

CDC HPV Typing of Cancers Study: Evaluating Representativeness

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Background

□ Typing study:

- Cases randomly sampled from 4 registries
 - LA, KY, MI, 3 counties in FL
 - Traced cases back to path labs
 - Varying ability to acquire cases
- Additional cases from Residual Tissue Repositories (RTRs)
 - HI, IA, LAX
 - Convenience sample, not random sample
- Sent tissue samples to CDC lab for HPV typing

□ Assessing representativeness

- Not all randomly sampled cases were available
- RTR cases not randomly sampled (will analyze in future)

Methods: Typed cases vs. Registry data

Typing study	Registry data
LA, KY, MI, FL (3 counties): random sample	LA, KY, MI, FL (3 counties): ALL cases
Selection criteria (same for both datasets):	
Cases diagnosed in 2004-2005	
Cervix, Vagina, Vulva, Anus, Penis, Oropharynx (specific subsites known to be potentially HPV-associated)	
Excluded certain histologies not typically HPV-associated (e.g. lymphoma, sarcoma, melanoma)	
Invasive cancers (some in situ typed, not included here)	
Histologic confirmation	

***RTR cases (Los Angeles, Iowa, Hawaii) not included in current analysis.**

Methods

□ Calculated % distribution (registry vs. all cases typed) for:

- Age
 - Continuous
 - Categorical (age 20+)
- Sex (Anal and Oropharynx)
- Race
 - White, Black, Other
 - Hispanic ethnicity for FL only
- Histology
 - Cervix only
- Stage

□ Significance testing

- Chi square
- T test for continuous (age)

Background:
HPV Typing Representativeness Analysis
Cases from LA, KY, MI, FL

Registry cases

- 5917 cases
- 100%

Sampled cases

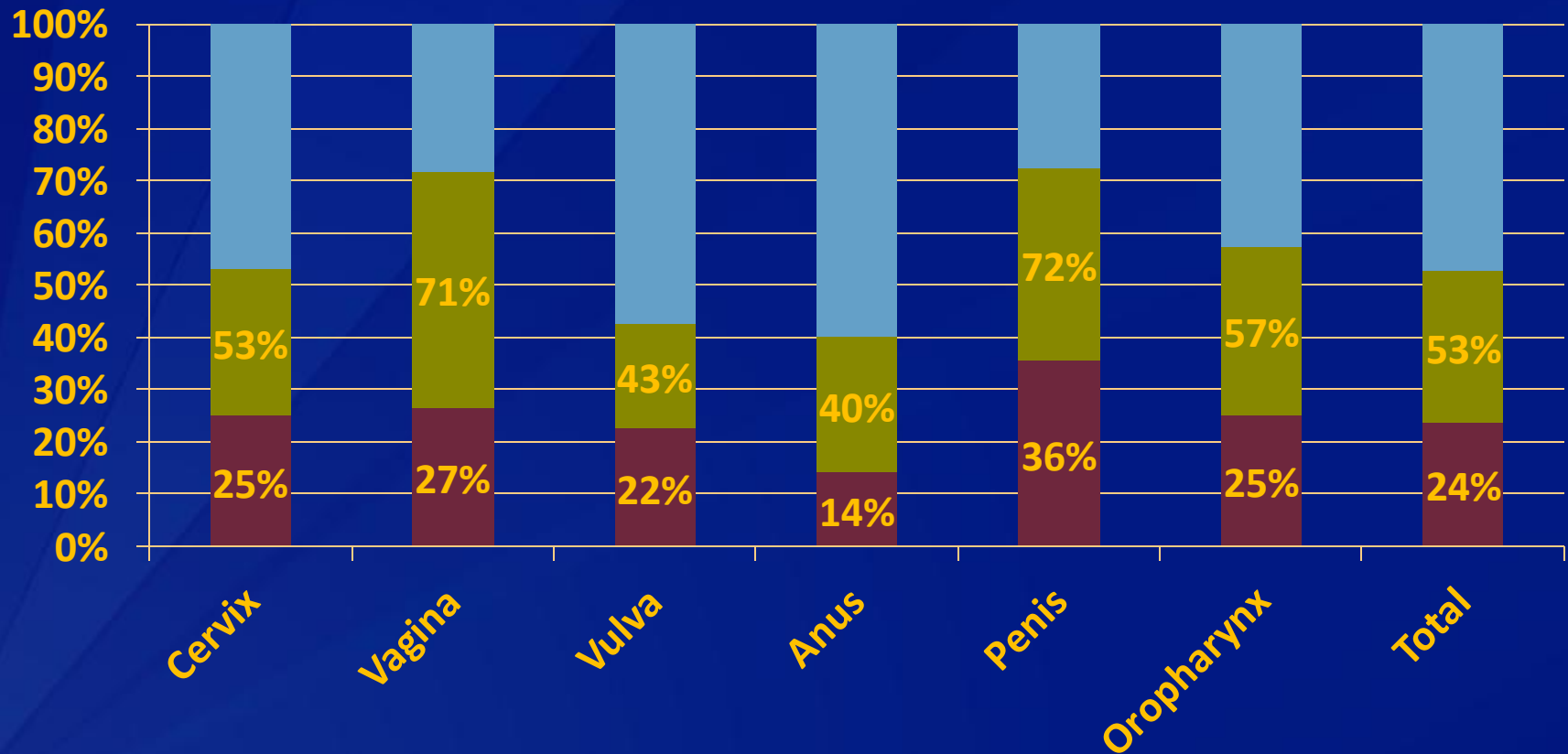
- 3127 cases
- 53%

Typing data

- 1403 cases
- 24% of registry
- 45% of sampled

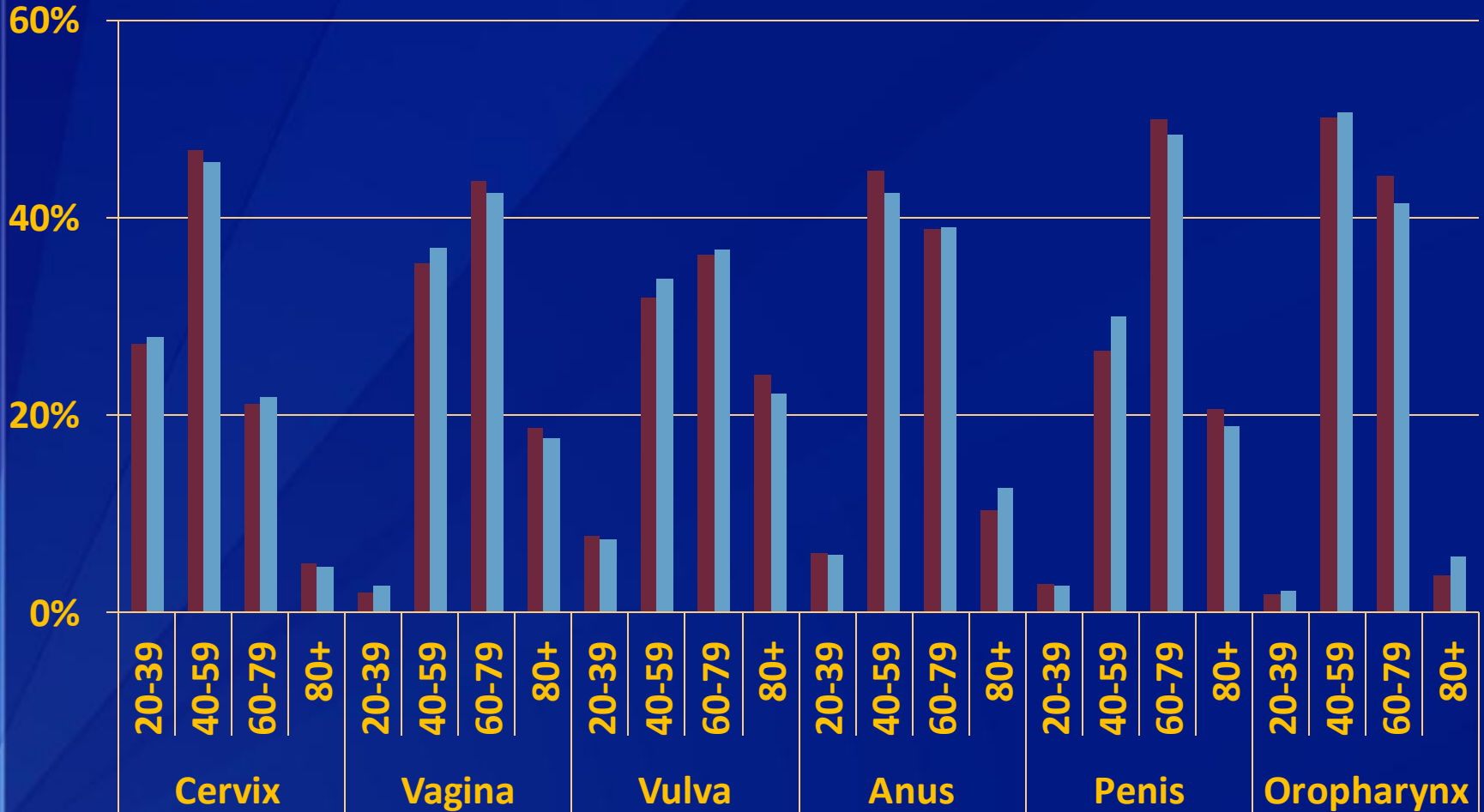
Sampling frame: Sampled and typed cases, percent of registry data

■ Typing ■ Sampled ■ Registry



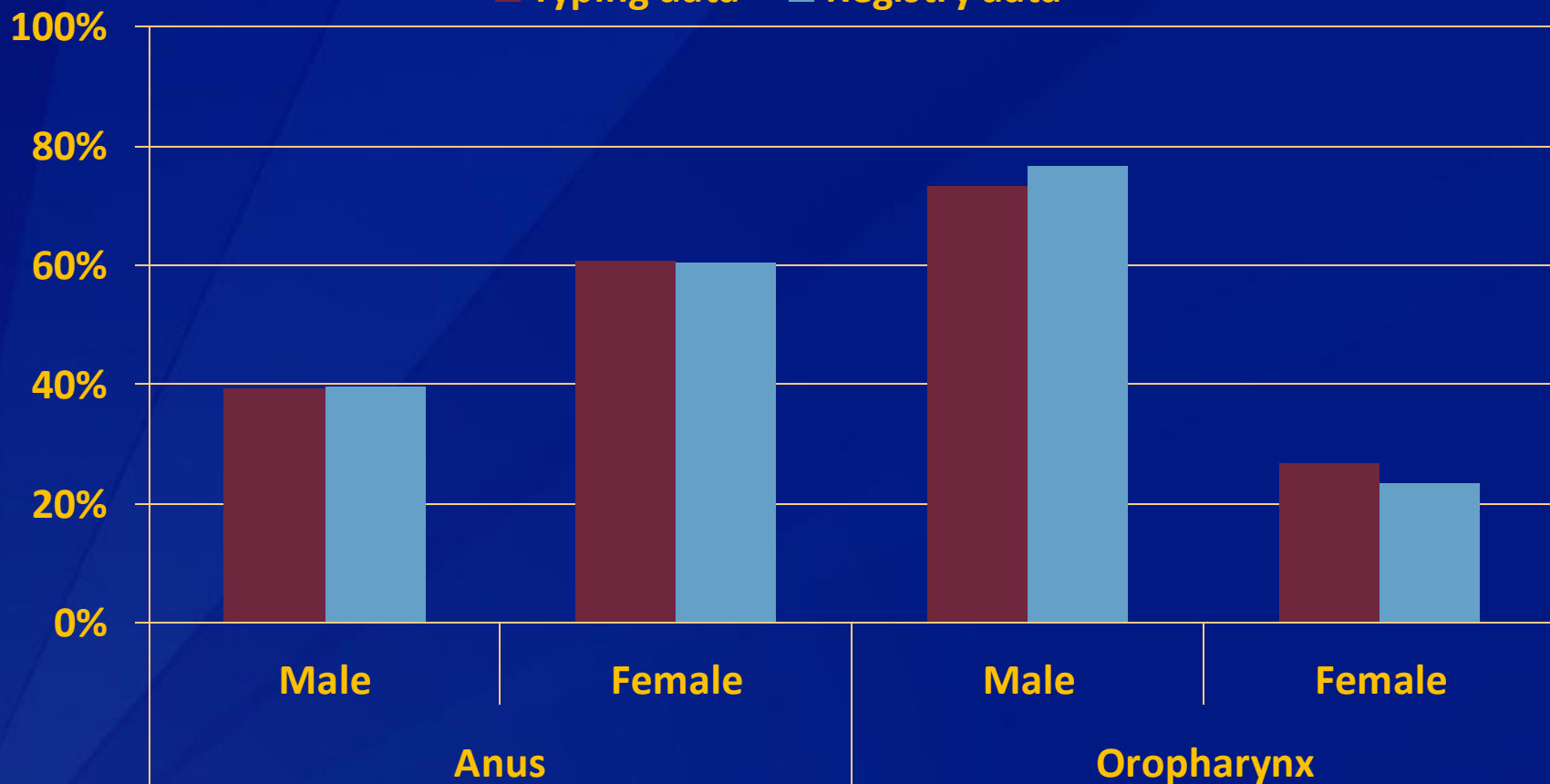
FL, LA, KY, MI comparison by age

■ Typing data ■ Registry data



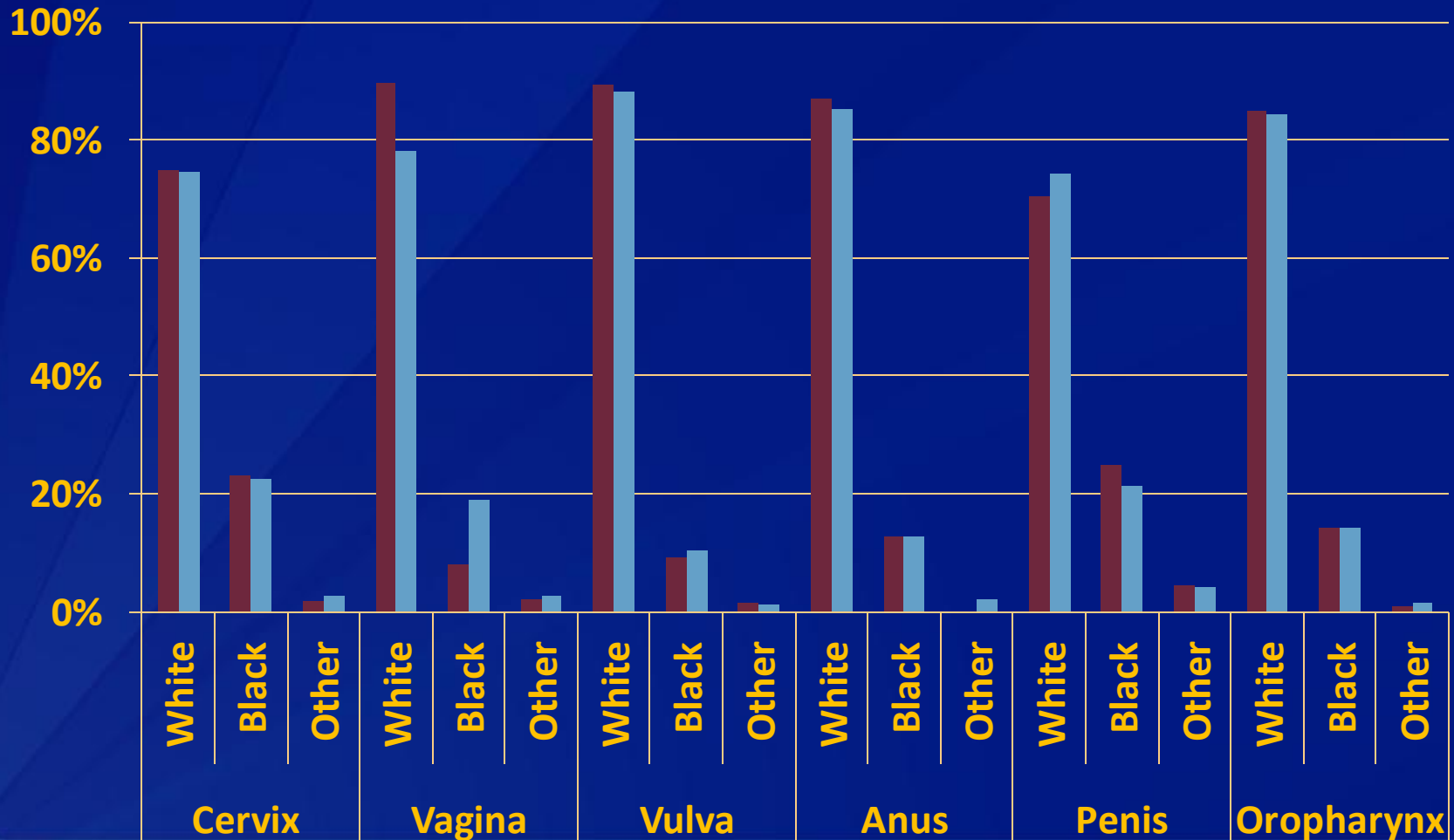
FL, LA, KY, MI comparison by sex

■ Typing data ■ Registry data



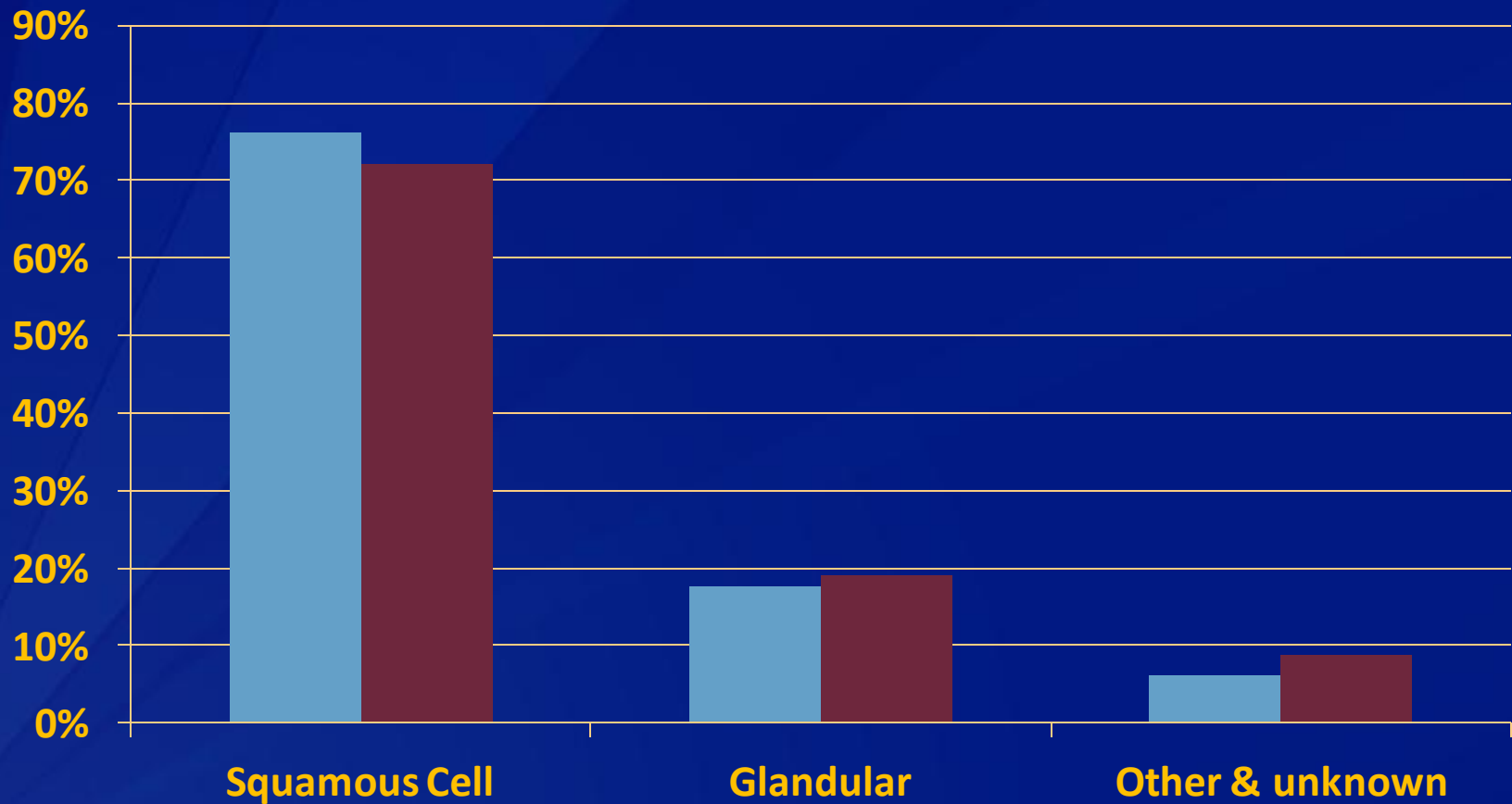
FL, LA, KY, MI comparison by race

■ Typing data ■ Registry data



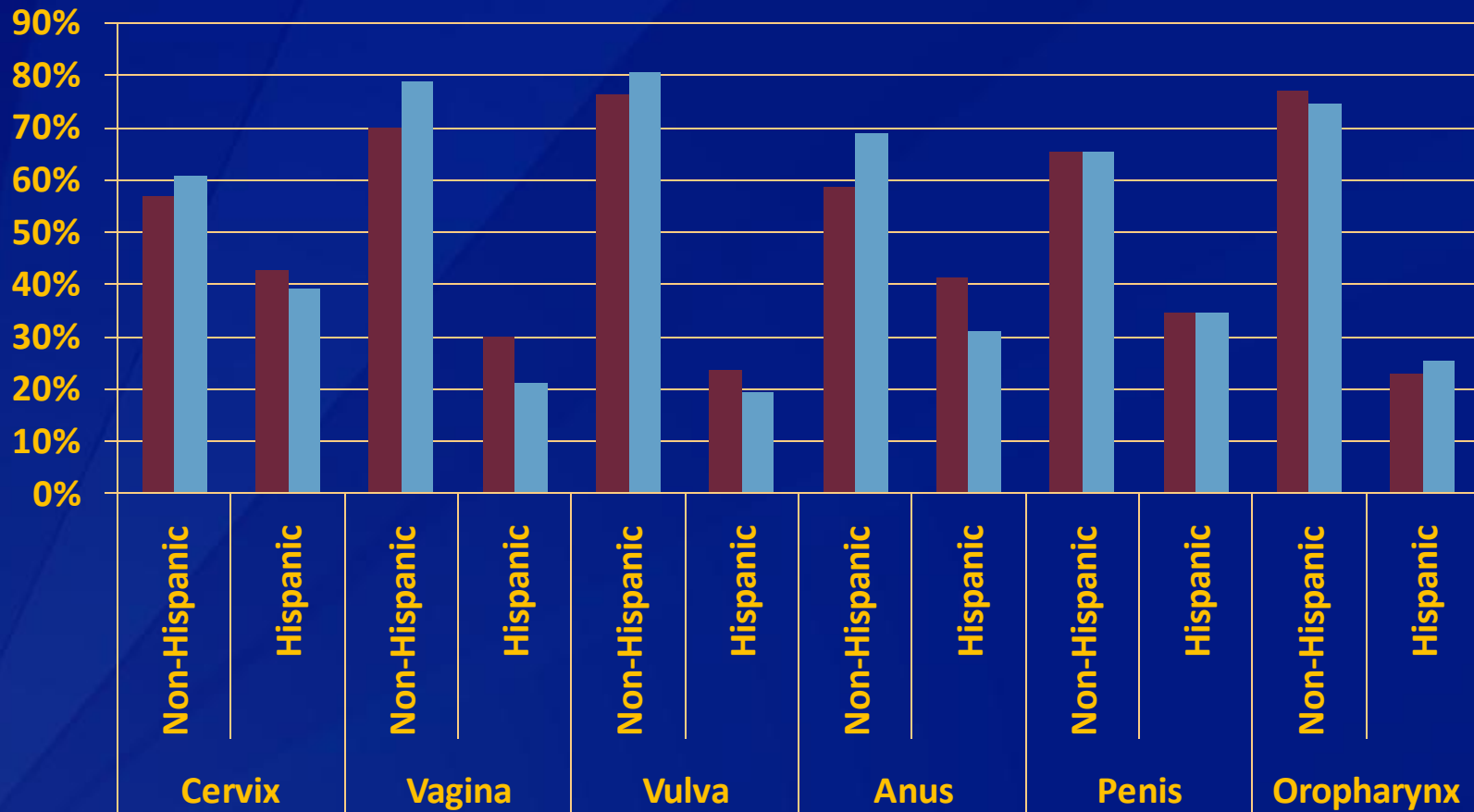
FL, LA, KY, MI comparison by histology: cervix only

■ Typing data ■ Registry data

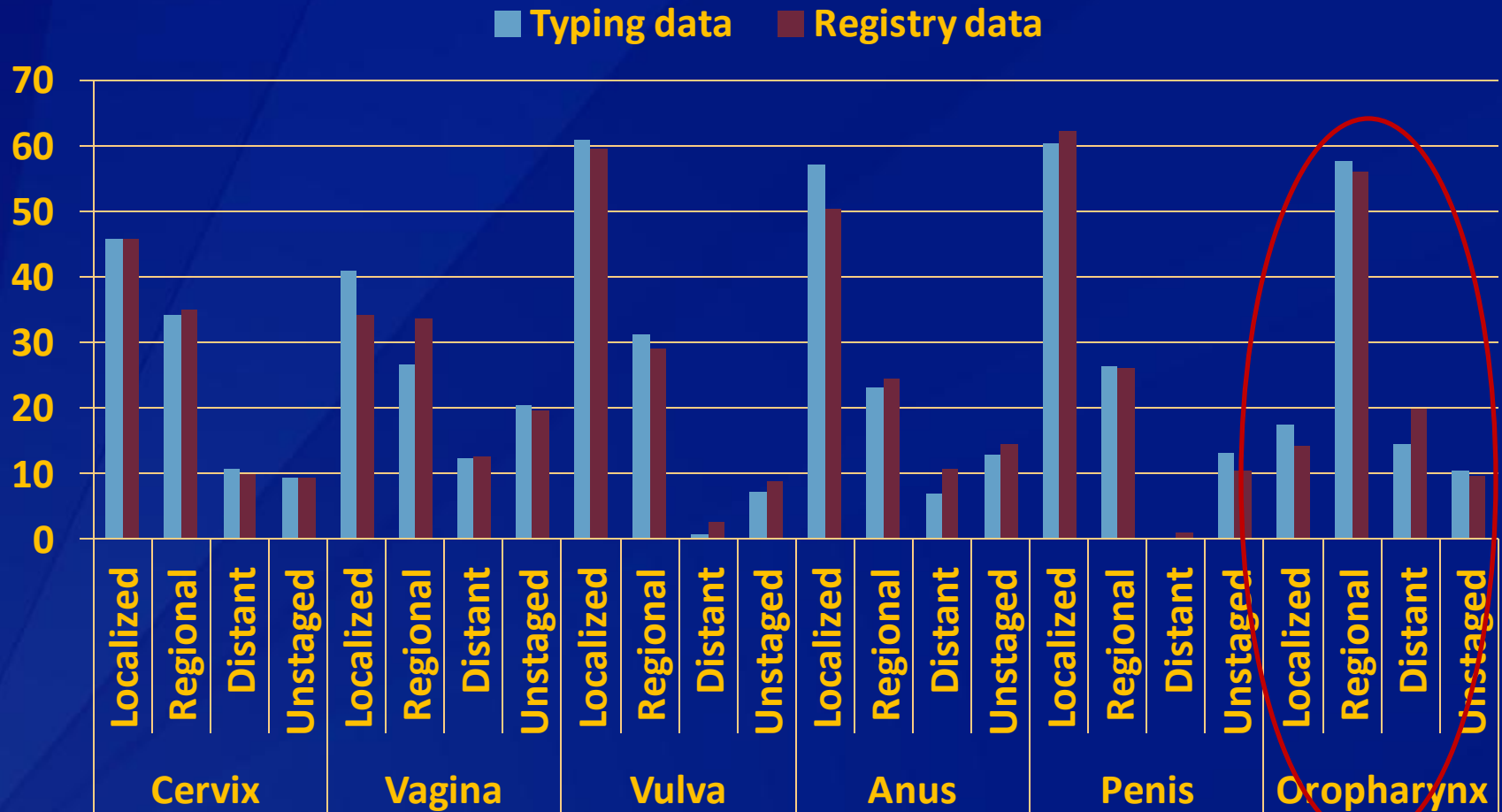


Florida (3 counties) comparison by Hispanic ethnicity

■ Typing data ■ Registry data



FL, LA, KY, MI comparison by stage at diagnosis



Conclusions

- ❑ **Typing sample representative of diagnosed cases**
 - **Distributions of typed cases not significantly different from registry cases**
 - **One exception: fewer distant stage oropharyngeal cases than expected**
- ❑ **Future plans**
 - **Include RTRs**
 - **Increases #**
 - **Convenience sample not random sample; probably less representative**
 - **Examine in situ tumors**
 - **RTRs**
 - **CIN3 from Michigan**

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Questions?

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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