

Health of Boston Special Report: Cancer Among City of Boston Residents, 1999-2013

Board of Health
Boston Public Health Commission
September 12, 2018

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Mary Bovenzi, Chronic Disease Prevention and Control



Boston Public Health Commission

City of Boston's local health agency:

The mission of the Boston Public Health Commission is to protect, preserve, and promote the health and well-being of all Boston residents, particularly the most vulnerable.

Research and Evaluation Office: Publishes biennial Health of Boston reports. Provides research, public health surveillance, analysis and interpretation of public health data, and program evaluation.

Chronic Disease Prevention and Control program: Focuses on primary and secondary prevention of chronic diseases like obesity, diabetes, cancer and heart disease by promoting healthy eating, active living and early detection/screening



Health of Boston Special Report: Cancer Among City of Boston Residents, 1999-2013



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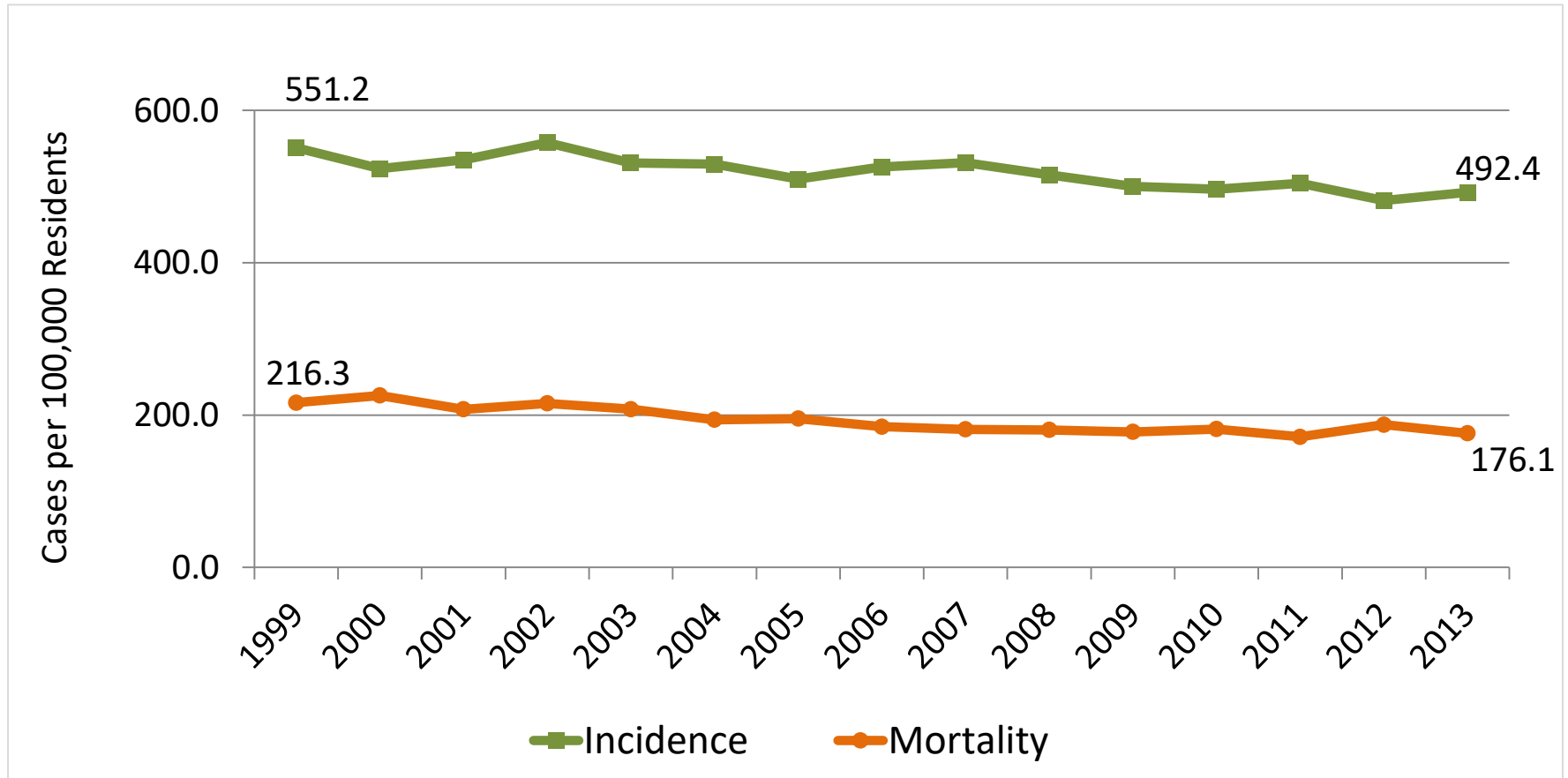
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All Cancer Incidence and Mortality by Year, 1999-2013



† Age-adjusted rates per 100,000 residents

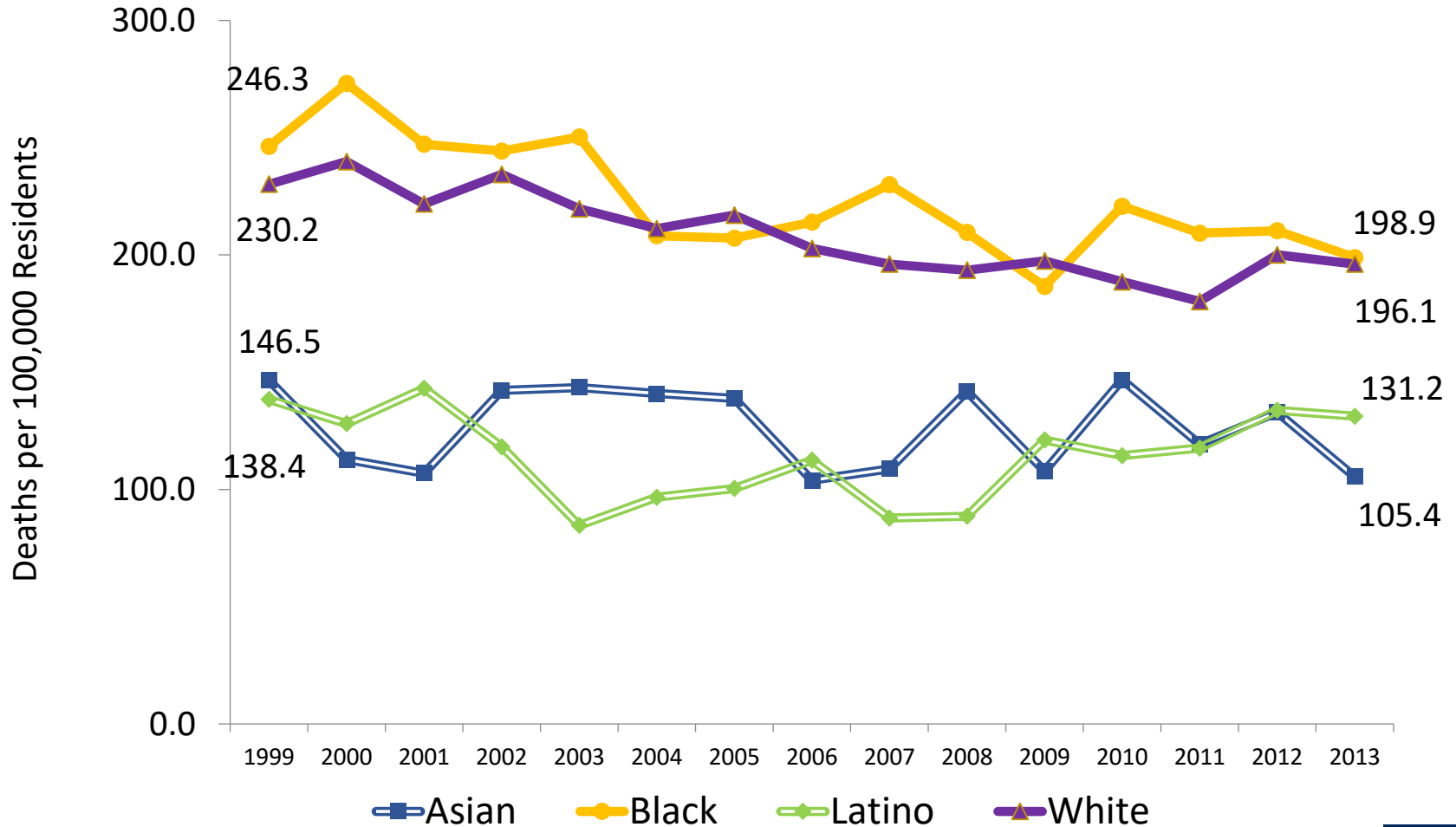
NOTE: Solid lines represent linear change over time ($p < 0.05$) I-11%, M-22%, M9915-27%

DATA SOURCES: Boston Resident Deaths, Massachusetts Department of Public Health; Cancer Registry, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



All Cancer Mortality by Race/Ethnicity and Year, 1999-2013



†Age-adjusted rates per 100,000 residents

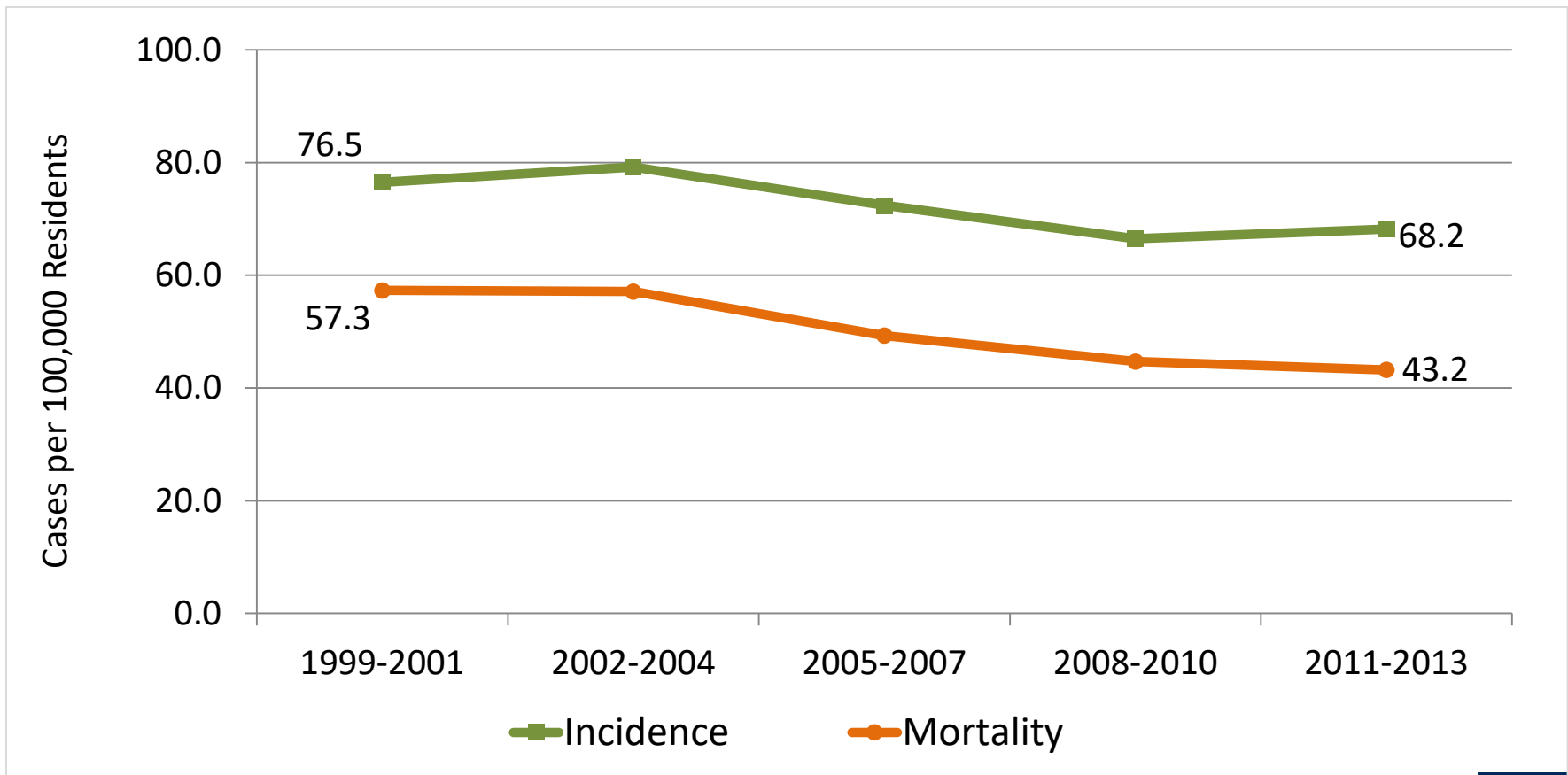
Solid lines represent linear change over time ($p < 0.05$) B-23% W-21% 9915 B -30% 9915 W -29%

DATA SOURCE: Boston Resident Deaths, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Lung Cancer Incidence and Mortality by 3-Year Time Periods, 1999-2013



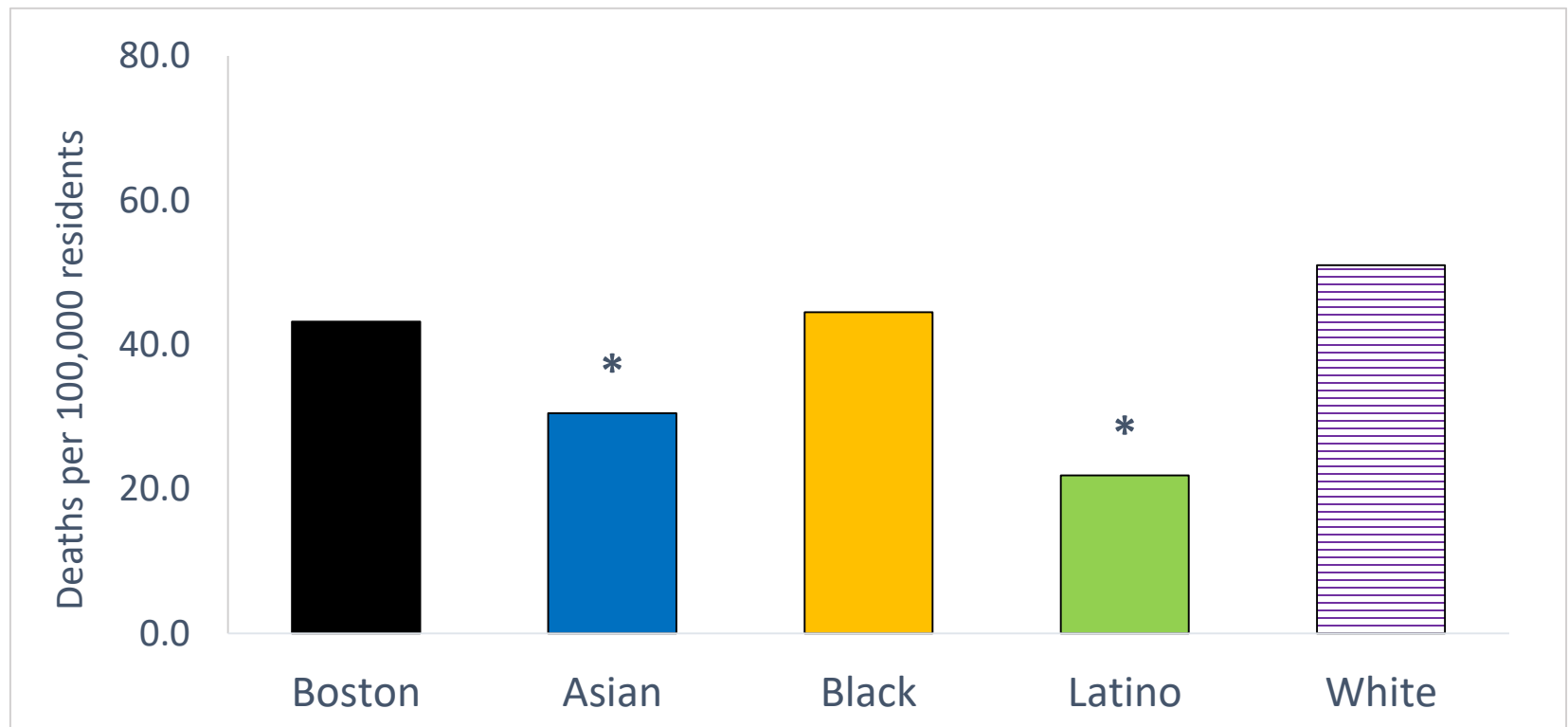
† Average Annual Age-adjusted rates per 100,000 residents

NOTE: Solid lines represent linear change over time ($p < 0.05$) I-15%, M-28%, M9915-37%

DATA SOURCES: Boston Resident Deaths, Massachusetts Department of Public Health; Cancer Registry, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

Lung Cancer Mortality by Race/Ethnicity, 2011-2013 combined



*Statistically significant difference when comparisons are made between racial/ethnic groups

A-40% L-57% 1415 B-30% 1415 L-63%

† Average Annual Age-adjusted rates per 100,000 residents

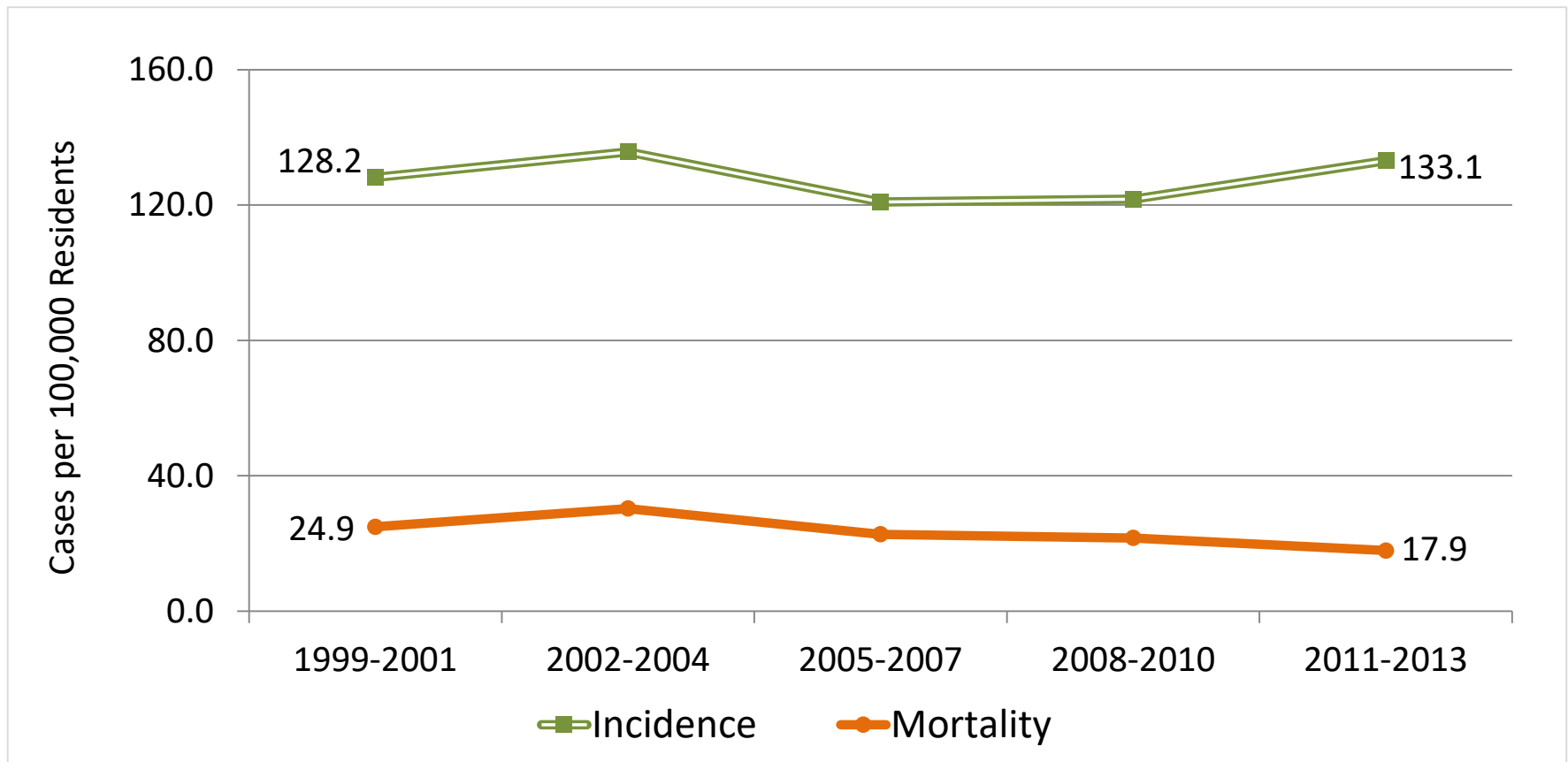
NOTE: Bars with patterns indicate the reference group within each selected indicator.

DATA SOURCE Boston resident deaths, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Female Breast Cancer Incidence and Mortality by 3-Year Time Periods, 1999-2013



† Average Annual Age-adjusted rates per 100,000 residents

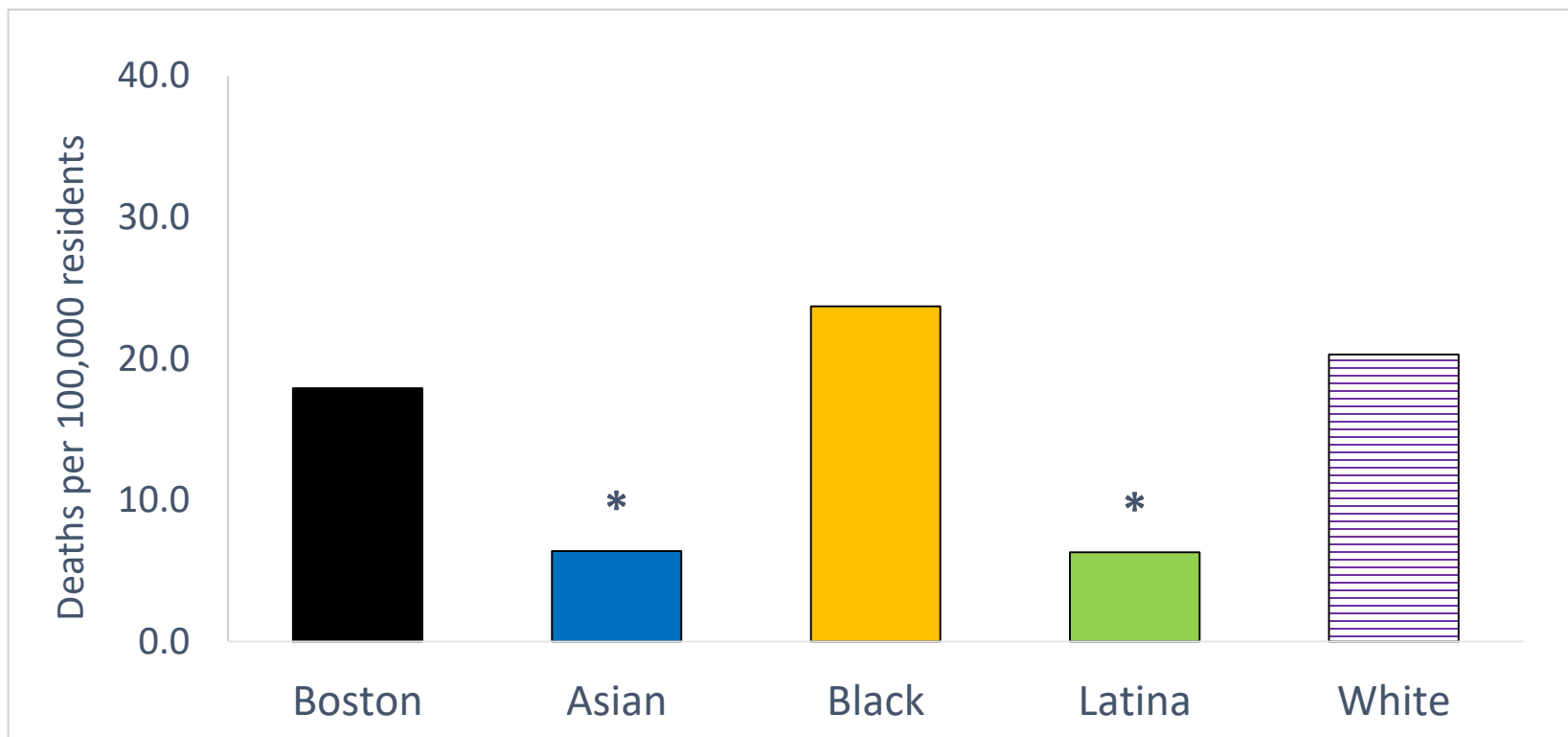
NOTE: Solid lines represent linear change over time ($p < 0.05$) M-32%, M9915-41%

DATA SOURCES: Boston Resident Deaths, Massachusetts Department of Public Health; Cancer Registry, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Female Breast Cancer Mortality by Race/Ethnicity, 2011-2013 combined



*Statistically significant difference when comparisons are made between racial/ethnic groups

A-69% L-69% 1415 L-65%

† Average Annual Age-adjusted rates per 100,000 residents

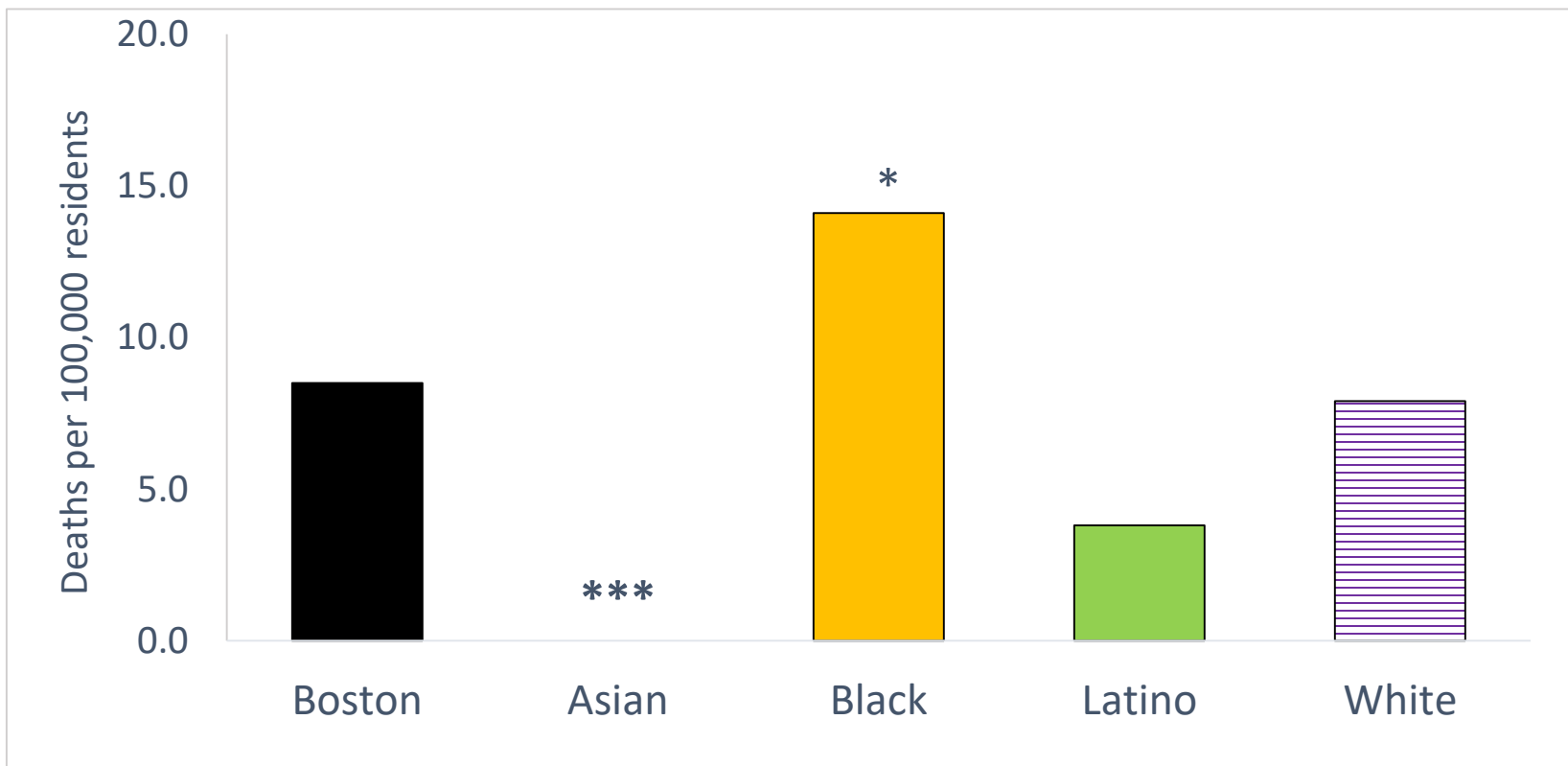
NOTE: Bars with patterns indicate the reference group within each selected indicator.

DATA SOURCE Boston resident deaths, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Premature (under age 65) Female Breast Cancer Mortality, 2011-2013 combined



***Data for Asian residents not shown due to sample limitations

* Statistically significant difference when comparisons are made between racial/ethnic groups B+78%>W 9910+78%

† Average Annual Age-adjusted rates per 100,000 residents

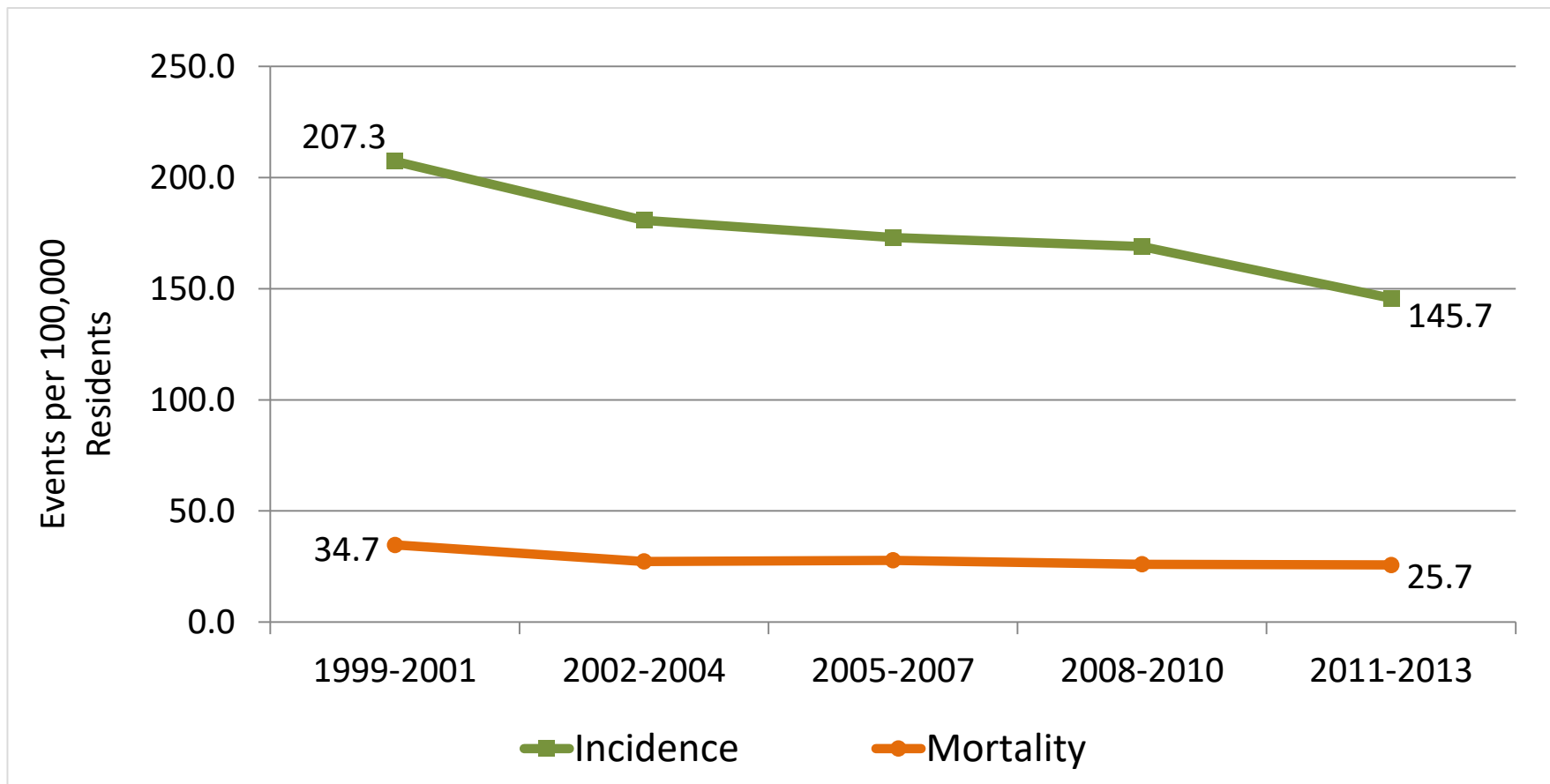
NOTE: Bars with patterns indicate the reference group within each selected indicator.

DATA SOURCE Boston resident deaths, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Prostate Cancer Incidence and Mortality by 3-Year Time Periods, 1999-2013



† Average Annual Age-adjusted rates per 100,000 residents

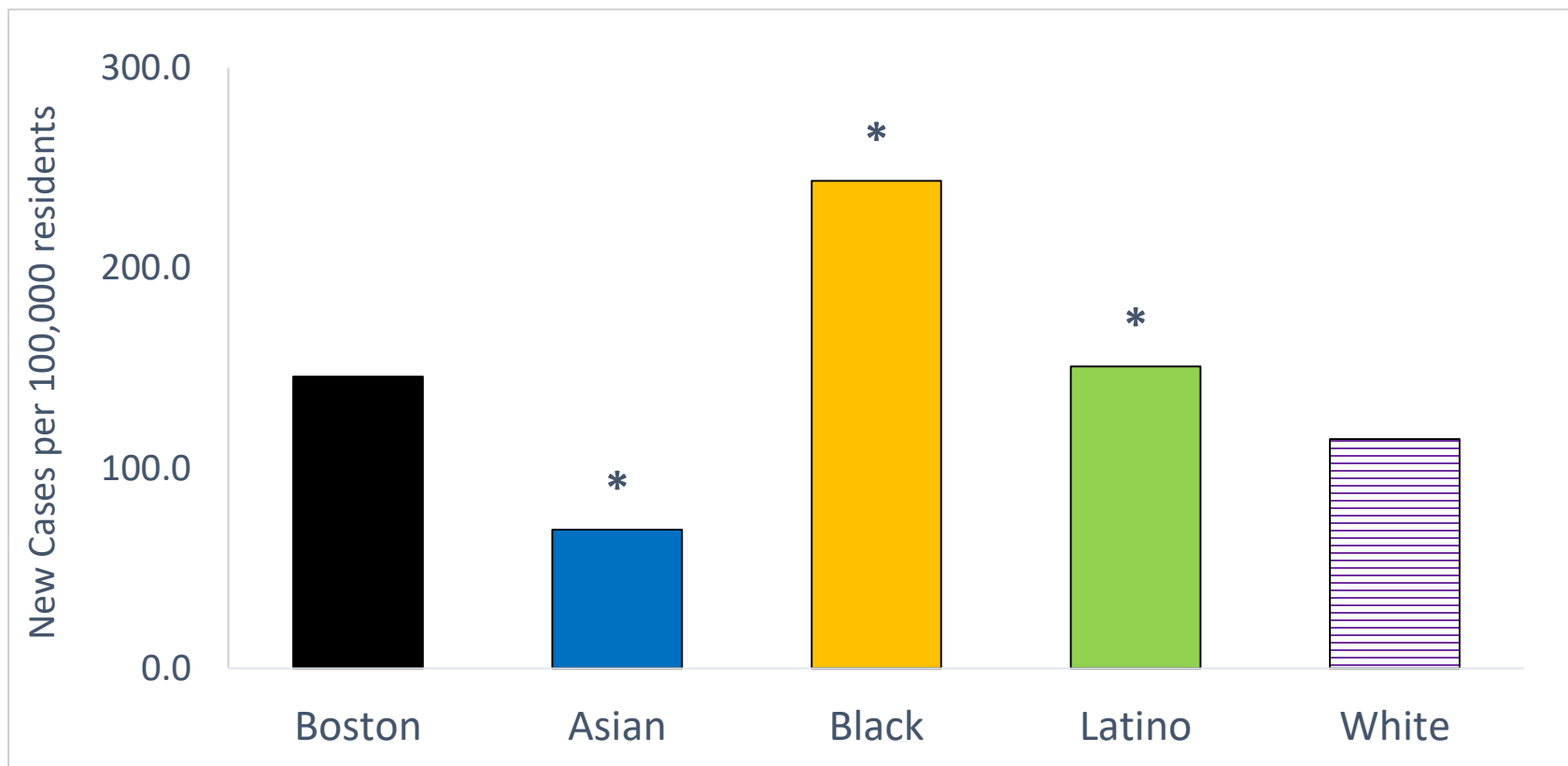
NOTE: Solid lines represent linear change over time ($p < 0.05$) I-27%, M-24%, M9915-30%

DATA SOURCES: Boston Resident Deaths, Massachusetts Department of Public Health; Cancer Registry, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Prostate Cancer Incidence by Race/Ethnicity, 2011-2013 combined



*Statistically significant difference when comparisons are made between racial/ethnic groups

A-39% B +113% L +32%

† Average Annual Age-adjusted rates per 100,000 residents

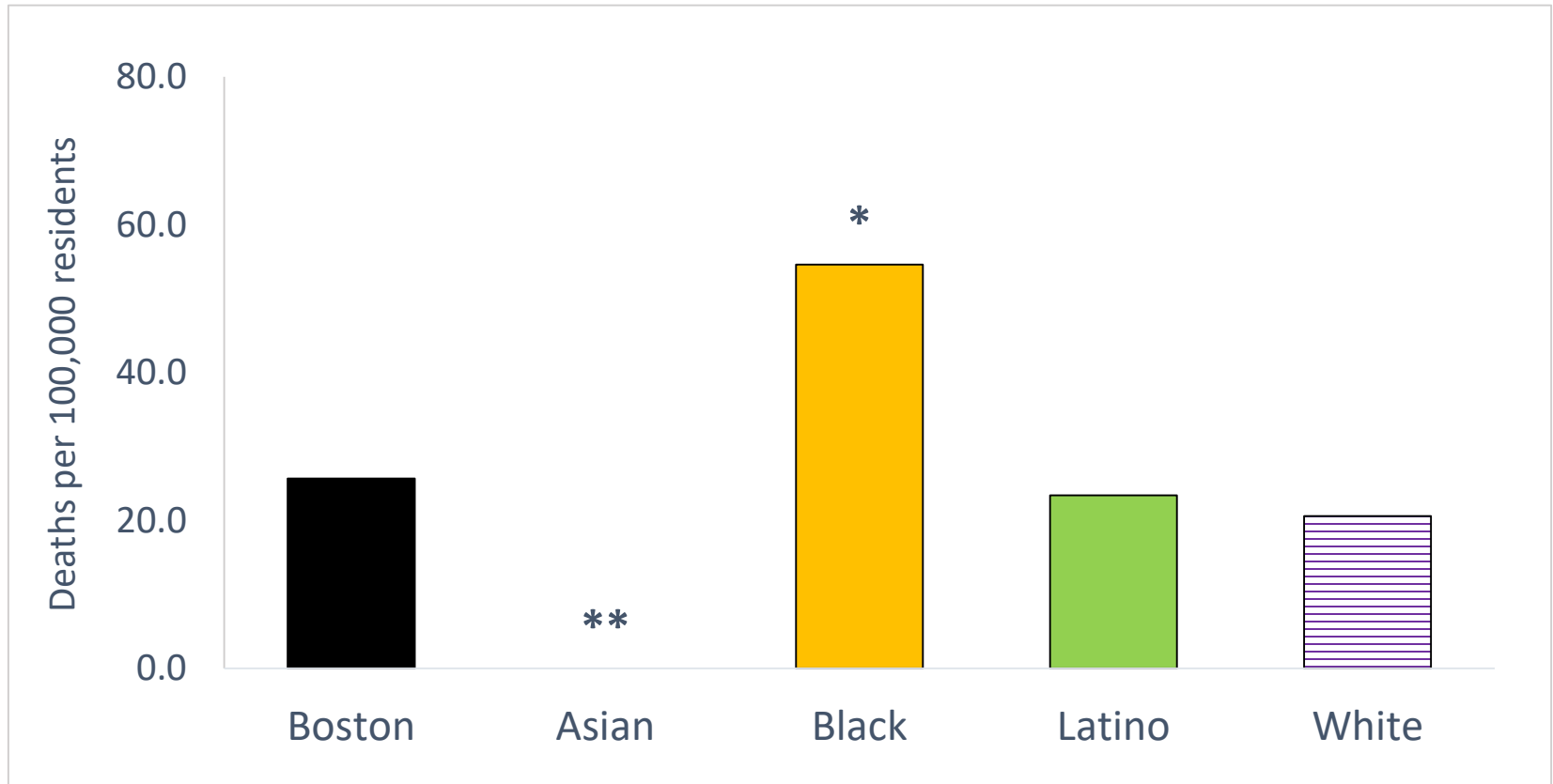
NOTE: Bars with patterns indicate the reference group within each selected indicator.

DATA SOURCE Boston resident deaths, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Prostate Cancer Mortality by Race/Ethnicity, 2011-2013 combined



*Statistically significant difference when comparisons are made between racial/ethnic groups B +165% 1415 B +158%

**Data for Asian residents not shown due to sample limitations

† Average Annual Age-adjusted rates per 100,000 residents

NOTE: Bars with patterns indicate the reference group within each selected indicator.

DATA SOURCE Boston resident deaths, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



BPHC's cancer work plan framework

Looking at each cancer type:

- 1. Data/program review:** Identify priority population: Who in Boston disproportionately affected. Are there evidenced-based program recommendations and/or MA statewide goals for this cancer?
- 2. Gap analysis:** What's already happening in Boston through our partners to reach priority population? Where are the gaps that Public Health (BPHC) can play a role to fill?
- 3. Set goals & develop program:** Engage public and provider communities in the development of educational messaging, strategies, and advocacy components
- 4. Advised by new BPHC Cancer Advisory Group (CAG):** Provides oversight, community engagement, provider engagement and oncology specialty expertise.
 - CAG's 1st meeting will be on Sept 21st; 25-30 members including type-specific oncology specialists

Getting started: Prostate cancer snapshot

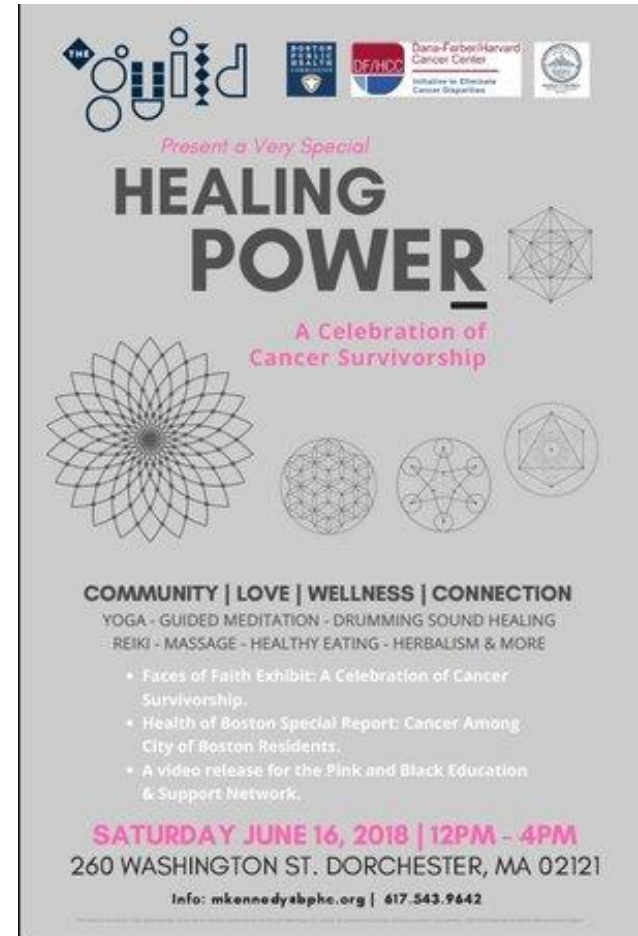
- Priority population:
 - High-risk men (African American men and men with a family history)
 - Family and community members that support men in their health and quality of life
- BPHC role:
 - Develop and support public messaging on prostate health, awareness of risk factors, screening recommendations, importance of shared decision making with providers
 - Support provider education through increasing awareness of prostate cancer early detection recommendations
 - Participate on *Mass DPH Comp Cancer Prevention and Control Network's* Prostate Cancer work group. BPHC's work plan will align with MA statewide goals
- Current work:
 - Spring/summer 2018: Focus groups with at-risk men and caregivers to develop public messaging
 - Fall 2018: CAG meets to advise on plan. Engage with providers to develop provider messaging. Develop public messages/materials & outreach plan

Breast Cancer snapshot

- Priority population
 - Non-white women, especially black women, experiencing the highest inequities in breast cancer outcomes
- BPHC role
 - Partner with organization & coalition already leading breast cancer work: *Boston Breast Cancer Equity Coalition* (BBCEC) on implementation of NIH-funded TRIP project (BMC, BWH, BIDMC, DFCI, MGH, Tufts)
 - Leverage BPHC's expertise in community engagement to support BBCEC work. Merge BPHC's *Pink and Black Education and Support Network* into BBCEC
- Current work
 - Co-lead BBCEC's community engagement work
 - Close out Pink & Black work plan and promote survivorship [video](#)
 - Continue working closely with partners on projects with joint goals

Future focus

- Plan to use framework to look at colorectal, lung and liver cancers in more depth
 - Prioritized Prostate and Breast because of BPHC staff expertise and existing partnership opportunities.
 - CAG will support prioritizing future work areas



THE GUILD **BOSTON HEALTH CENTER** **DF/HCC** Dana-Farber/Harvard Cancer Center Initiative to Elevate Cancer Survivorship

Present a Very Special
HEALING POWER
A Celebration of Cancer Survivorship

COMMUNITY | LOVE | WELLNESS | CONNECTION
YOGA - GUIDED MEDITATION - DRUMMING SOUND HEALING
REIKI - MASSAGE - HEALTHY EATING - HERBALISM & MORE

- Faces of Faith Exhibit: A Celebration of Cancer Survivorship.
- Health of Boston Special Report: Cancer Among City of Boston Residents.
- A video release for the Pink and Black Education & Support Network.

SATURDAY JUNE 16, 2018 | 12PM - 4PM
260 WASHINGTON ST. DORCHESTER, MA 02121
Info: mkennedyabphc.org | 617.543.9642

Questions? Thoughts? Ideas?

Thank you!

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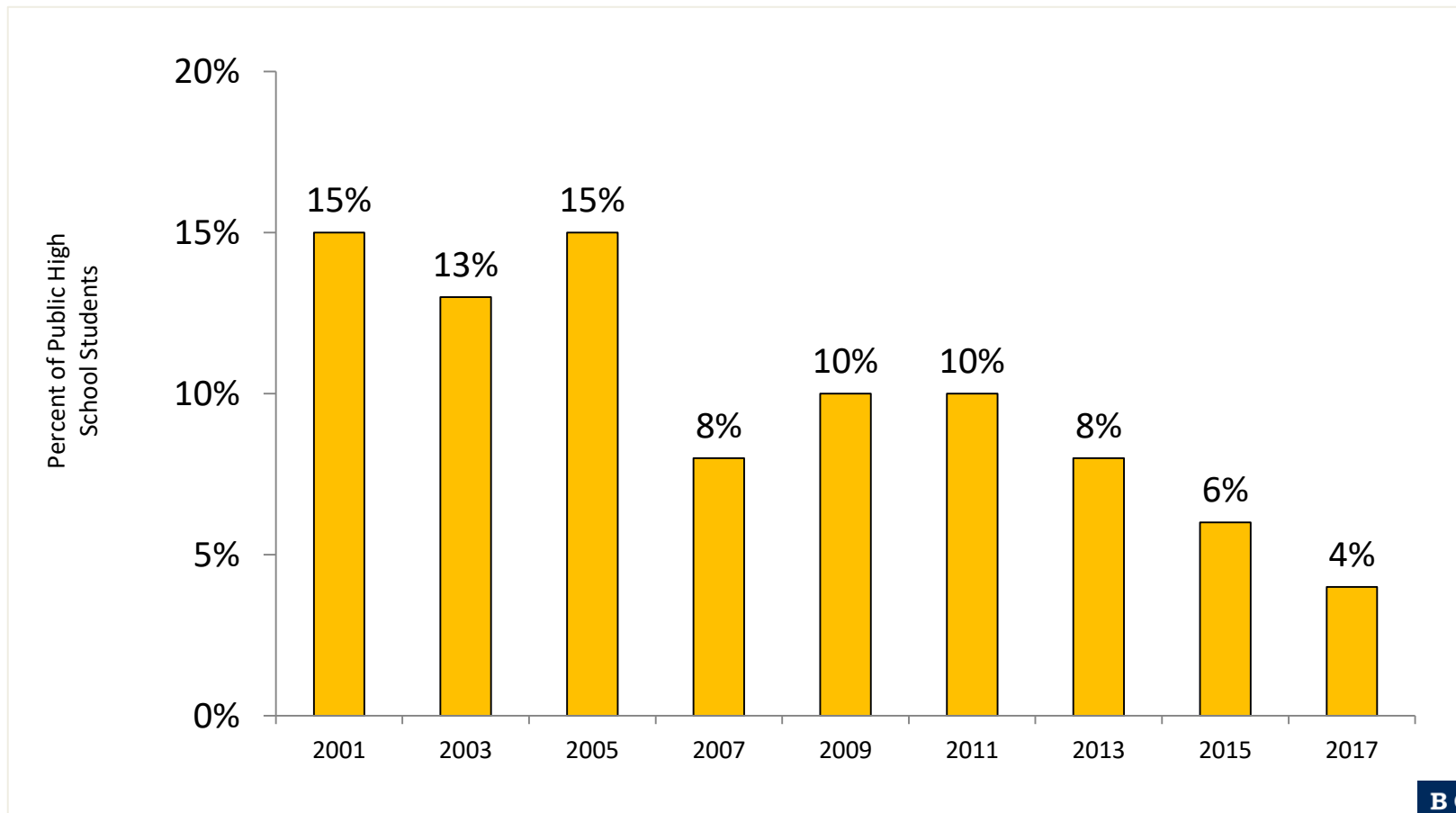
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and Control Division

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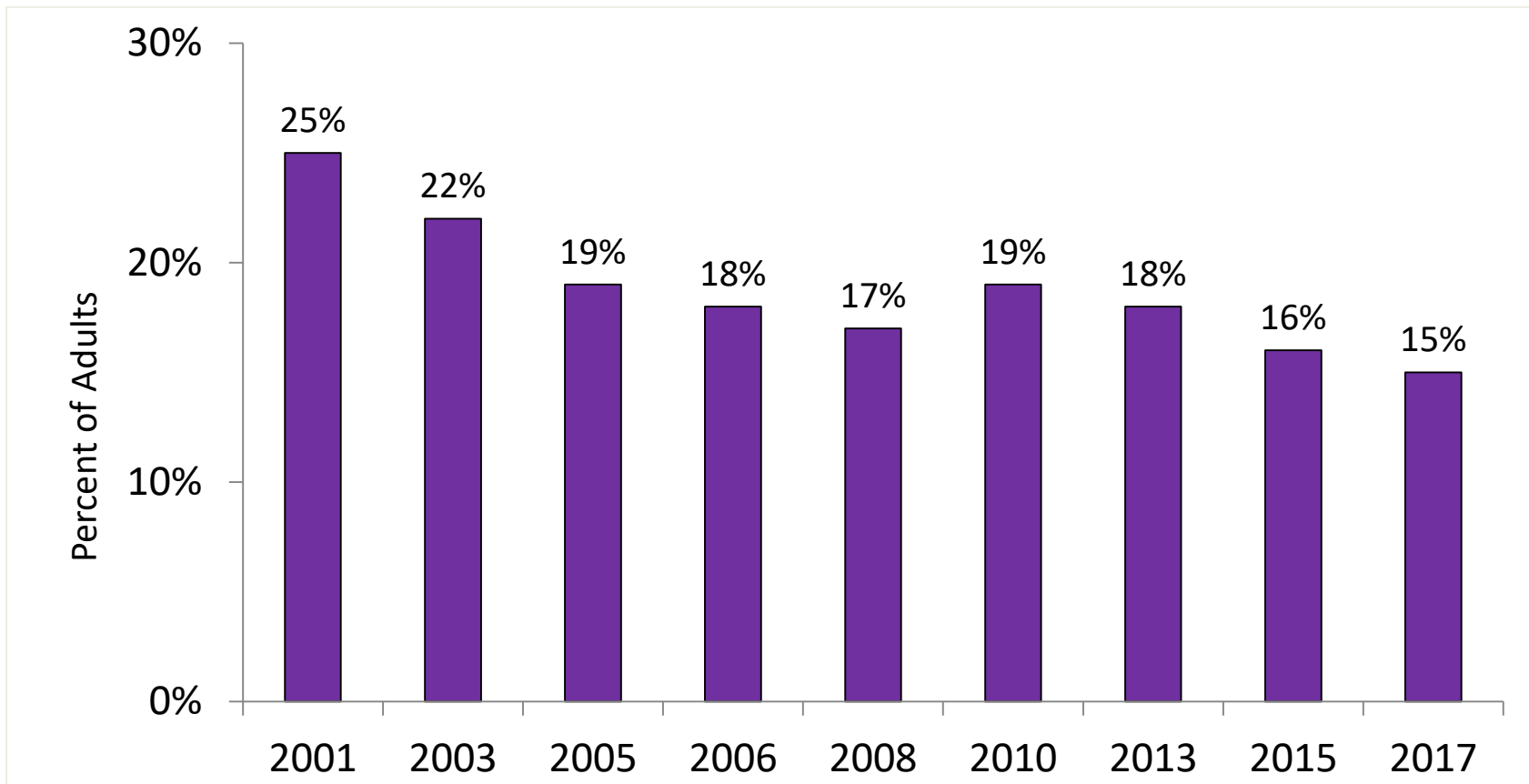


Public High School Students Who Smoke Cigarettes by Year



DATA SOURCE: Youth Risk Behavior Surveillance System (2001, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017),
Centers for Disease Control and Prevention
DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

Adults Who Smoke Cigarettes by Year



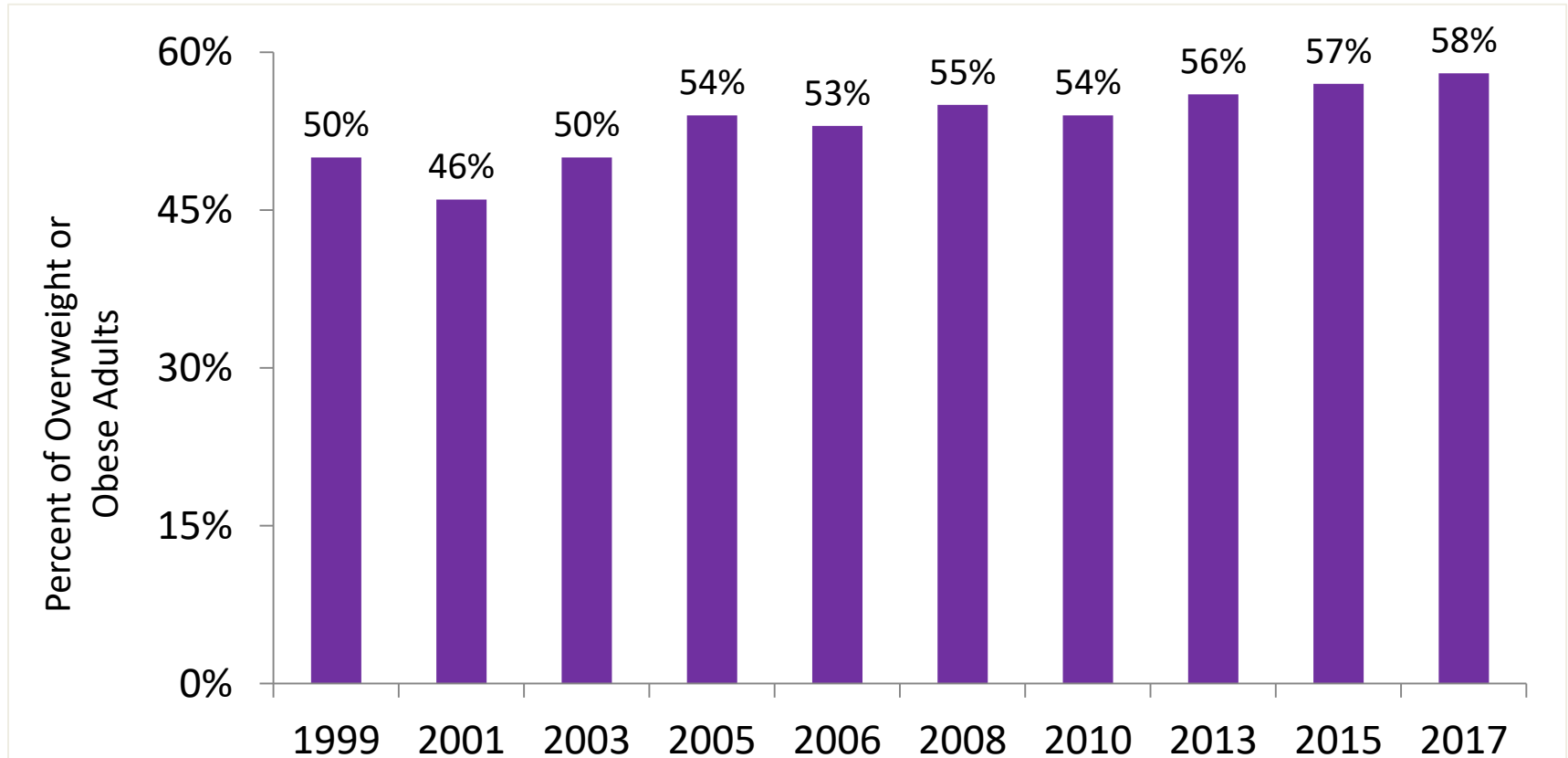
DATA SOURCE: Boston Behavioral Risk Factor Surveillance System (2001, 2003, 2005,2006, 2008,2010,2013, 2015, 2017),

Boston Public Health Commission

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



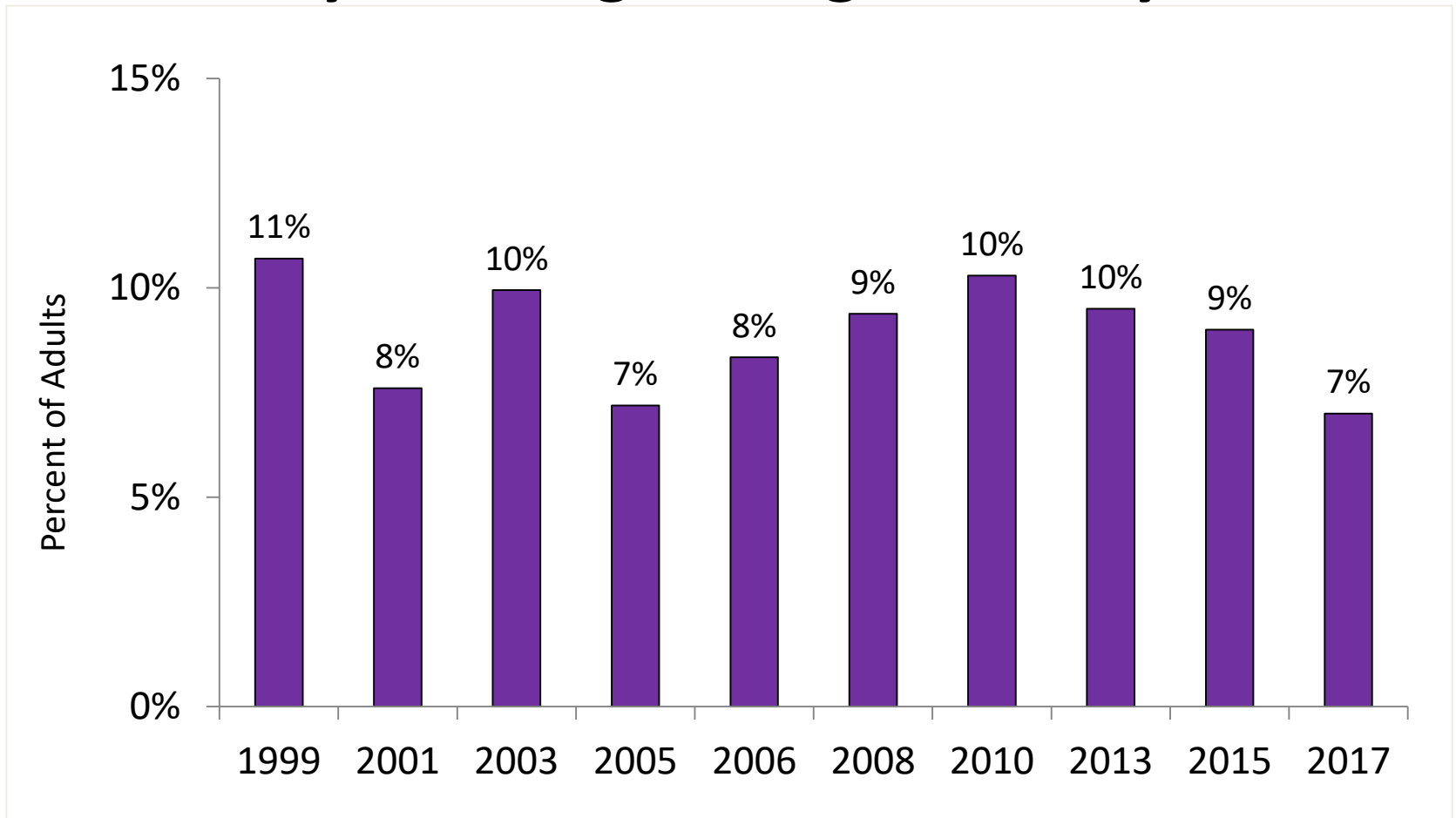
Overweight or Obese Adults by Year



DATA SOURCE: Boston Behavioral Risk Factor Surveillance System (2001, 2003, 2005, 2006, 2008, 2010, 2013, 2015, 2017), Boston Public Health Commission
DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



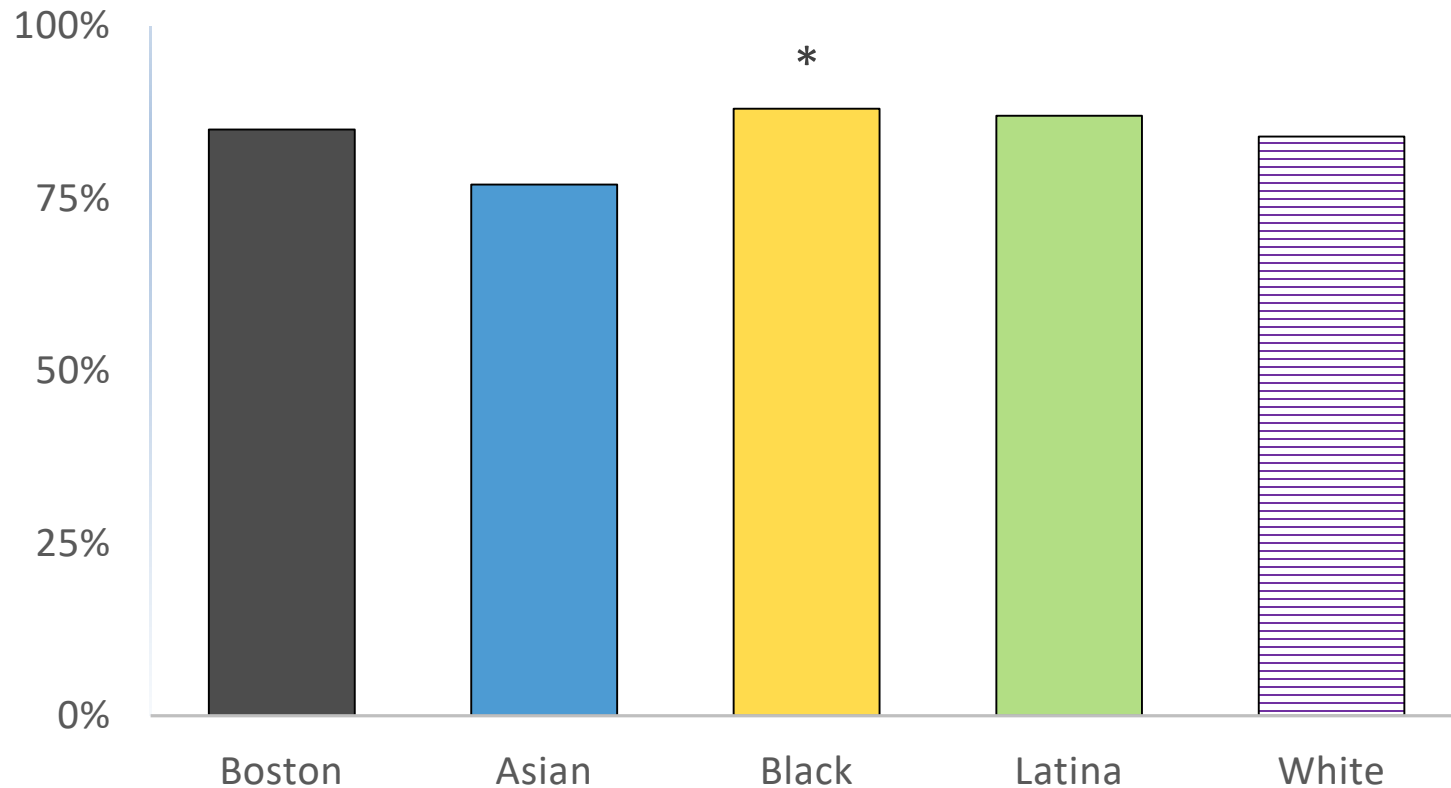
Heavy Drinking among Adults by Year



DATA SOURCE: Boston Behavioral Risk Factor Surveillance System (2001, 2003, 2005, 2006, 2008, 2010, 2013, 2015, 2017),
Boston Public Health Commission
DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Mammogram During Past 2 Years, Females Ages 40-74, by Race/Ethnicity, 2008, 2010, & 2013 combined



*Statistically significant difference when comparisons are made between racial/ethnic groups

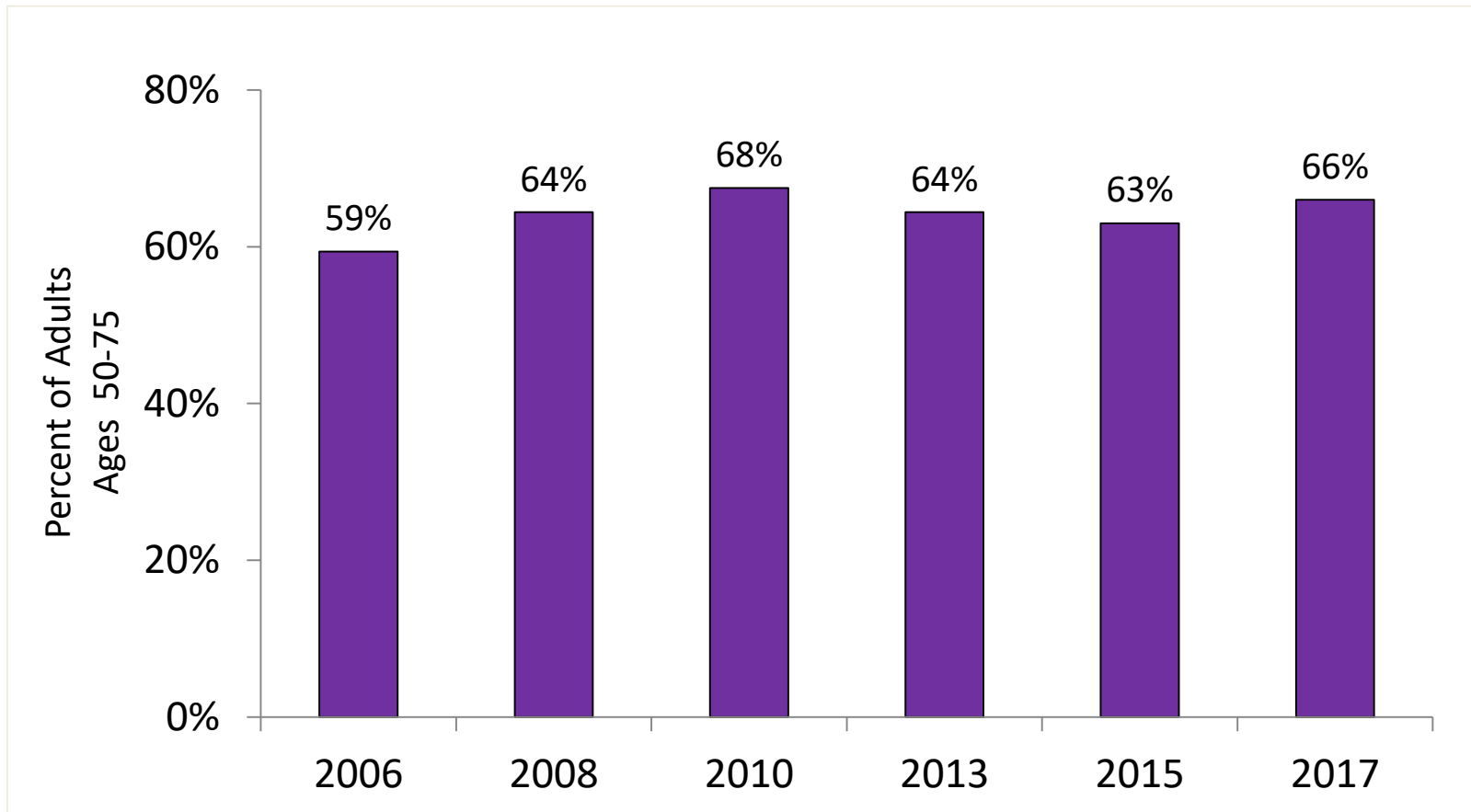
NOTE: Bars with patterns indicate the reference group within each selected indicator.

DATA SOURCE: Boston Behavioral Risk Factor Surveillance System (2008, 2010, 2013), Boston Public Health Commission

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Colonoscopy or Sigmoidoscopy, Ages 50-75, During the Past 5 Years by Year



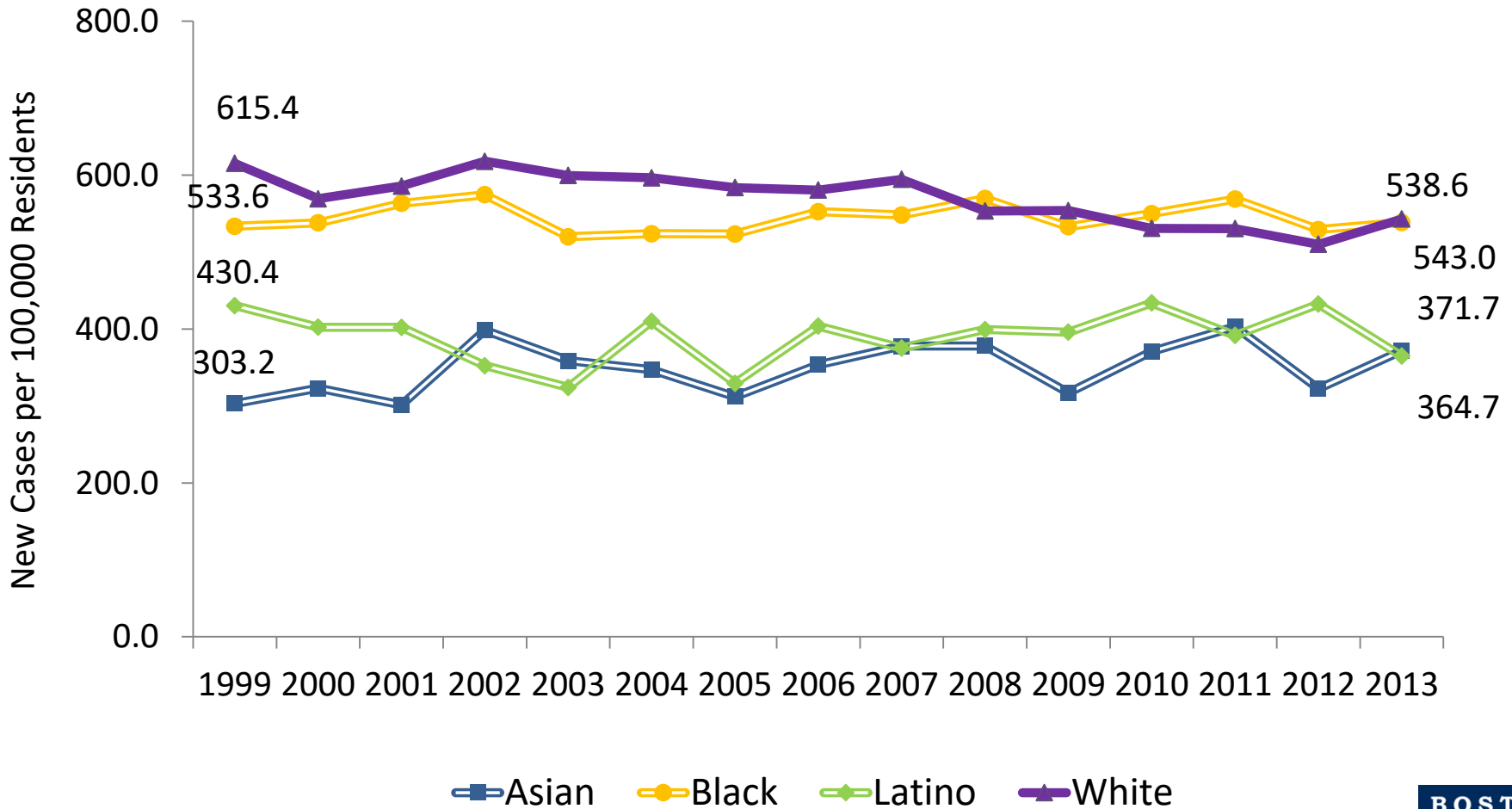
DATA SOURCE: Boston Behavioral Risk Factor Surveillance System (2006, 2008, 2010, 2013, 2015, 2017),

Boston Public Health Commission

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



All Cancer Incidence by Race/Ethnicity and Year, 1999-2013



†Age-adjusted rates per 100,000 residents

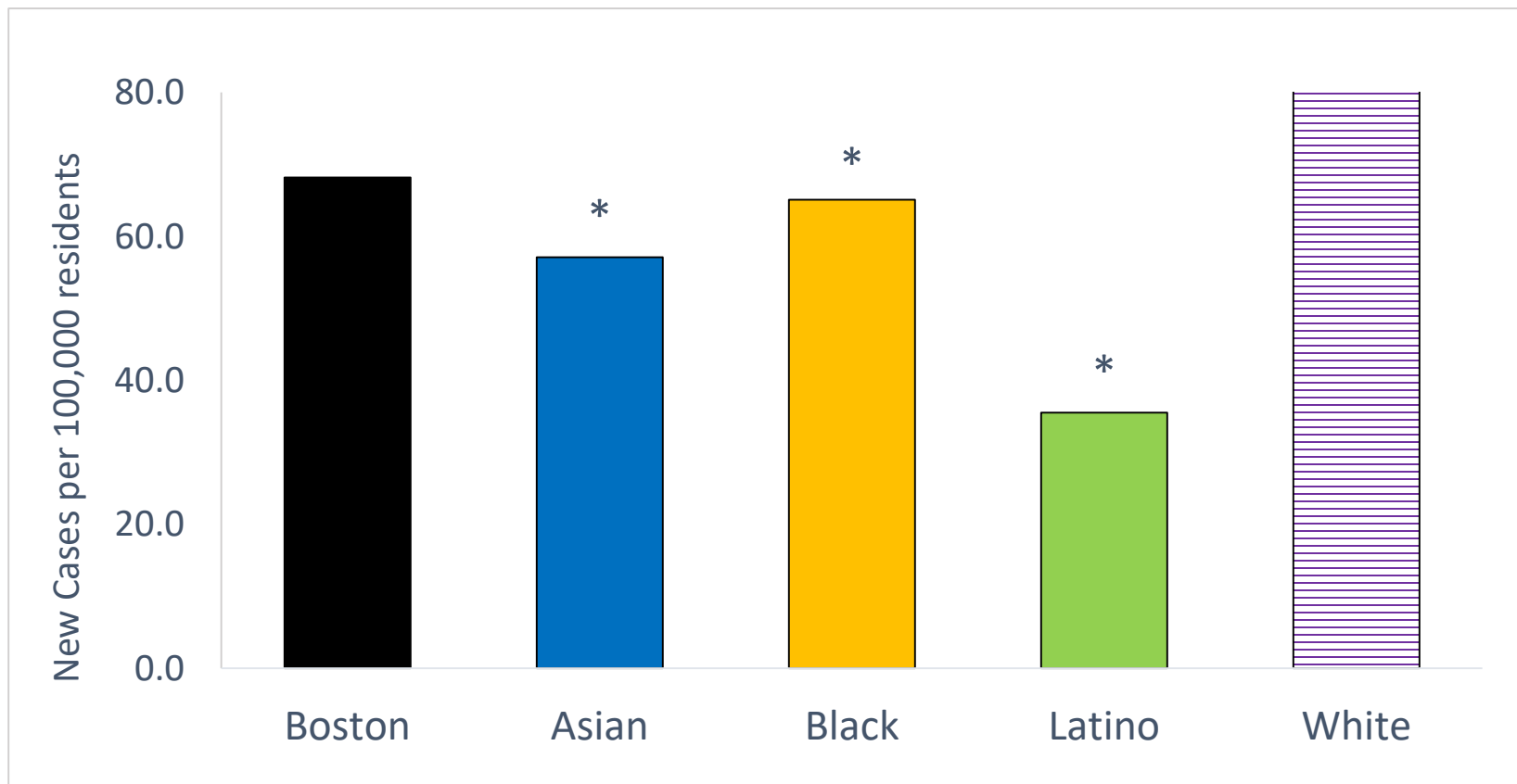
Solid lines represent linear change over time ($p < 0.05$) W-14%

DATA SOURCES: Cancer Registry, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Lung Cancer Incidence by Race/Ethnicity, 2011-2013 combined



*Statistically significant difference when comparisons are made between racial/ethnic groups

A-30% B-20% L-57%

† Average Annual Age-adjusted rates per 100,000 residents

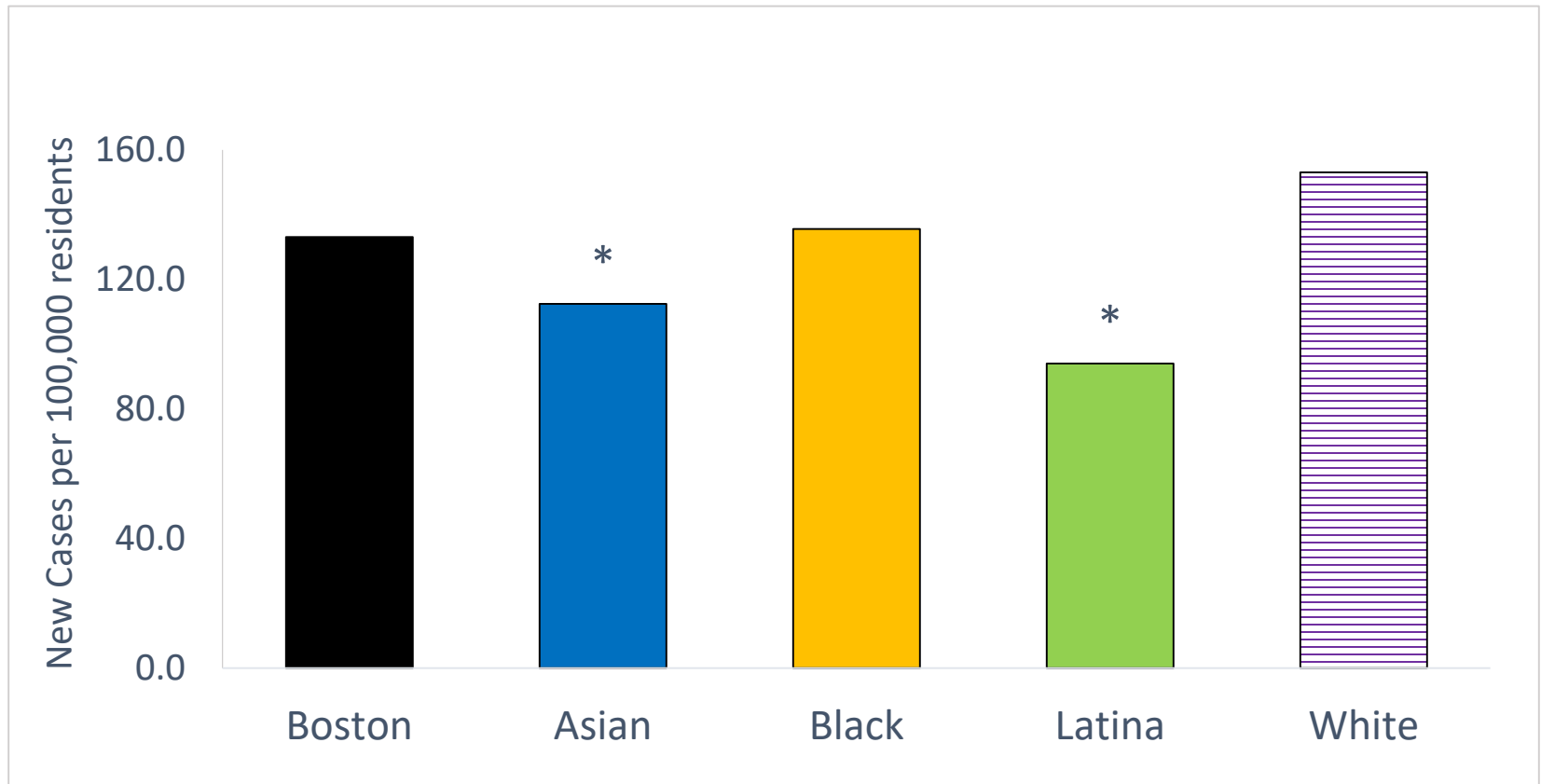
NOTE: Bars with patterns indicate the reference group within each selected indicator.

DATA SOURCES: Cancer Registry, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Female Breast Cancer Incidence by Race/Ethnicity, 2011-2013 combined



*Statistically significant difference when comparisons are made between racial/ethnic groups

A-28% L-39%

† Average Annual Age-adjusted rates per 100,000 residents

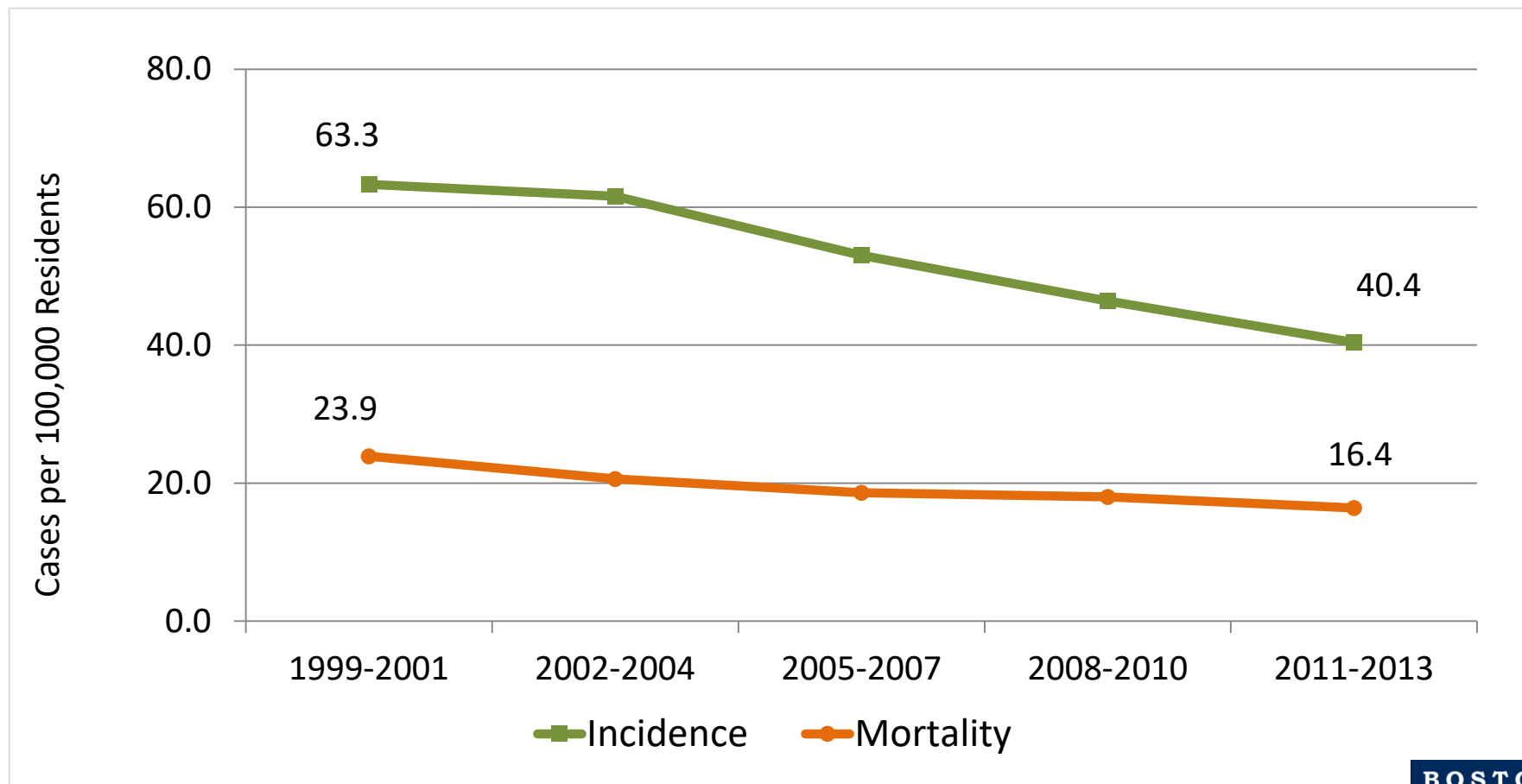
NOTE: Bars with patterns indicate the reference group within each selected indicator.

DATA SOURCES: Cancer Registry, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Colorectal Cancer Incidence and Mortality by 3-Year Time Periods, 1999-2013



† Average Annual Age-adjusted rates per 100,000 residents

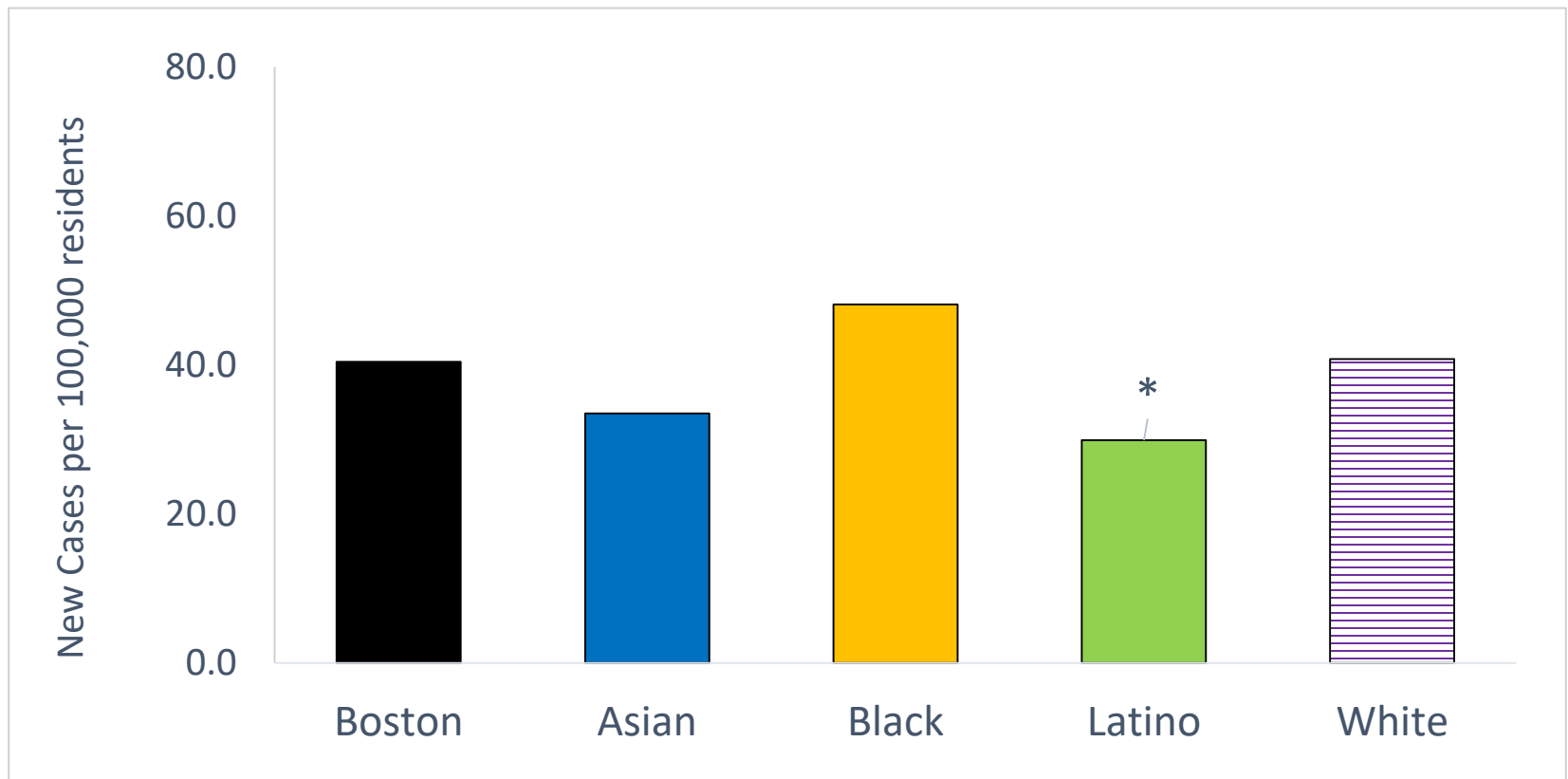
NOTE: Solid lines represent linear change over time ($p < 0.05$) I-37%, M-31%, M9915-43%

DATA SOURCES: Boston Resident Deaths, Massachusetts Department of Public Health; Cancer Registry, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Colorectal Cancer Incidence by Race/Ethnicity, 2011-2013 combined



*Statistically significant difference when comparisons are made between racial/ethnic groups L-27%

† Average Annual Age-adjusted rates per 100,000 residents

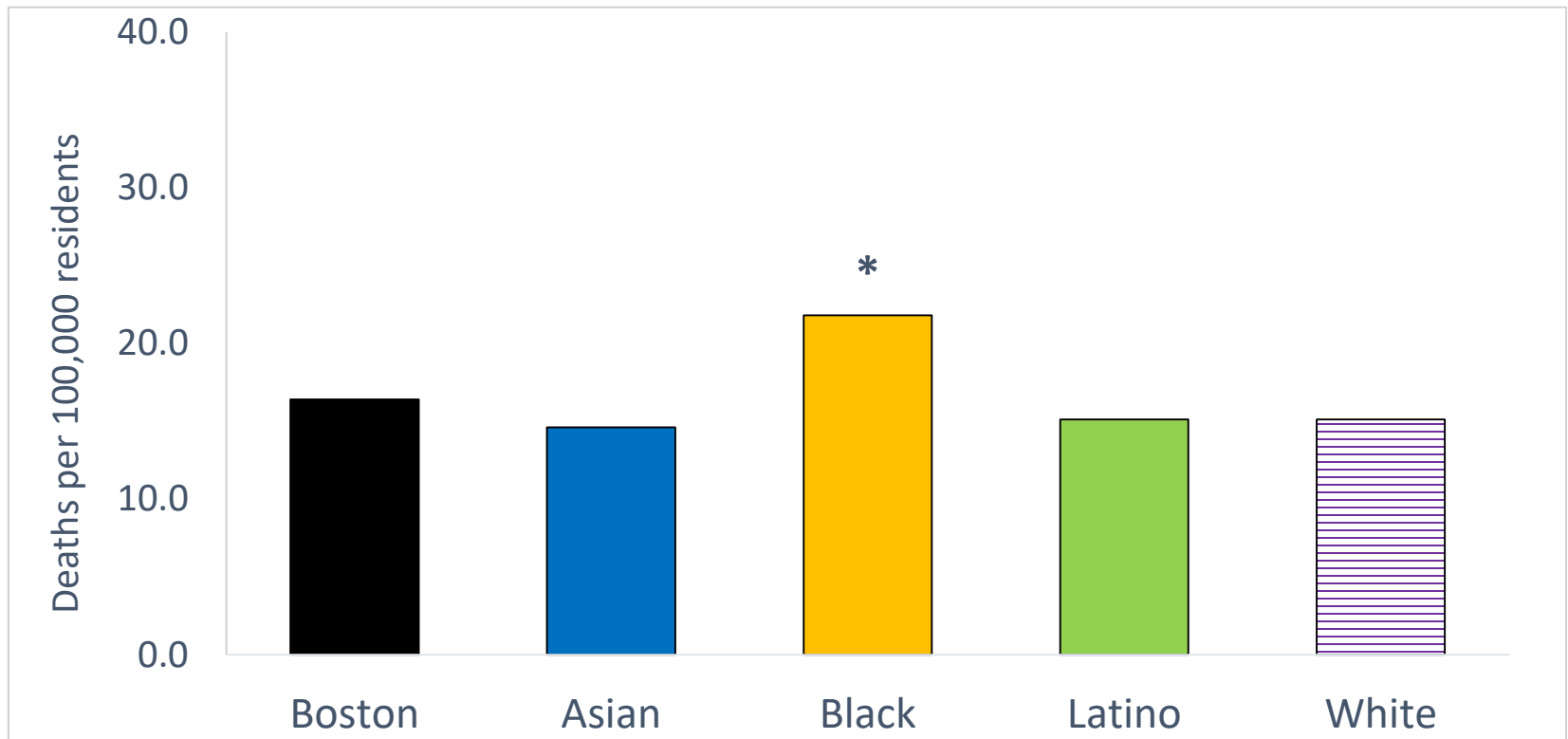
NOTE: Bars with patterns indicate the reference group within each selected indicator.

DATA SOURCES: Cancer Registry, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Colorectal Cancer Mortality by Race/Ethnicity, 2011-2013



*Statistically significant difference when comparisons are made between racial/ethnic groups

B +44% 1415 L-62%

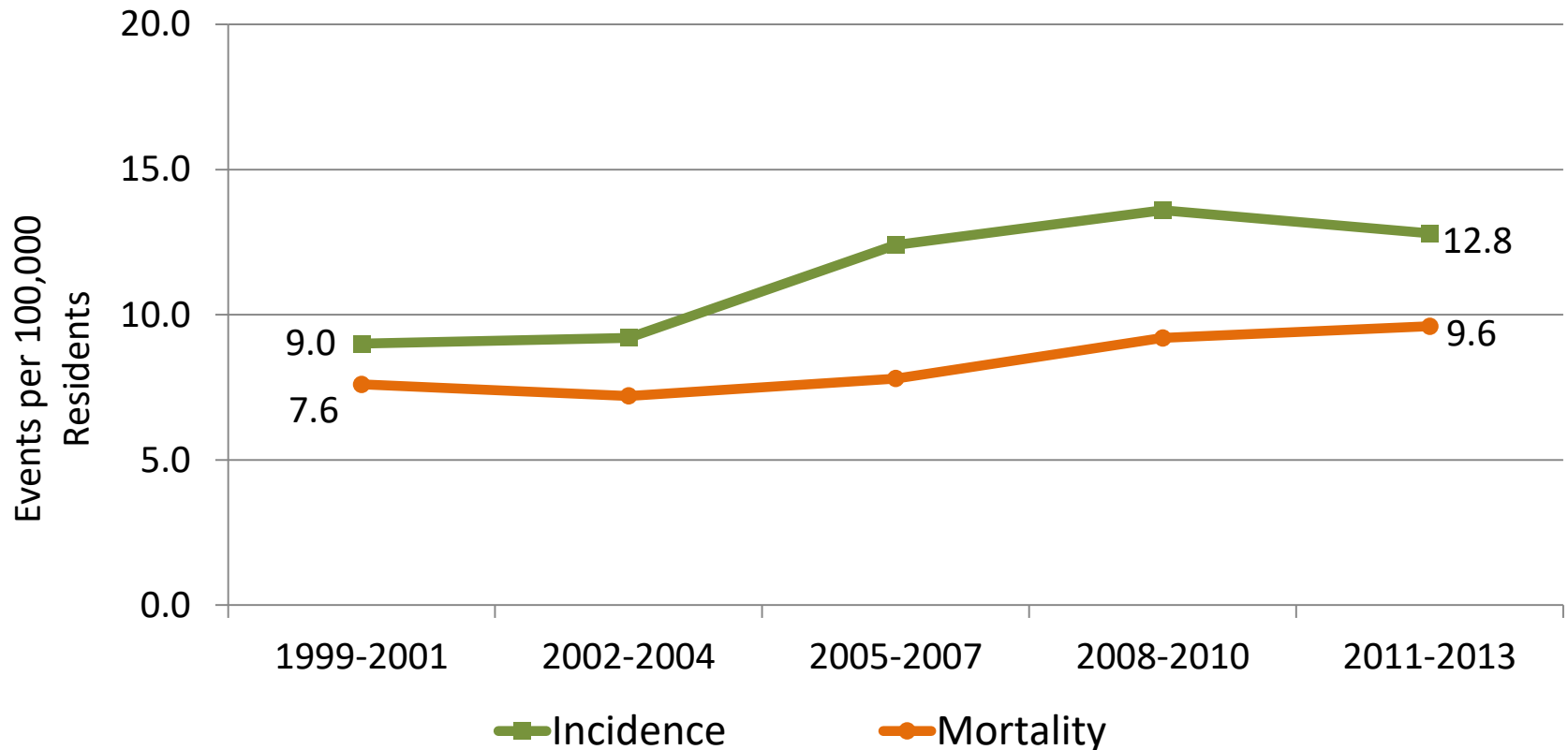
† Average Annual Age-adjusted rates per 100,000 residents

NOTE: Bars with patterns indicate the reference group within each selected indicator.

DATA SOURCE Boston resident deaths, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

Liver Cancer Incidence and Mortality by 3-Year Time Periods, 1999-2013



† Average Annual Age-adjusted rates

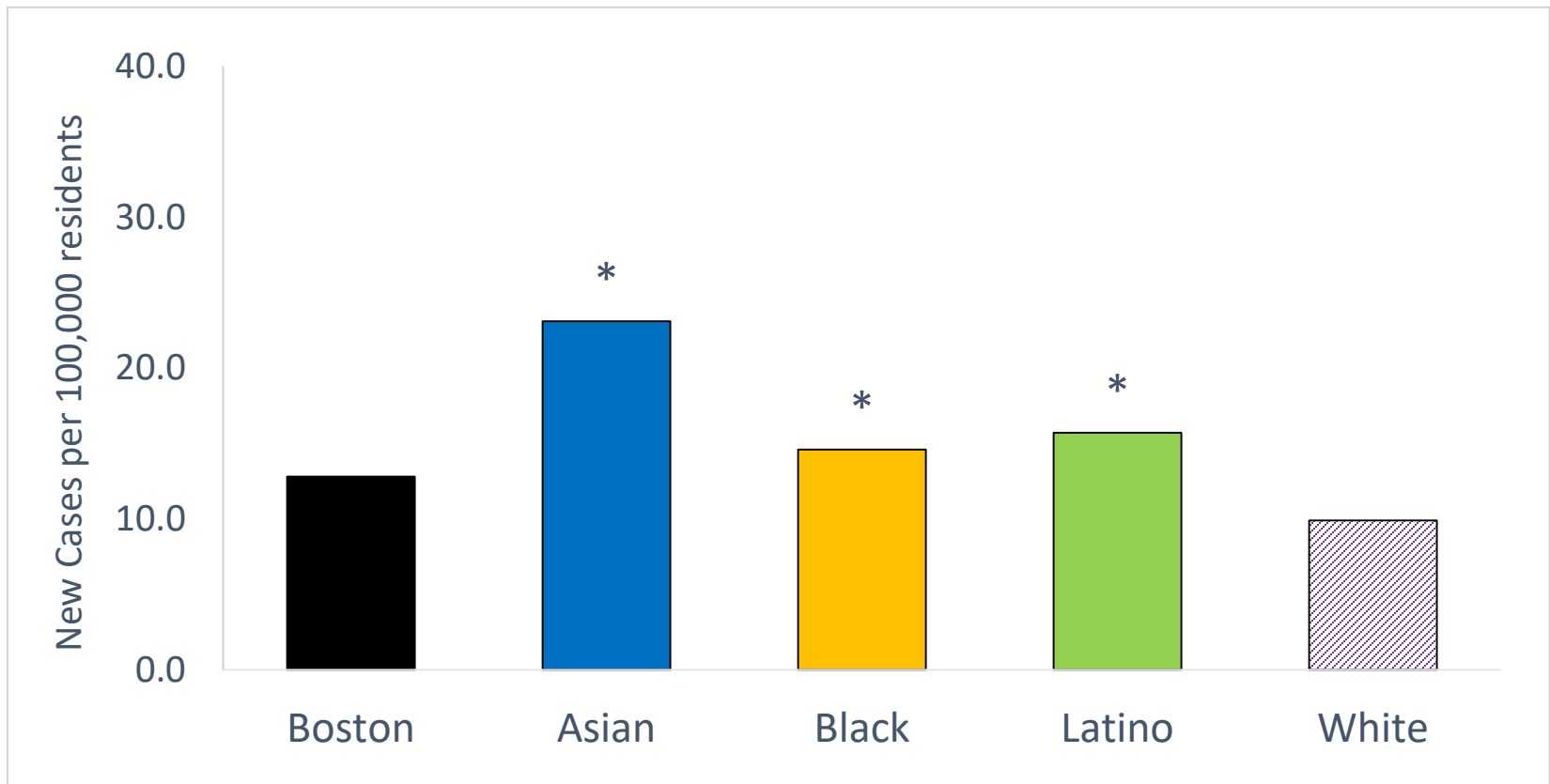
NOTE: Solid lines represent linear change over time ($p < 0.05$) I+52%, M+34%, M9915+35%

DATA SOURCES: Boston Resident Deaths, Massachusetts Department of Public Health; Cancer Registry, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Liver Cancer Incidence by Race/Ethnicity, 2011-2013 combined



*Statistically significant difference when comparisons are made between racial/ethnic groups

A +134% B +48% L+59%

† Average Annual Age-adjusted rates per 100,000 residents

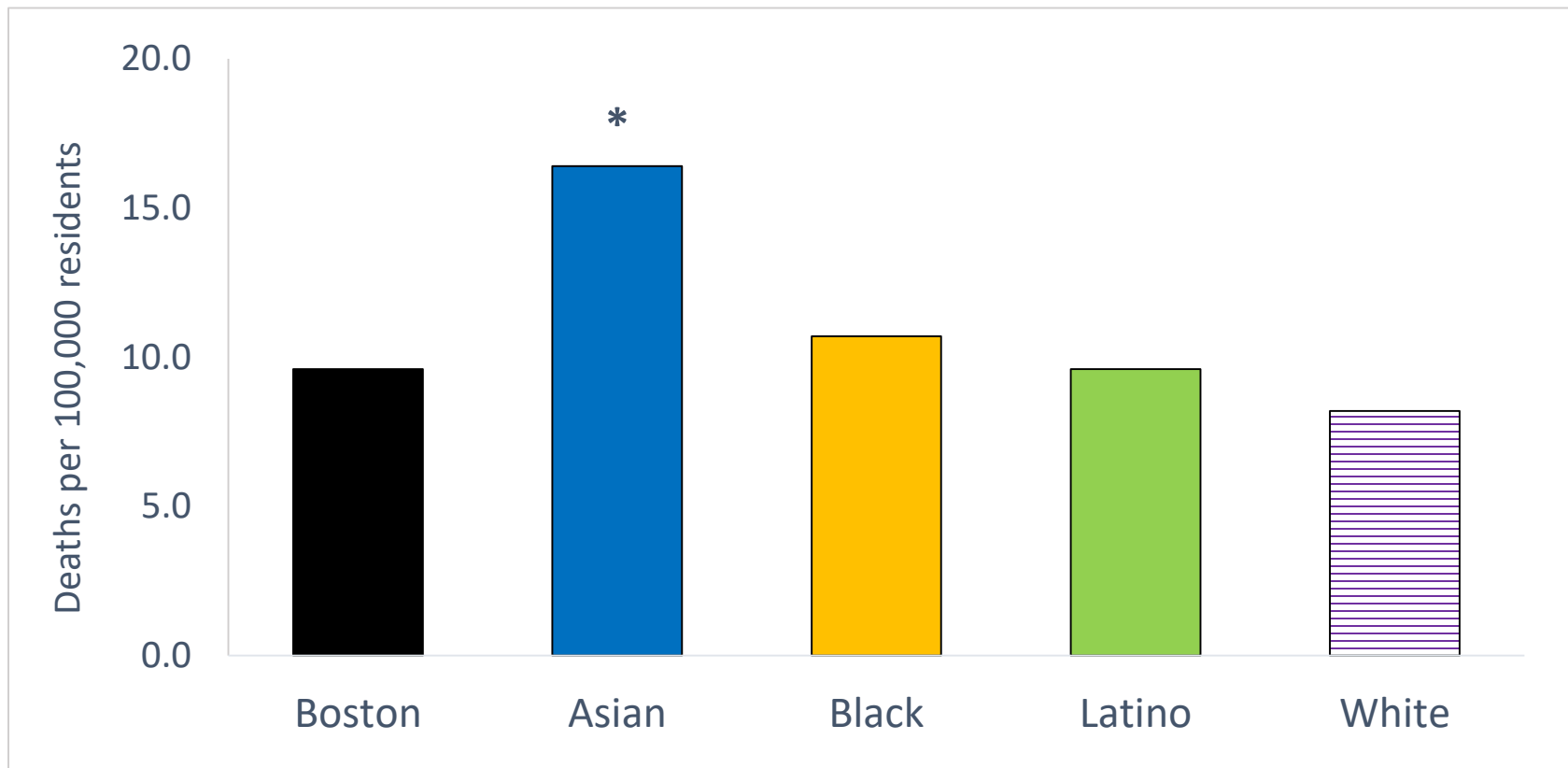
NOTE: Bars with patterns indicate the reference group within each selected indicator.

DATA SOURCE Boston resident deaths, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office



Liver Cancer Mortality by Race/Ethnicity, 2011-2013 combined



*Statistically significant difference when comparisons are made between racial/ethnic groups

A + 101% 1415 A +102%

† Average Annual Age-adjusted rates per 100,000 residents

NOTE: Bars with patterns indicate the reference group within each selected indicator.

DATA SOURCE Boston resident deaths, Massachusetts Department of Public Health

DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

