per year. The screening rate in Massachusetts for women aged 50 and older is 13% higher than the rate nationally.

### Self-Reported Mammogram During the Previous Two Years Among Massachusetts Females Age 50+, 2000-2012\*



## Massachusetts Department of Public Health Program Initiatives Selected Initiatives for Breast Cancer

The Women's Health Network Care Coordination Program:

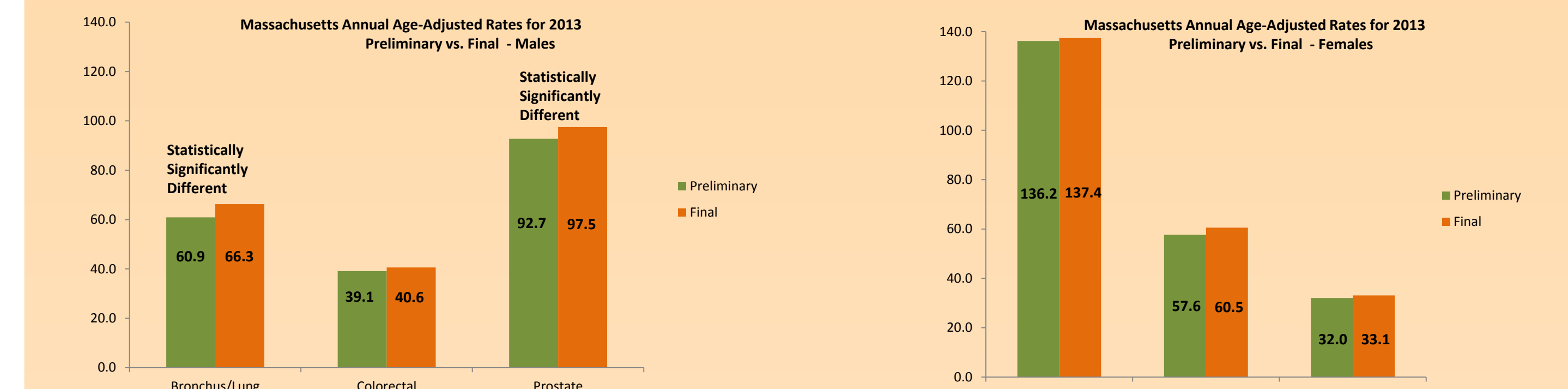
- Funded 11 clinical sites in community health centers to provide education and patient navigation for screening of breast, cervical and colorectal cancers.
- Developed and promoted the *Can We Talk?* materials to help empower women to feel more comfortable discussing breast and cervical cancer screening with their healthcare providers.
- Implemented the Community Based Organization Outreach, Education and Linkage project to link those most in need to a medical home and screening services.



## Questions

1. Was early release of 2013 incidence rates misleading?
2. Did we gain anything by releasing preliminary rates?

### Comparison of Preliminary vs. Final Incidence Rates for Males and Females - 2013



### Joinpoint Regression Best Fit - Annual Percent Change Using Preliminary and Final Rates

CANCER TYPE	Preliminary		Final	
	Segments	APC	Segments	APC
Bronchus & Lung (males)	2003-2012	-2.06^	2003-2005	2.33
	2012-2013	-16.09	2005-2013	-3.04^
Colorectal (males)	2003-2013	-5.37^	2003-2010	-5.74^
			2010-2013	-3.47^
Prostate (males)	2003-2010	-1.64	2003-2008	0.59
	2010-2013	-15.22^	2008-2013	-9.68^
Breast (females)	2003-2013	0.36	2003-2013	0.40
Lung (females)	2003-2008	0.76	2003-2005	3.39
	2008-2013	-2.56^	2005-2013	-1.28^
Colorectal (females)	2003-2013	-4.04^	2003-2013	3.90^

^ Indicates a statistically significant trend (p<.05)

➢ In general, preliminary model overstated the magnitude, but not the direction of trends.  
➢ Use of 'final' rates changed the underlying model for all but female breast and female colorectal cancer.

## Did they get what they needed?

- Massachusetts Executive Office of Health and Human Services liked the report; the result was an interview with Boston Public Radio WBUR.
- Between December 2015 – April 2016 there were 297 MCR web page hits on this report.
- MCCPCN used this report for the following: updating cancer burden in Massachusetts; preparing for the updated Cancer Control Plan; Performance Measures Tracking; program evaluation and design.
- Release of preliminary data contributes to a favorable public perception.



## For the Future

- Include Delay Adjustment Factors to more accurately access current trends.
- Include additional cancer sites.



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