

New HIV diagnoses in Ontario, 2014

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November 2015





What can you expect to learn?

- To understand what the trends are in new HIV diagnoses for Ontario up to 2014
- To understand some of the limitations of this information

Where does this data come from?



Source of information

1. Person decides to get an HIV test
2. Health care provider completes a lab form
3. Specimen is collected and sent to Public Health Ontario Laboratory
4. If the result is HIV positive:
 - Result reported back to health care provider to give result to the person, and to local public health unit
 - Result is shared with the Laboratory Enhancement Program, which sends a data collection form to the health care provider



**Information
on form**



**Information
on form**



What is a “new HIV diagnosis”?

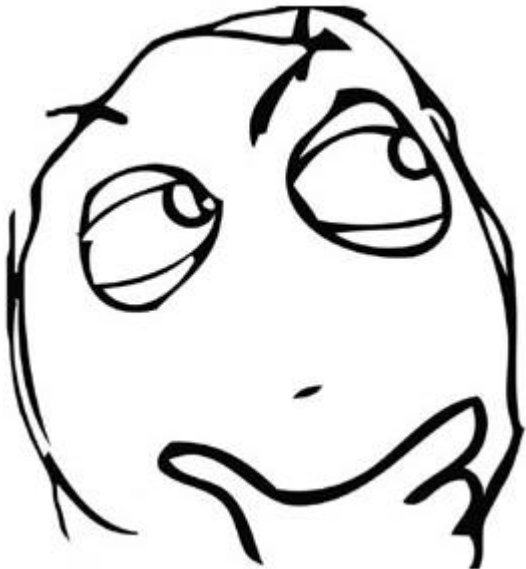
- Based on having a first positive HIV test in Ontario
- **Not** the same thing as a new HIV infection
- Includes people already diagnosed with HIV who have moved and tested for the first time in Ontario



**Do not put your faith in
what statistics say...**

**...until you have carefully
considered what they
do not say**

William W. Watt





25% of new HIV diagnoses are missing information on risk factors

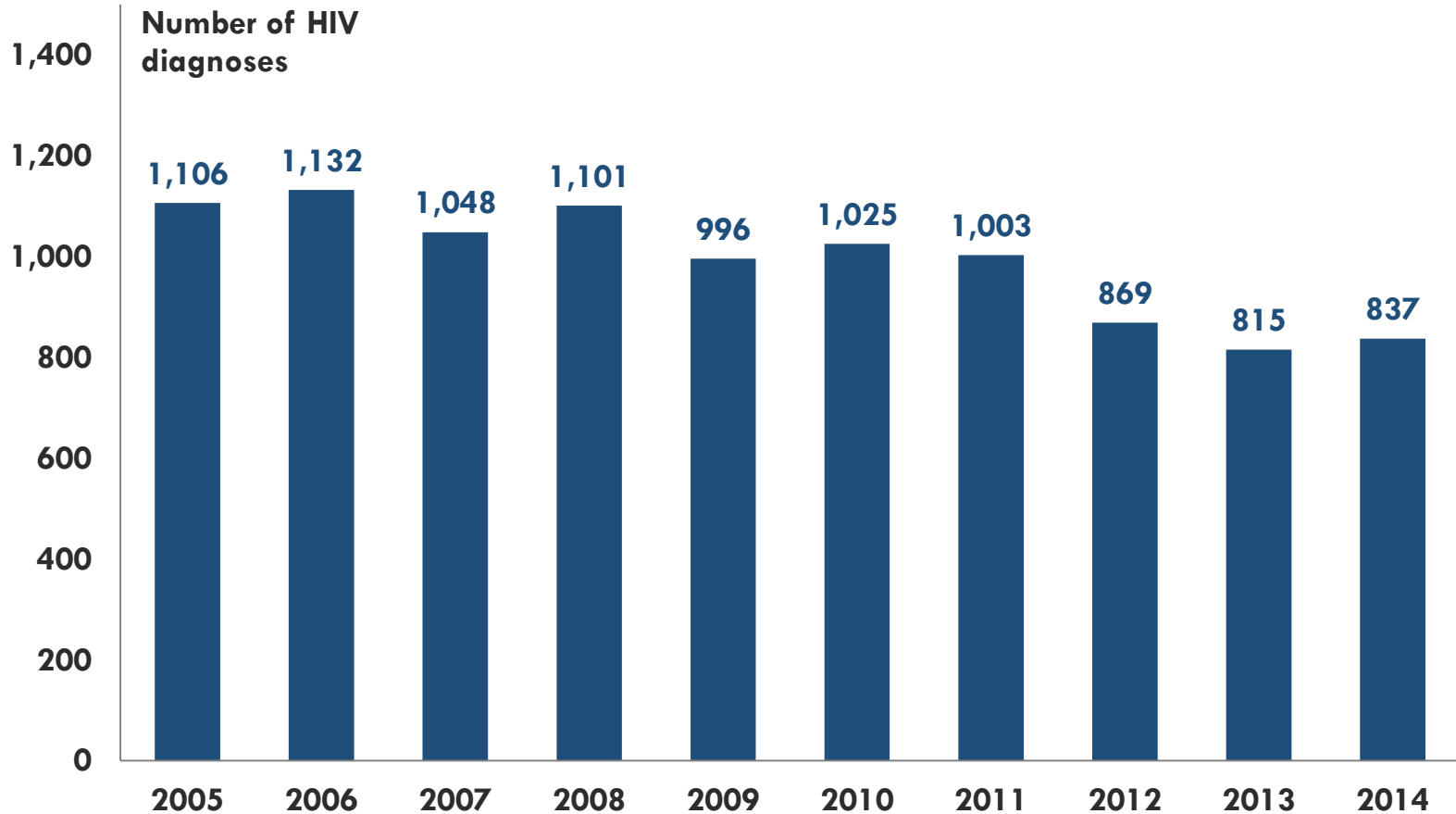
40% are missing information on ethnicity

No option for documenting transgender identity

HIV diagnoses by Sex

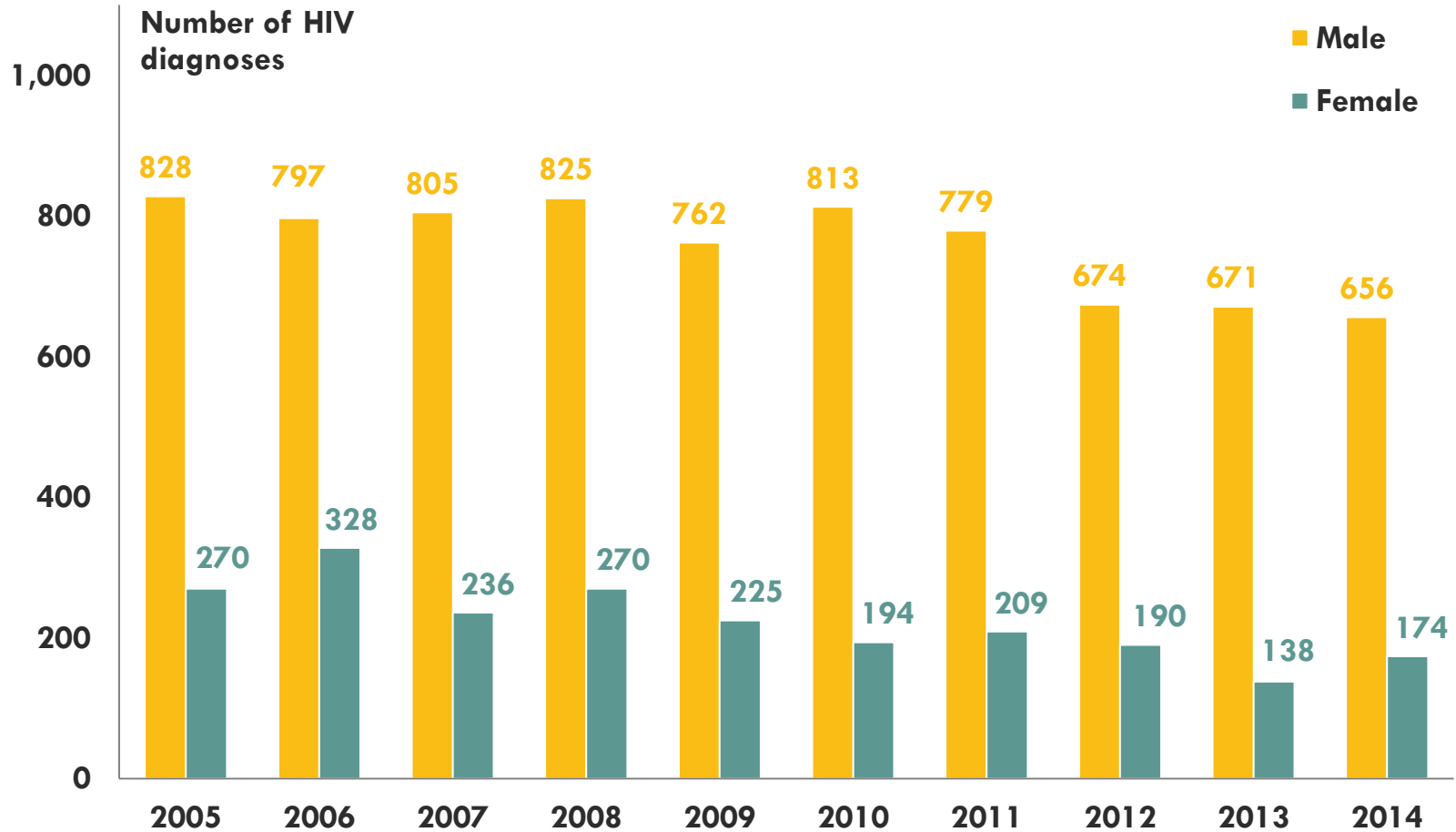


Total HIV diagnoses, 2005-2014





HIV diagnoses by sex, 2005-2014

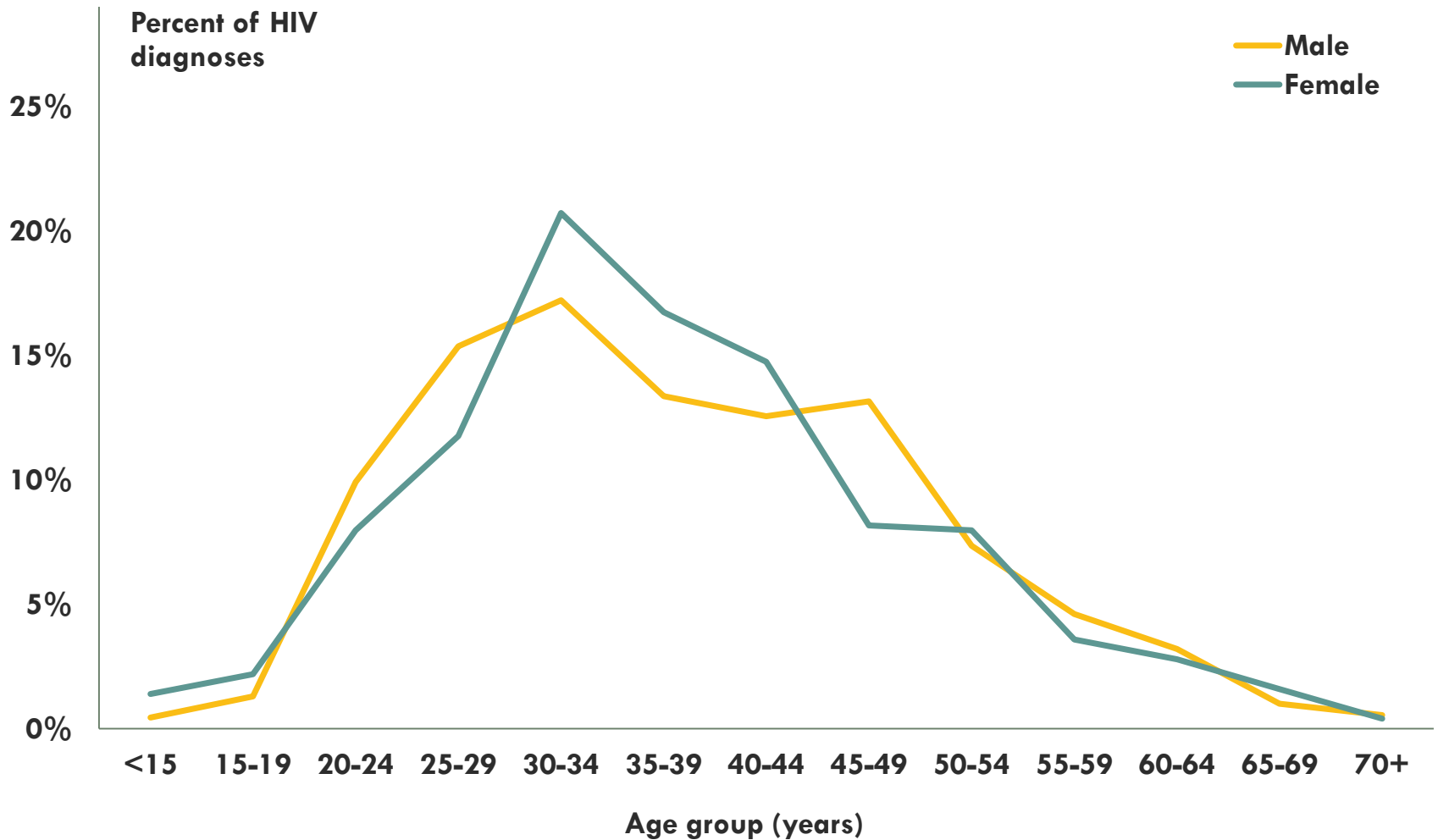


Data provided by Public Health Ontario Laboratory to OHESI (www.OHESI.ca);
Cases with unknown sex excluded; no option for transgender

HIV diagnoses by Age group

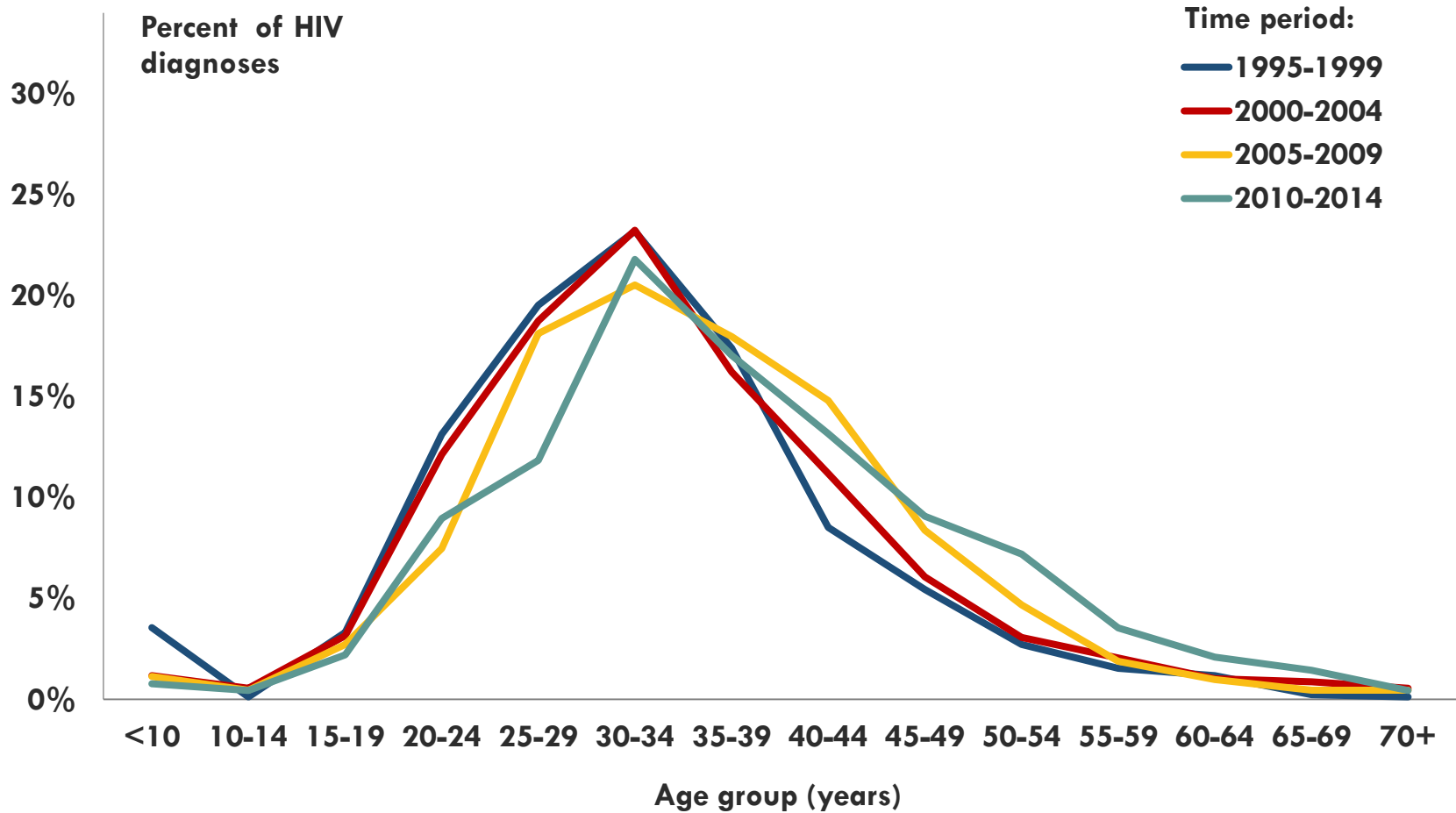


HIV diagnoses by age group and sex, 2012-2014



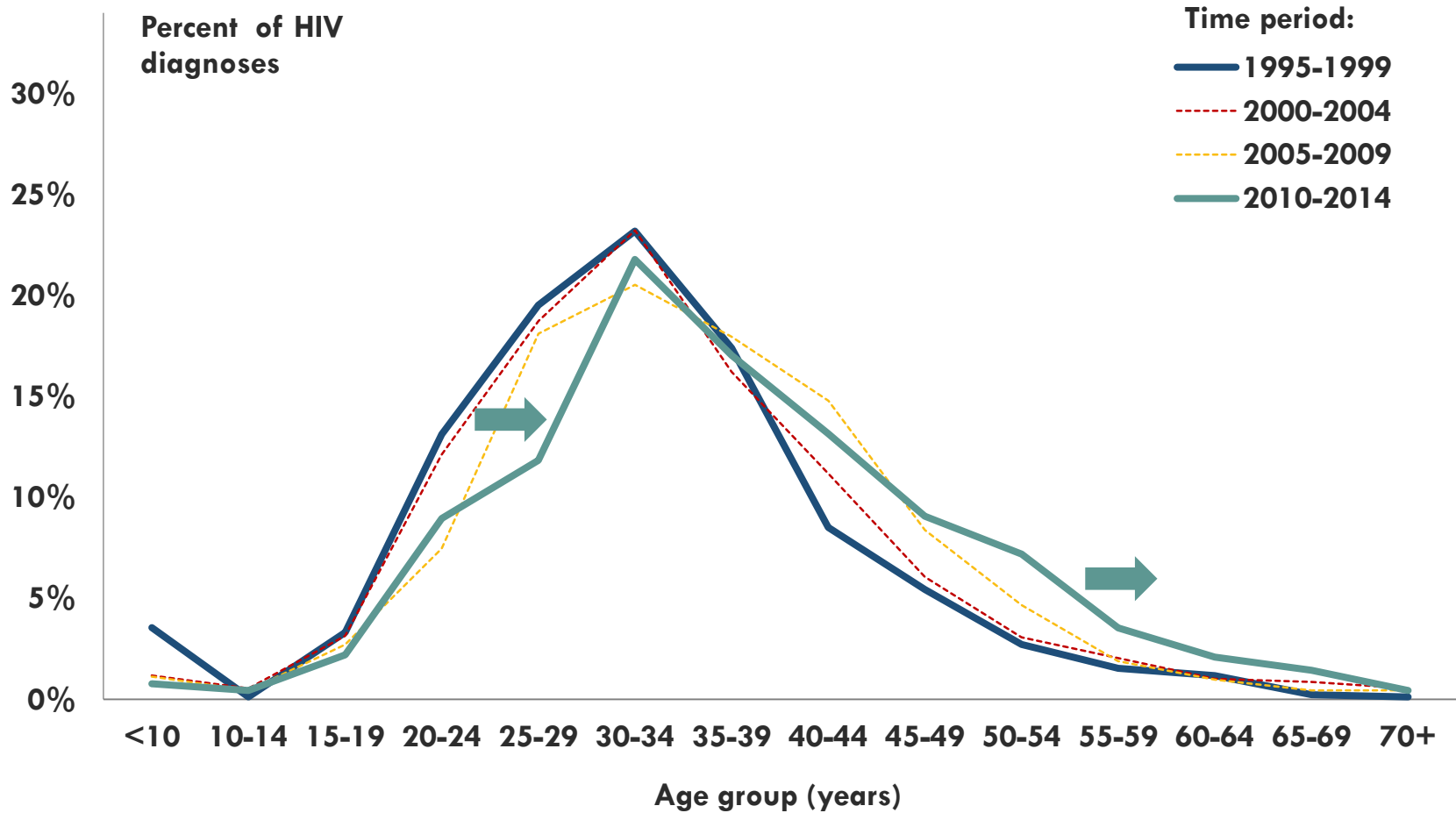


Female HIV diagnoses by age group and time period, 1995-2014



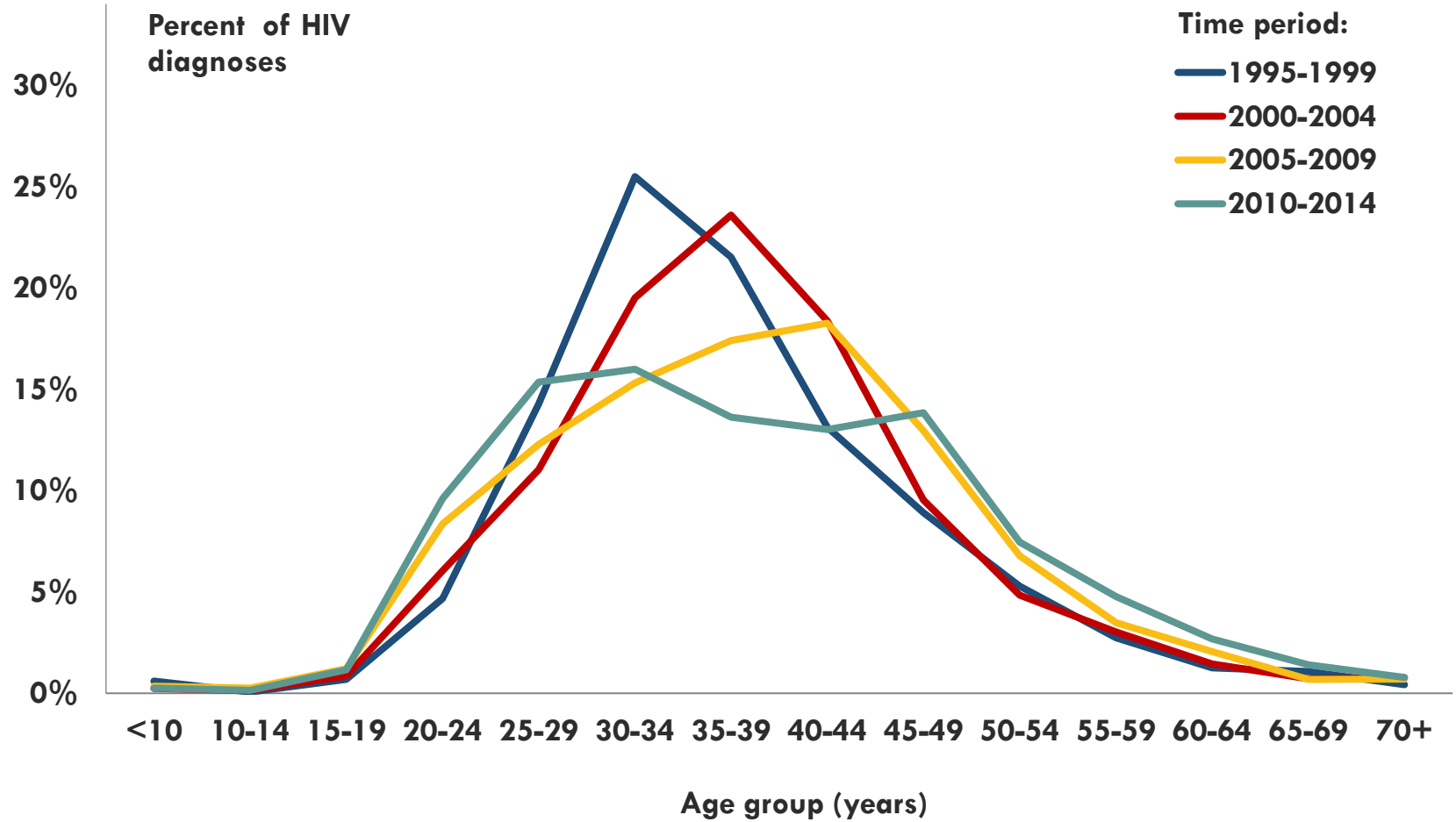


Female HIV diagnoses by age group and time period, 1995-2014



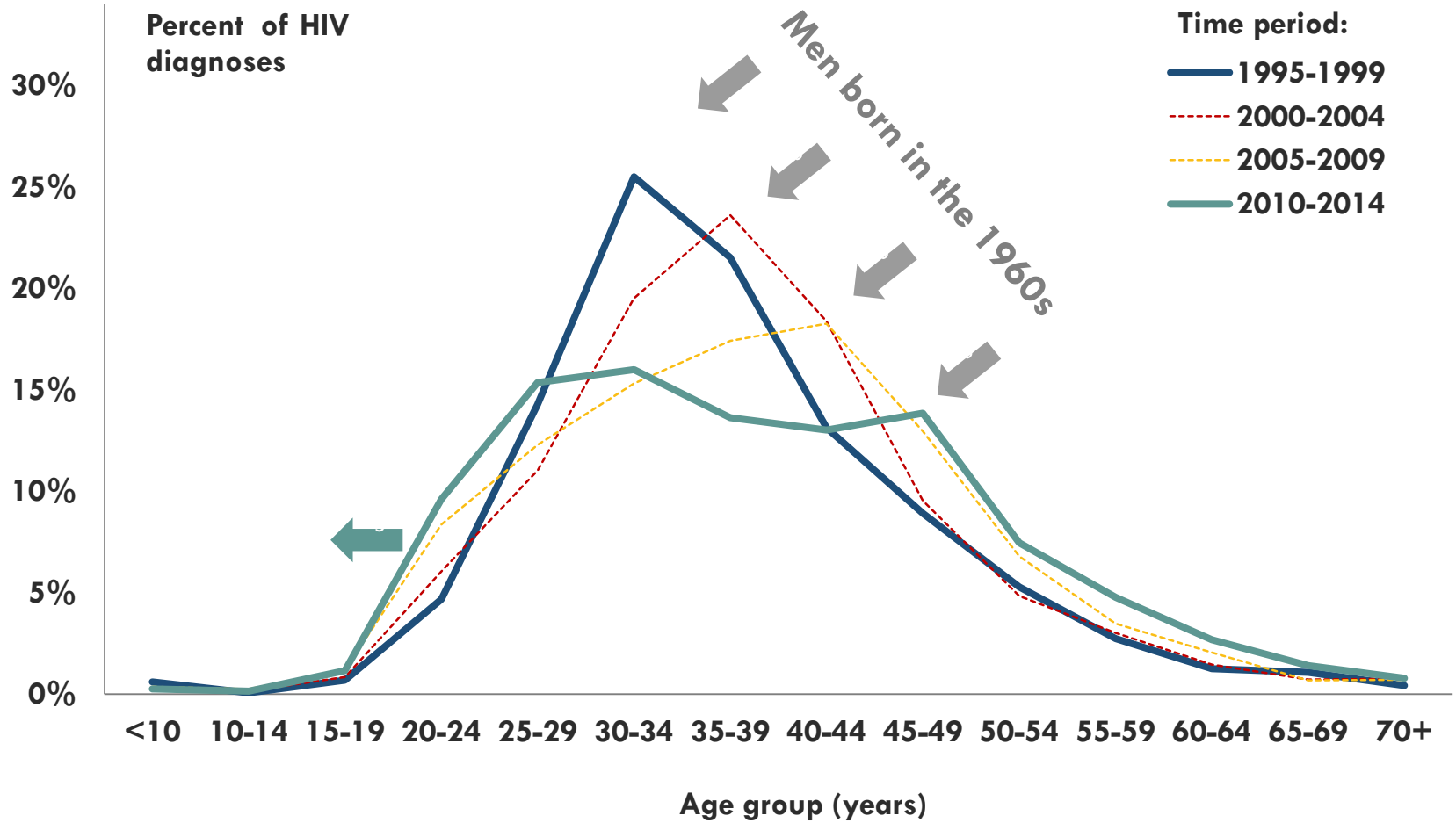


Male HIV diagnoses by age group and time period, 1995-2014





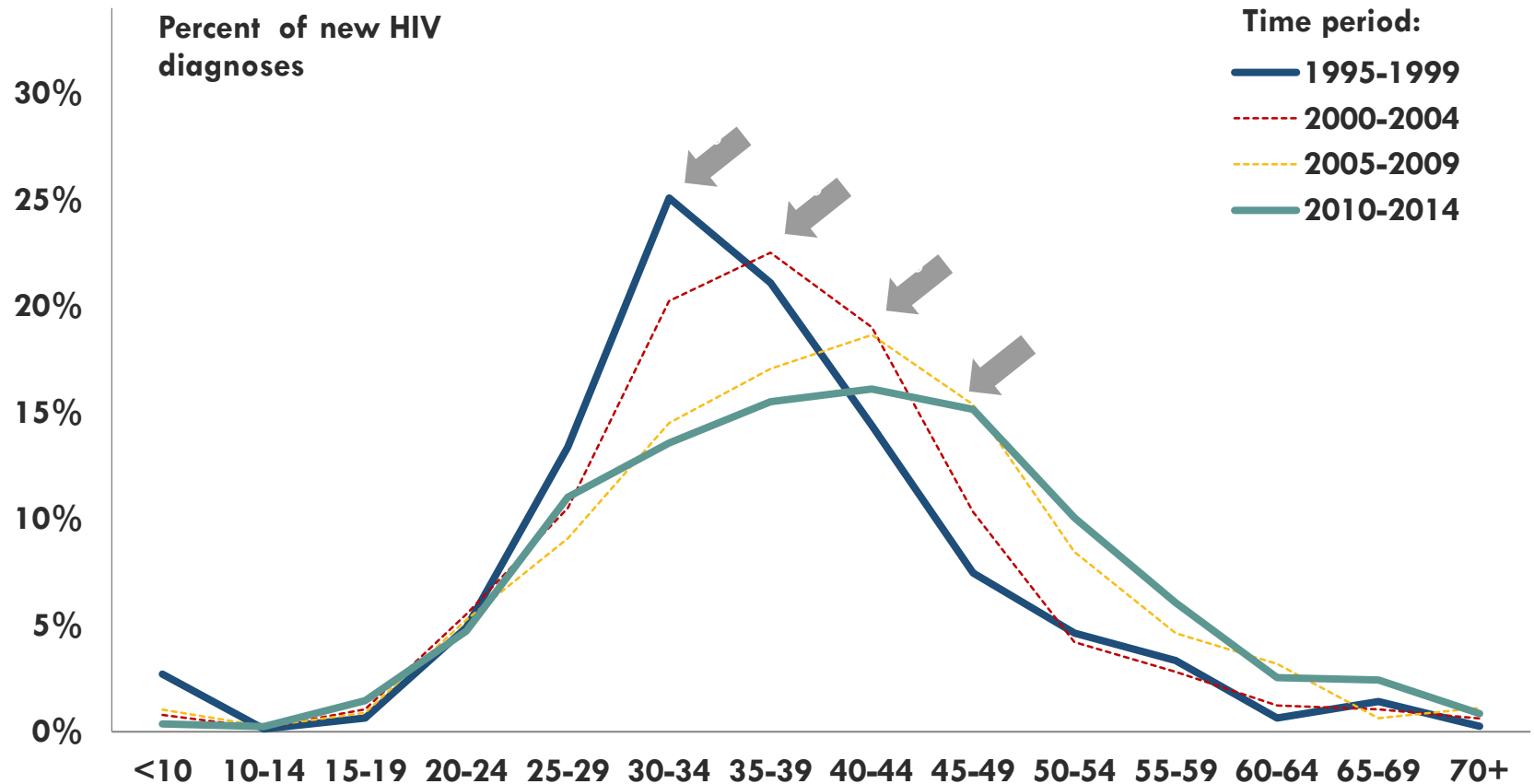
Male HIV diagnoses by age group and time period, 1995-2014



Data provided by Public Health Ontario Laboratory to OHESI (www.OHESI.ca)

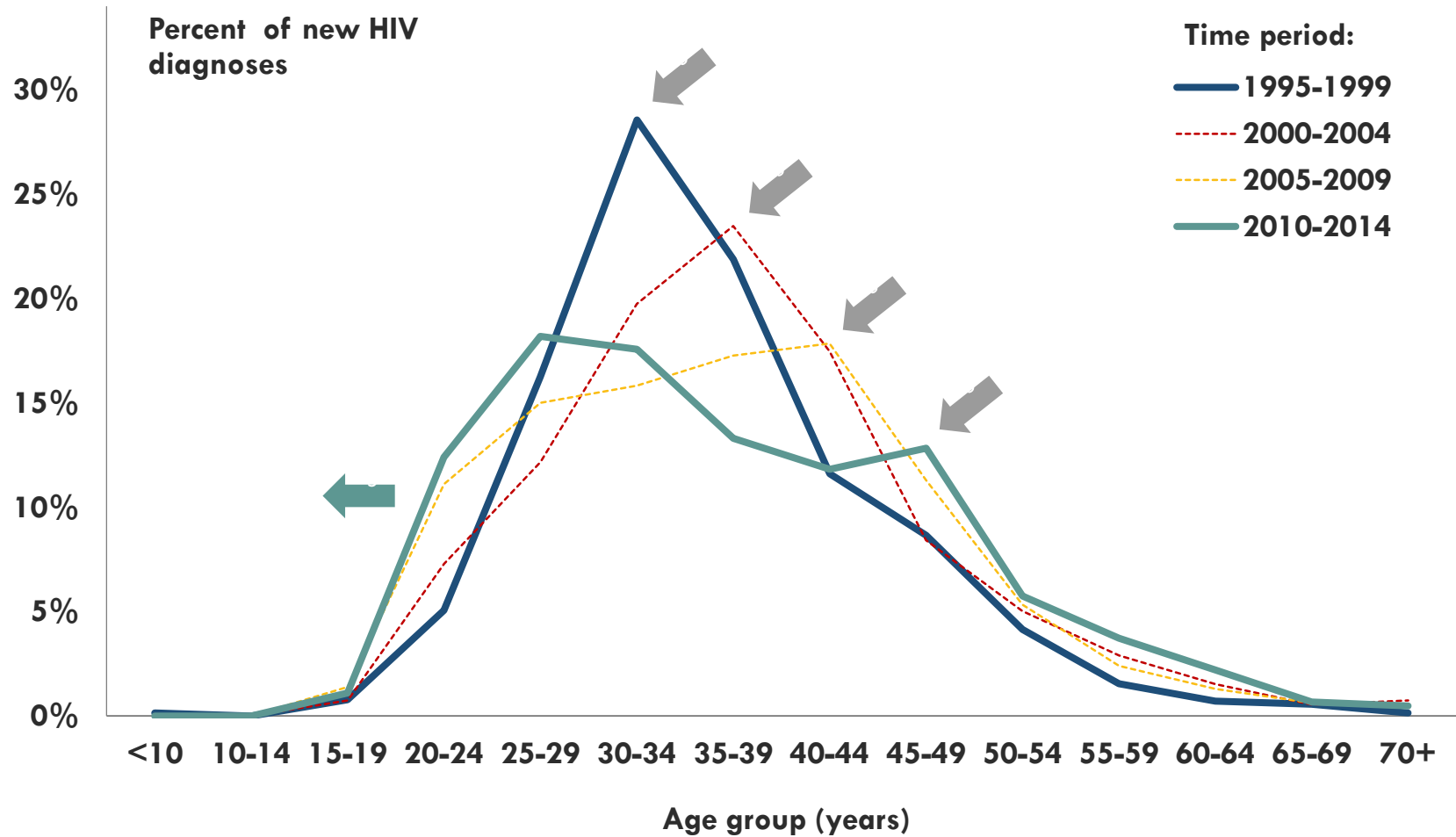


Male (not known to be MSM) HIV diagnoses by age group and time period, 1995-2014





Male (known to be MSM) HIV diagnoses by age group and time period, 1995-2014



HIV diagnoses by Health Region

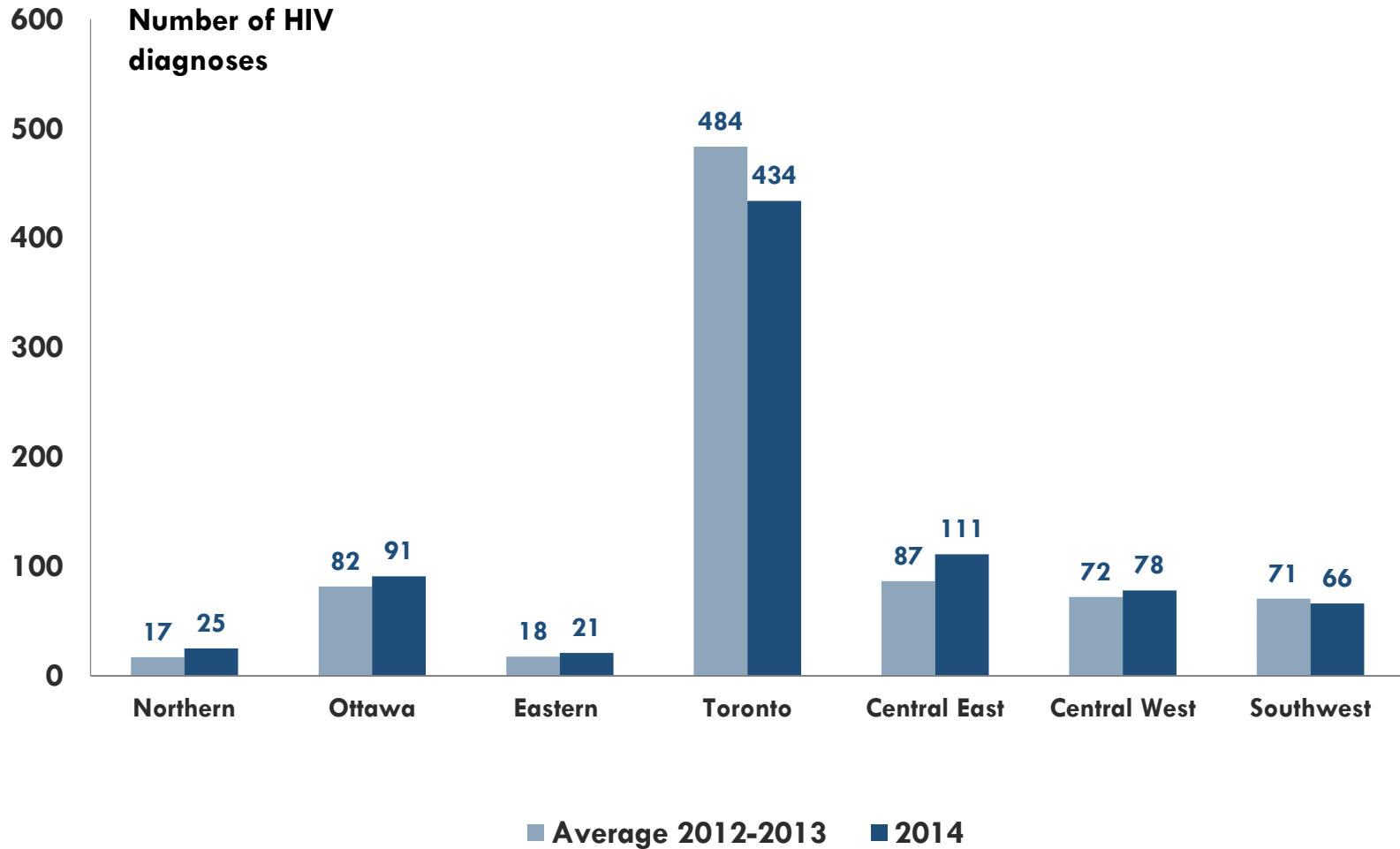


Health Regions



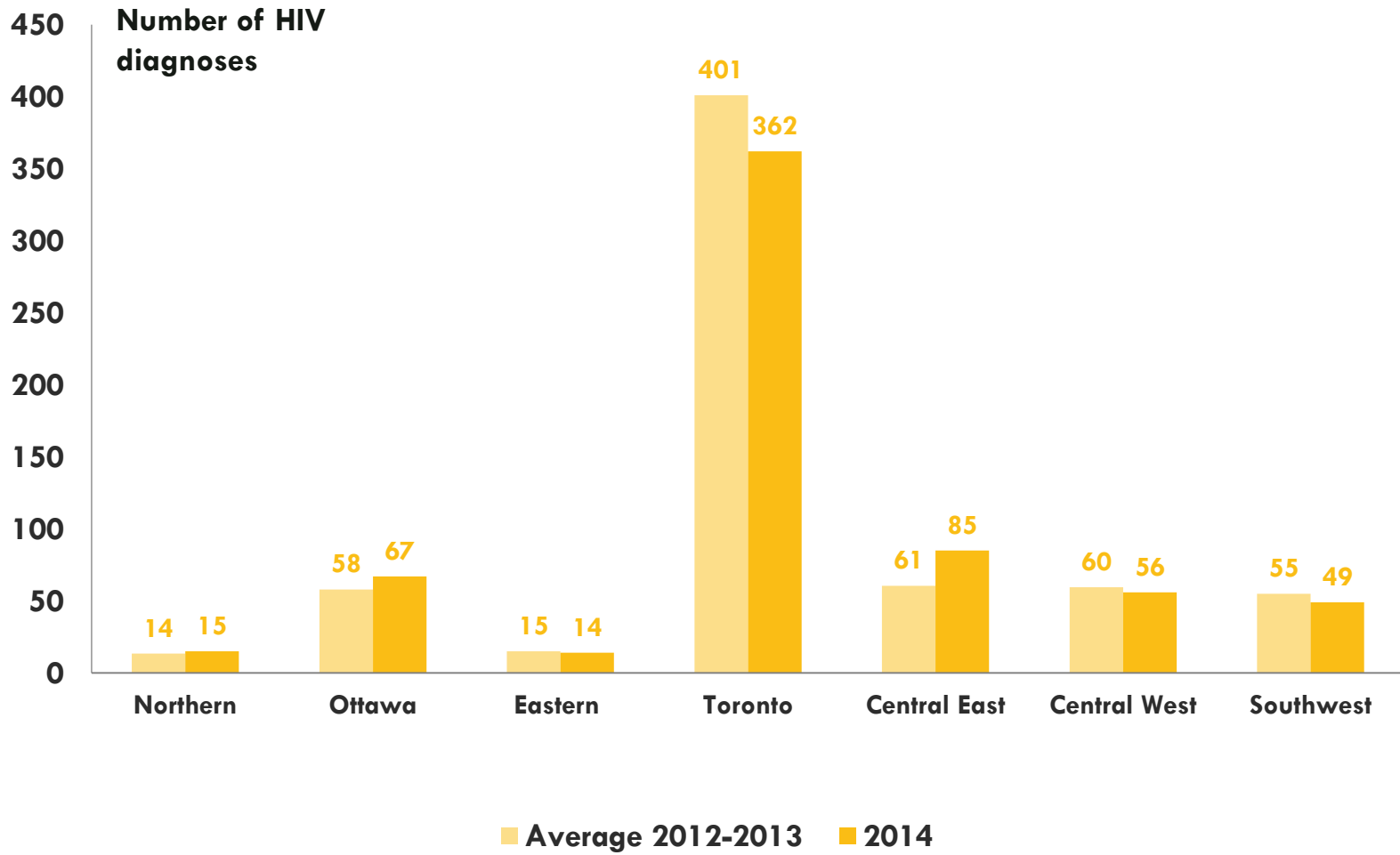


HIV diagnoses by Health Region, 2014



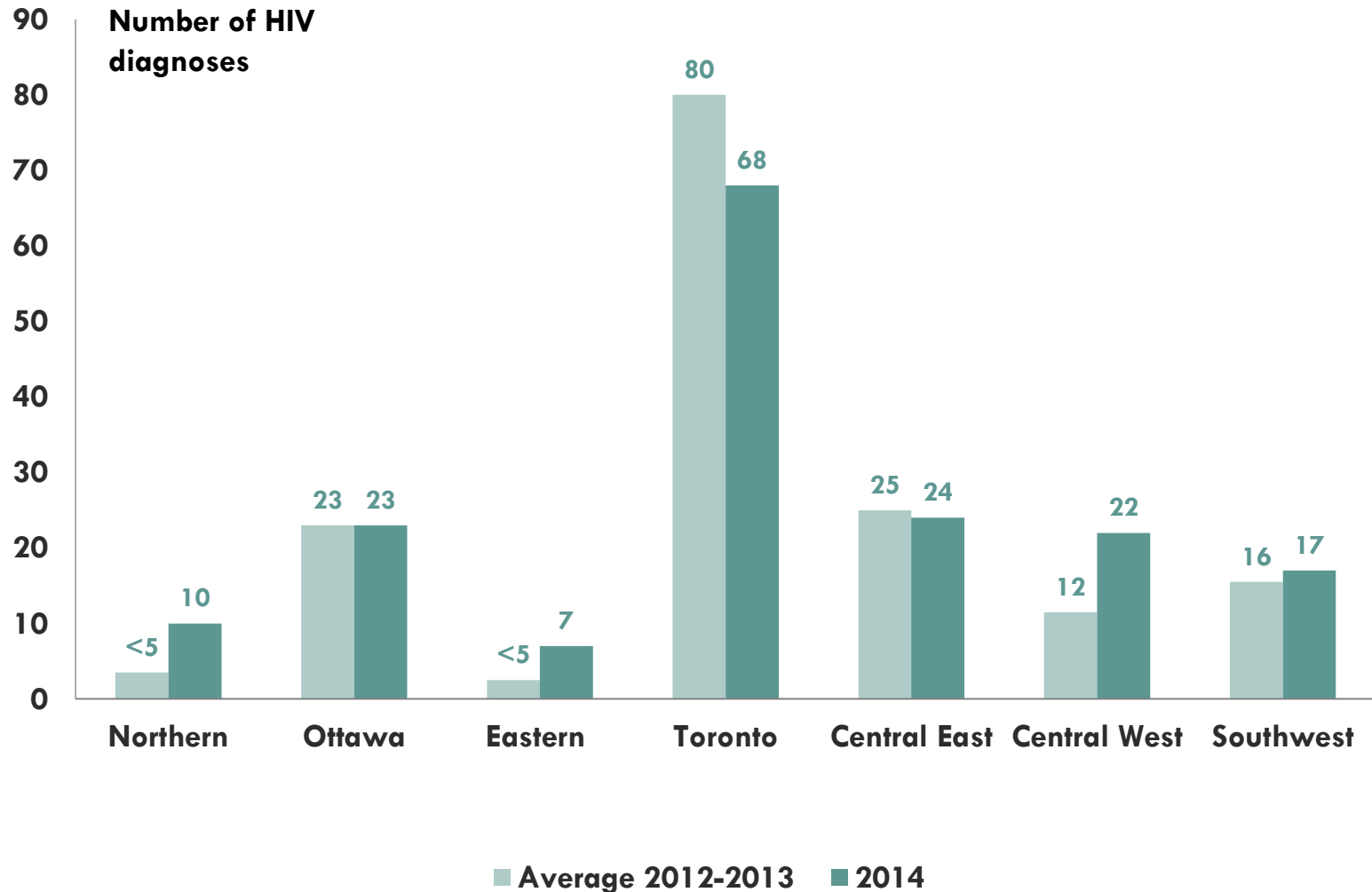


Male HIV diagnoses by Health Region, 2014





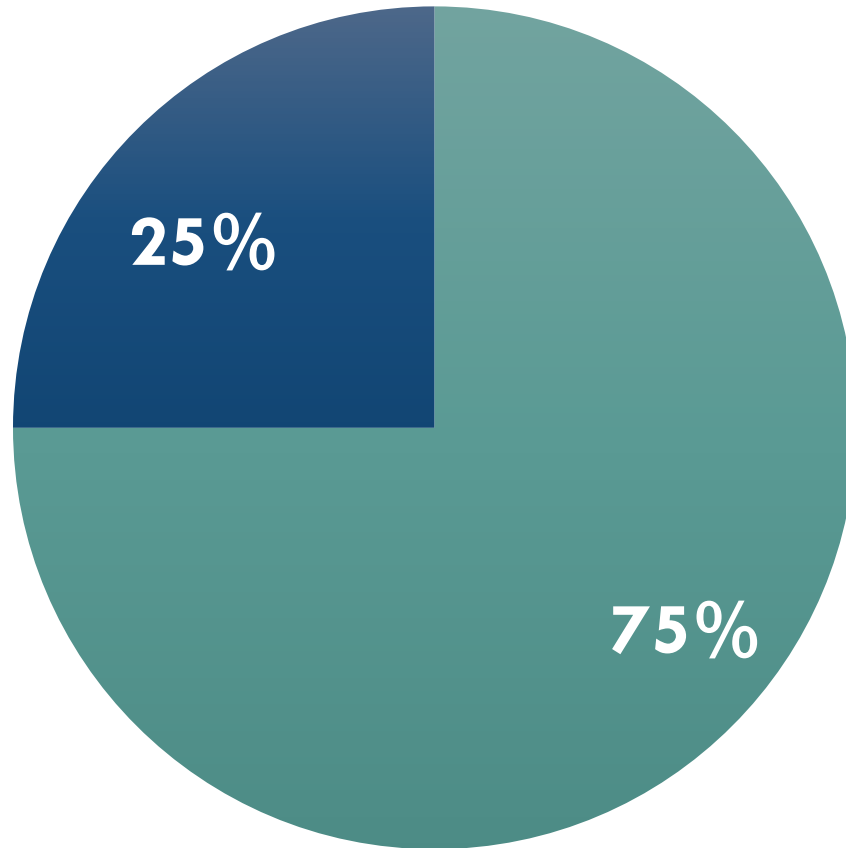
Female HIV diagnoses by Health Region, 2014



HIV diagnoses by population (exposure category)

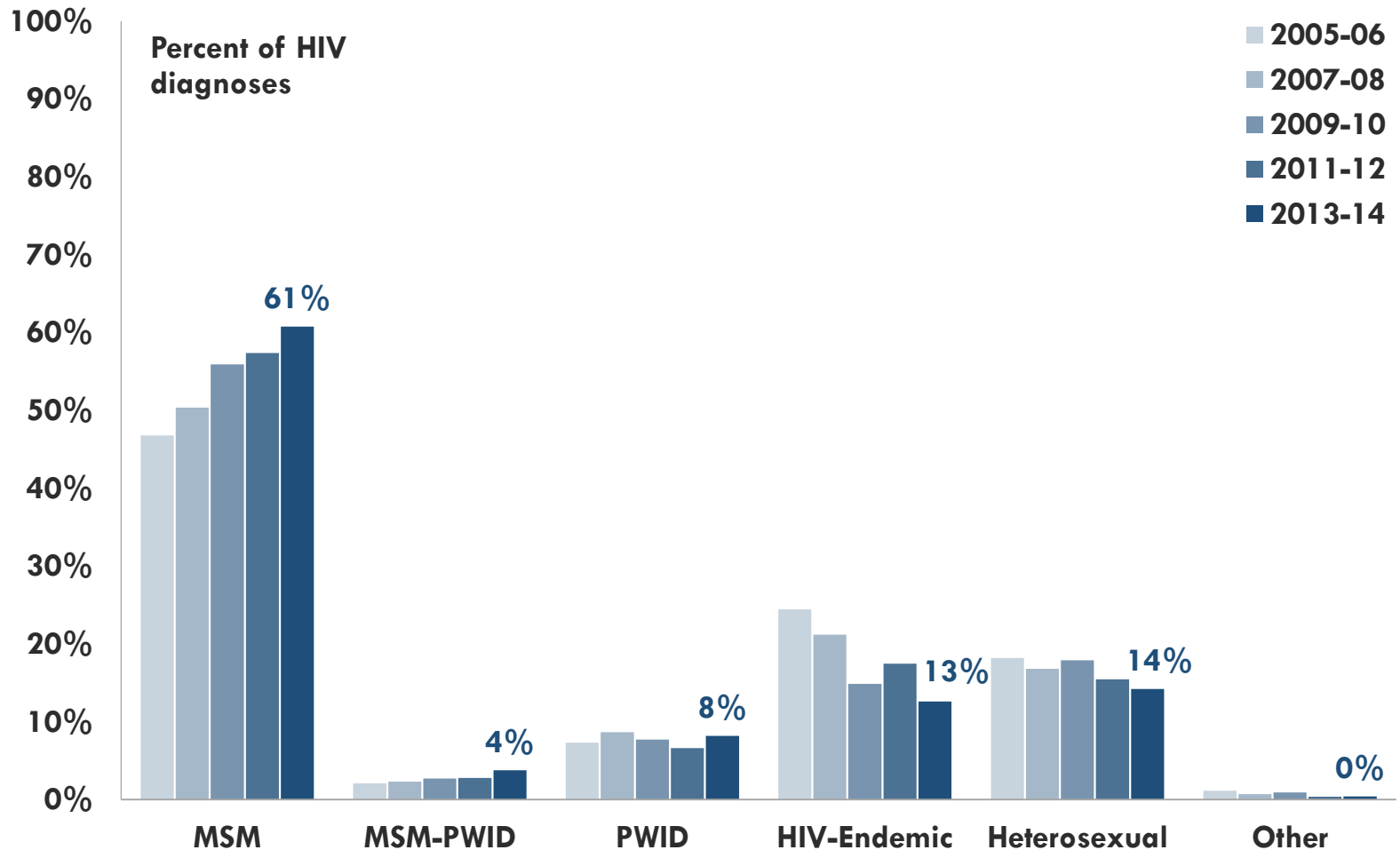


Missing information on exposure category





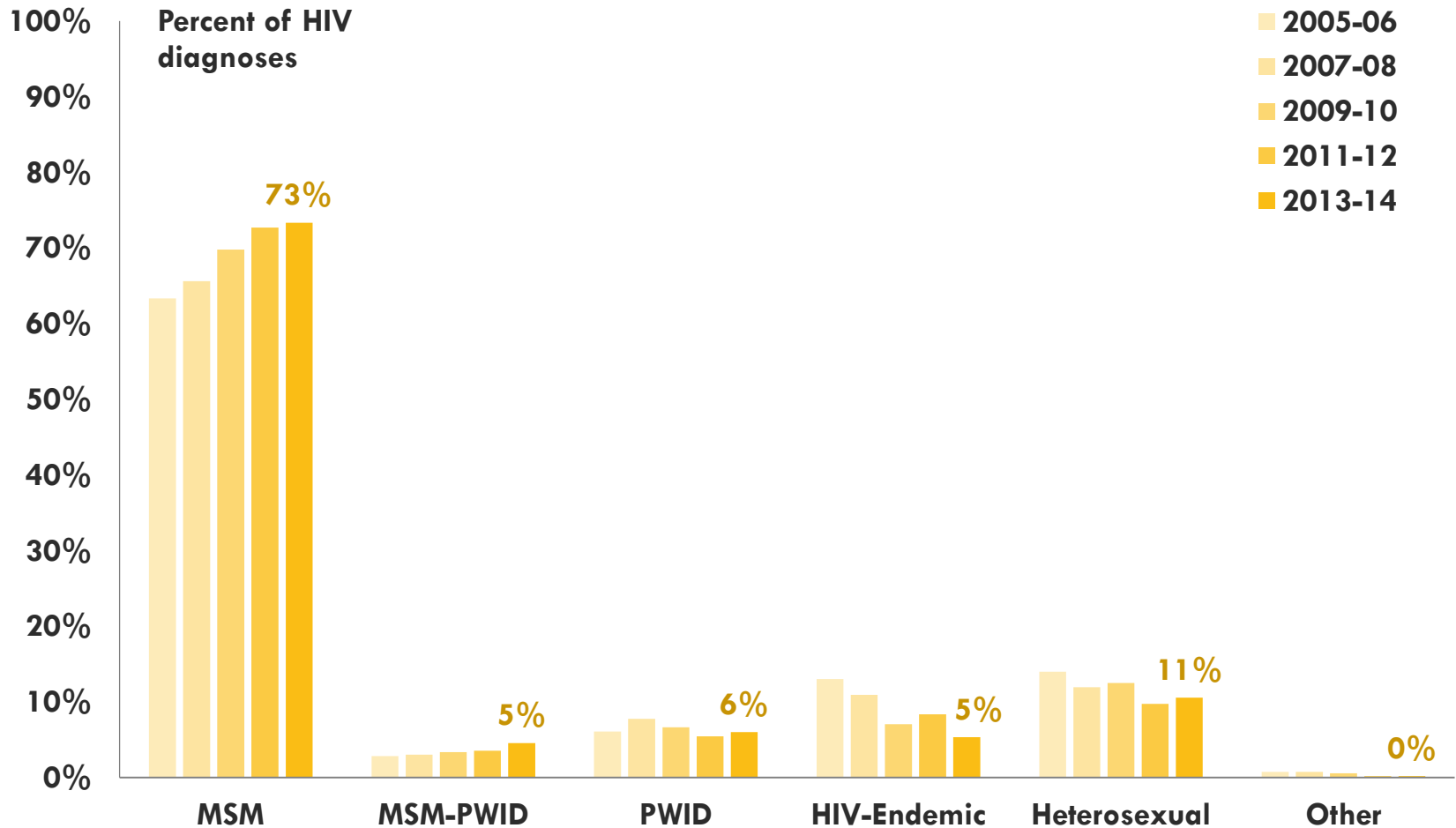
HIV diagnoses by exposure category 2005-2014 (where known)



Data provided by Public Health Ontario Laboratory to OHESI
(www.OHESI.ca); MSM=men who have sex with men,
PWID=people who inject drugs

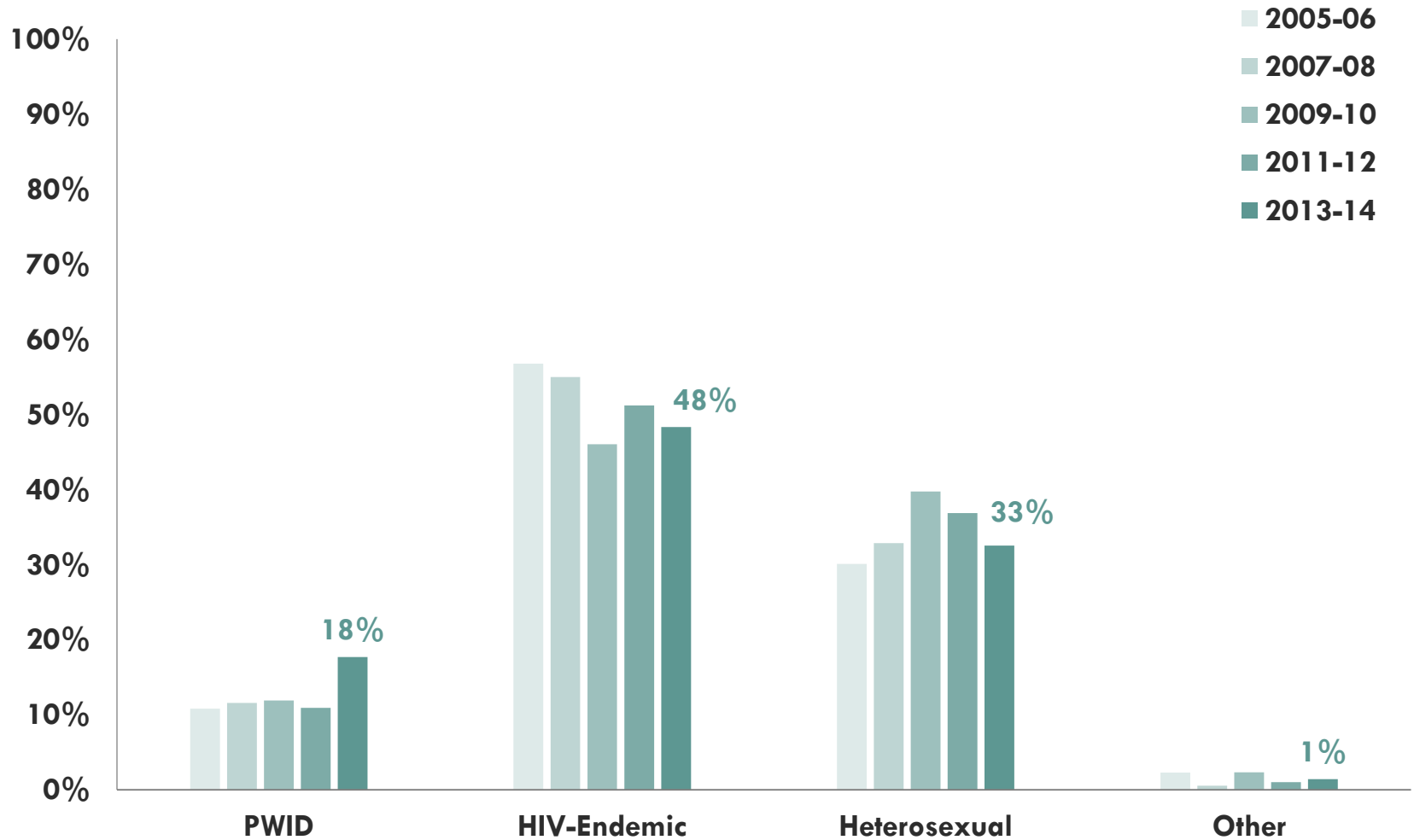


Male HIV diagnoses by exposure category 2005-2014 (where known)





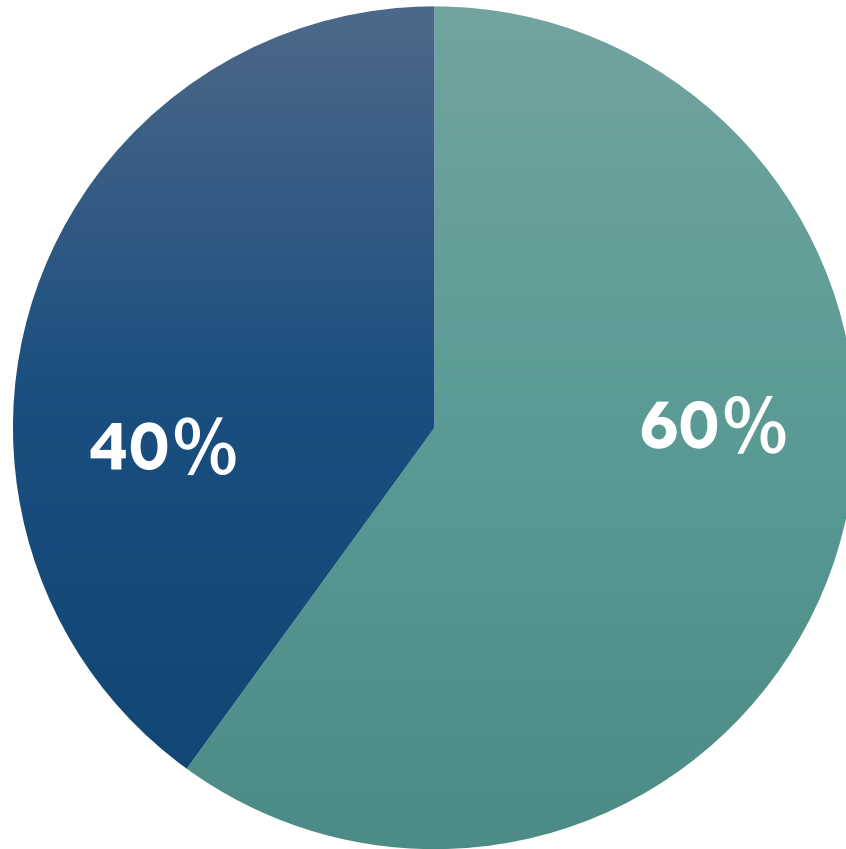
Female HIV diagnoses by exposure category 2004-2014 (where known)



HIV diagnoses by ethnicity

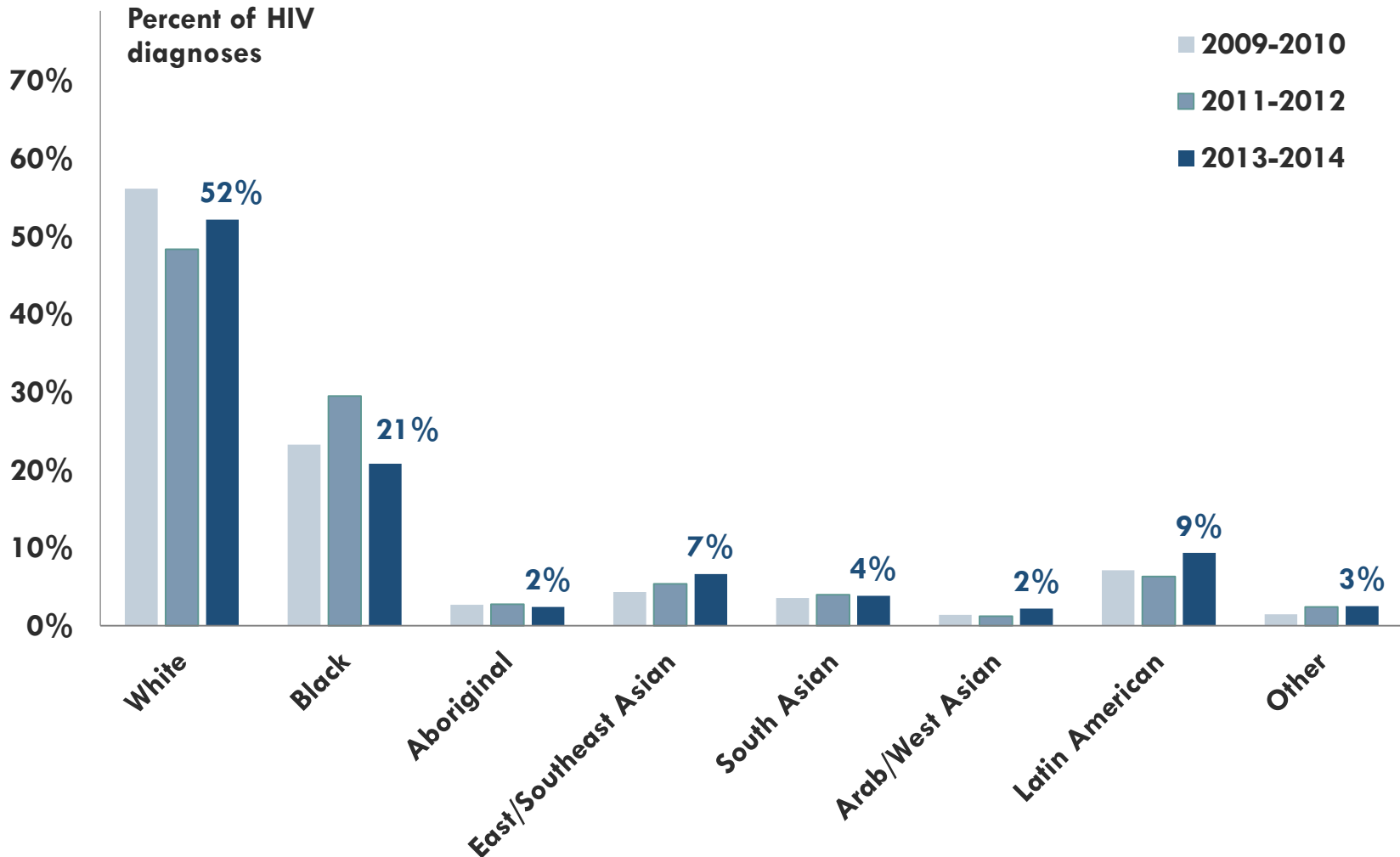


Missing information on ethnicity



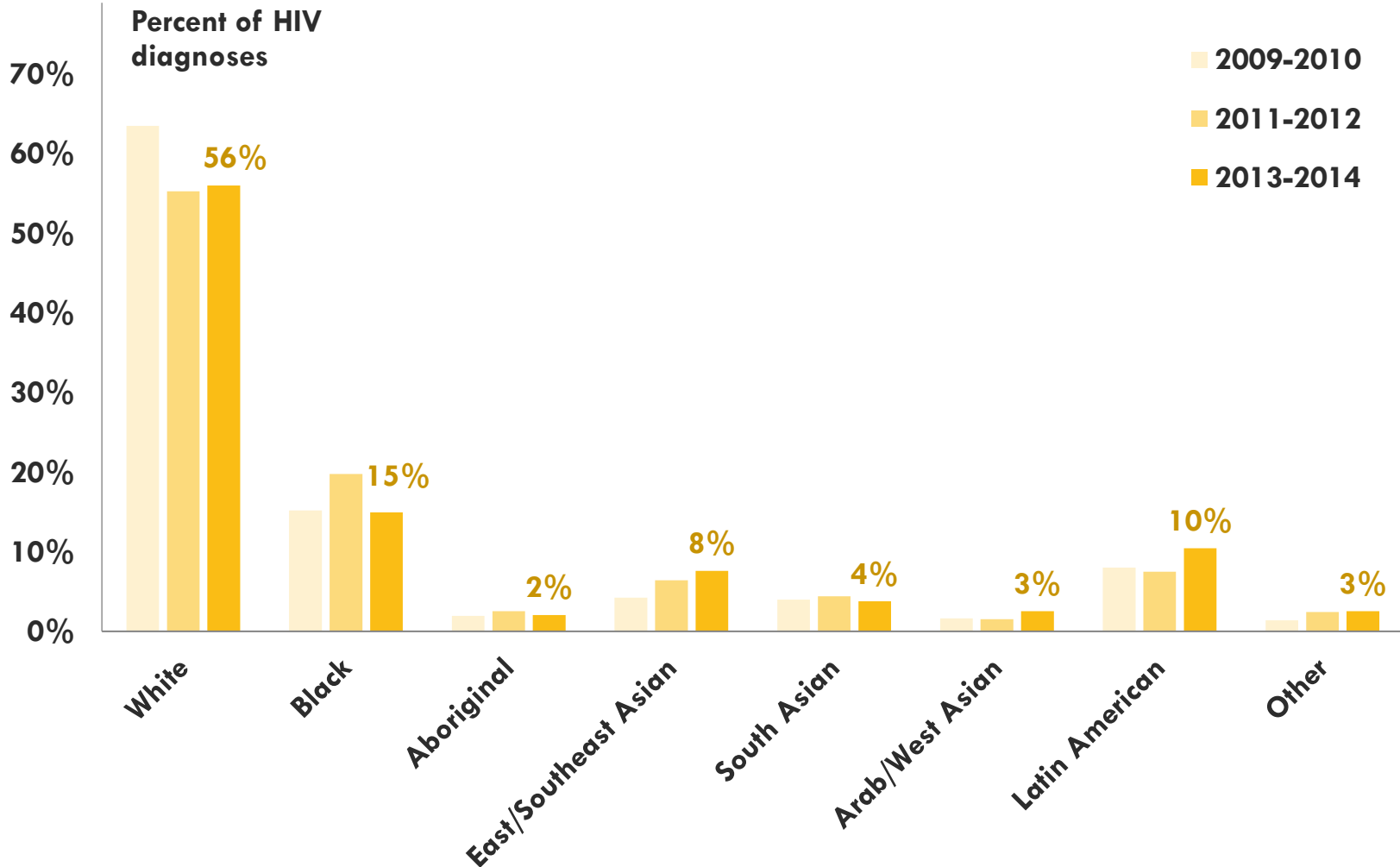


HIV diagnoses by ethnicity 2009-2014 (where known)



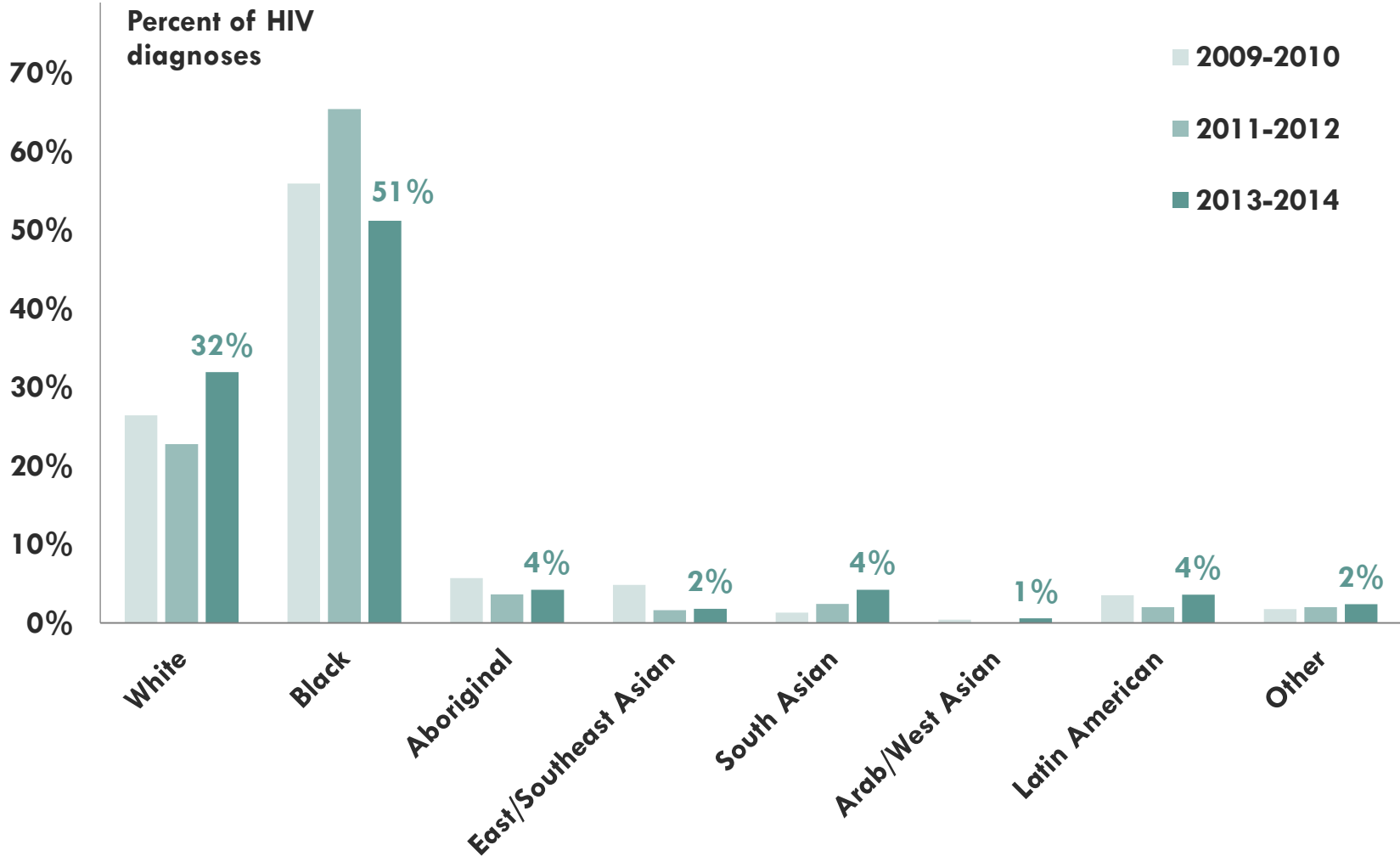


Male HIV diagnoses by ethnicity 2009-2014 (where known)





Female HIV diagnoses by ethnicity 2009-2014 (where known)

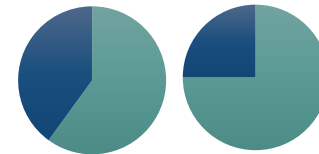


To summarize



Take-home messages for 2014

- New HIV diagnoses by exposure category
 - Consistent with long term trends
 - Small changes in 2013-14 compared to previous two years, except among females who use injection drugs
- New HIV diagnoses by ethnicity
 - Varying trends in 2013-14 compared to prior two-year periods
- Difficult to interpret due to missing data





Take-home messages for 2014

- New HIV diagnoses in females:
 - Peak age 30-34, with shift to older age at diagnosis over time
 - Small increase in diagnoses in females compared to 2013 yet still lower than previous years
 - Small increase in Northern, Eastern, and Central West Health Regions
 - Small increase among females who use injection drugs
- Possible explanations?
 - Small increases between years are not uncommon (usual variation)?
 - Efforts to increase testing among females who use injection drugs?



Take-home messages for 2014

- New HIV diagnoses in males:
 - Stable number of new HIV diagnoses compared to 2013
 - Two trends by age:
 - Cohort effect: men born in 1960's have higher number of diagnoses compared to other generations (more pronounced in MSM)
 - Shift towards younger age at diagnosis among MSM over past 10 years
- Explanations?
 - Consistent with trends seen in other places
 - Reflects generational differences, including underlying HIV prevalence?



What's next?

- Looking further into these trends
- Working to change lab form to reducing missing information
- Looking at ways to adjust for missing data
- Shifting from mutually exclusive exposure categories to overlapping priority populations

Thanks for watching!

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