

Melanoma Surveillance in the United States: Overview of Methods

Meg Watson, MPH

Epidemiologist

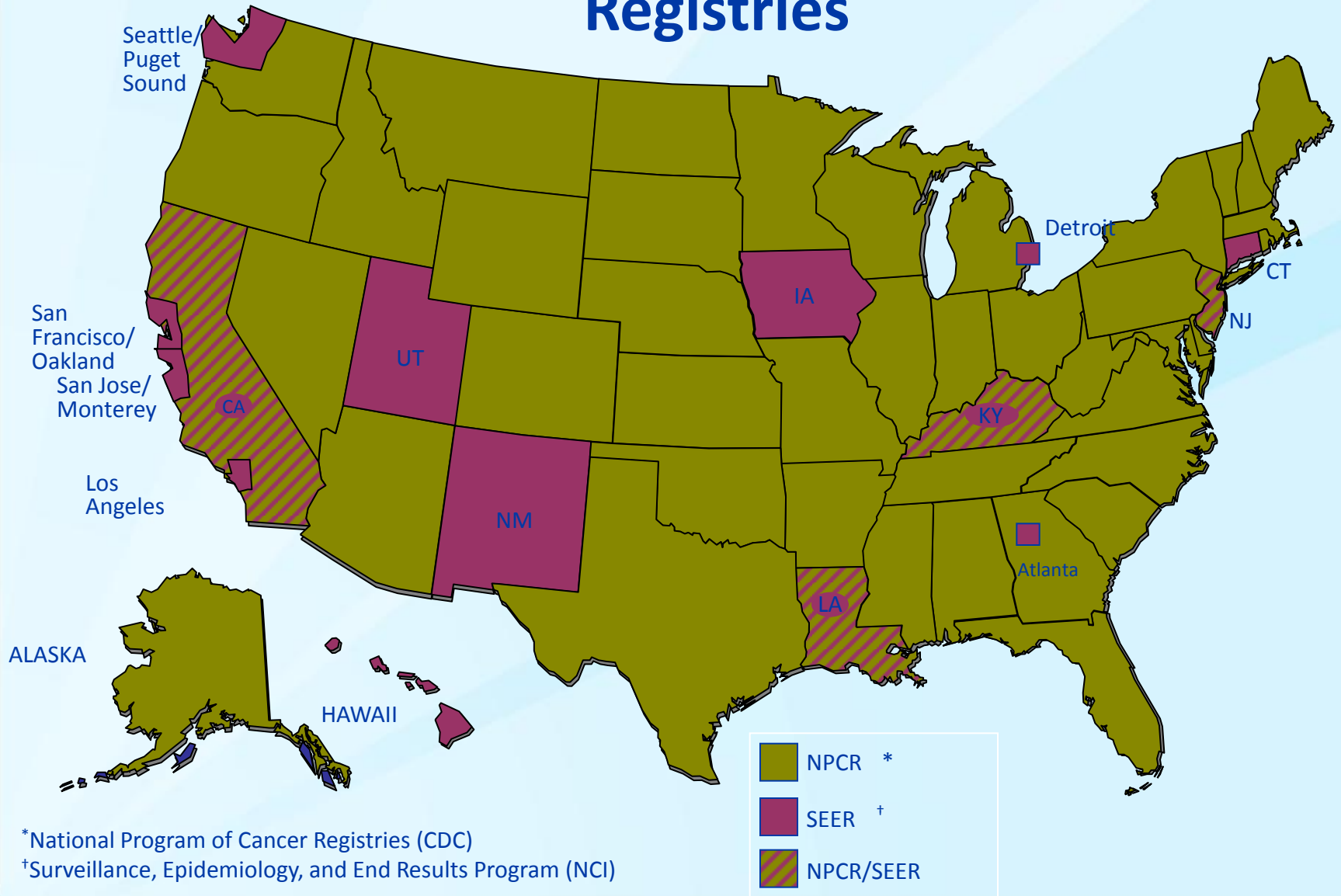
Epidemiology and Applied Research Branch
Division of Cancer Prevention and Control
Centers for Disease Control and Prevention



Outline

- Melanoma supplement project
 - Rationale
 - Overview of articles
 - Analysis criteria
 - Current status/issues
 - Results: preliminary data

NPCR and SEER State and Metropolitan Registries



Melanoma Supplement

- Rationale:
 - Burden of melanoma has primarily been characterized using SEER data
 - Reports suggest melanoma increasing
 - More population coverage enables study of
 - Geographic variation (UV)
 - Racial/ethnic variation
 - Histologic subtypes
 - Etc.
 - Basal and squamous cell not collected

Melanoma Supplement

- ~75 Authors and Participants
 - State Cancer Registries
 - CA, FL, ID, LA, TX, GA, AR, MO, NJ, NH, KS, AZ
 - Academia-Universities and Cancer Centers
 - Harvard, Sloan-Kettering, Case-Western, Emory
 - National Cancer Institute
 - American Cancer Society
 - CDC
- Process
 - Monthly meetings
 - Peer review (internal clearance + journal peer review)
- Projected 2010 publication
 - Journal of the American Academy of Dermatology

Melanoma Supplement

- Issues for steering committee
 - Race/ethnicity
 - Site categories
 - Histology categories
 - Underreporting in non-hospital settings

Melanoma Supplement

- Issues
 - Underreporting in non-hospital settings
 - State concerns related to data completeness
- Addressing concerns
 - Article on underreporting
 - Methods to examine incidence
 - Exclusion of states with concerns about completeness

Melanoma Supplement

Proposed articles

- NPCR/SEER combined data:
 - Methods (including descriptive epi)
 - Burden in young adults
- Racial/ethnic variations
 - Histology, site and age
 - Stage and staging scheme changes
- NPCR/SEER combined with other data sets:
 - UV and melanoma
 - SES and melanoma

Melanoma Supplement

Proposed articles, continued

- SEER only:
 - Multiple primary cancers after melanoma
 - US trends
- Other aspects:
 - Underreporting and state registry activities
 - Nat'l behavioral surveys assessing sunprotective behaviors
 - Comprehensive cancer control programs
 - Melanoma screening
 - Commentaries

Melanoma Supplement: Current Status

- Most papers complete or nearly complete
- Process:
 - Supplement editorial review (overall fit, dermatologist review, stats review)
 - CDC clearance if CDC author
 - DCPC ADS informal review if no CDC author
 - Cleared articles to JAAD for peer-review

Melanoma Surveillance in the United States: Overview of Methods

Methods

- NPCR/SEER 2004—2006
 - Some articles use 1999—2006
 - Excluded states not meeting USCS criteria
 - Excluded states with concerns about completeness
 - 78% population coverage
- “Melanoma of the skin” defined as:
 - ICD-0-3 site code C44.0-C44.9
 - Histology codes 8720-8790
 - Does not include melanomas of genital skin or non-cutaneous melanomas

Methods, Continued

- Incidence rates
 - Expressed per 100,000 persons
 - Age-adjusted to 2000 US Standard Population
 - Calculated using SEER*Stat 6.5.2
 - 95% confidence intervals

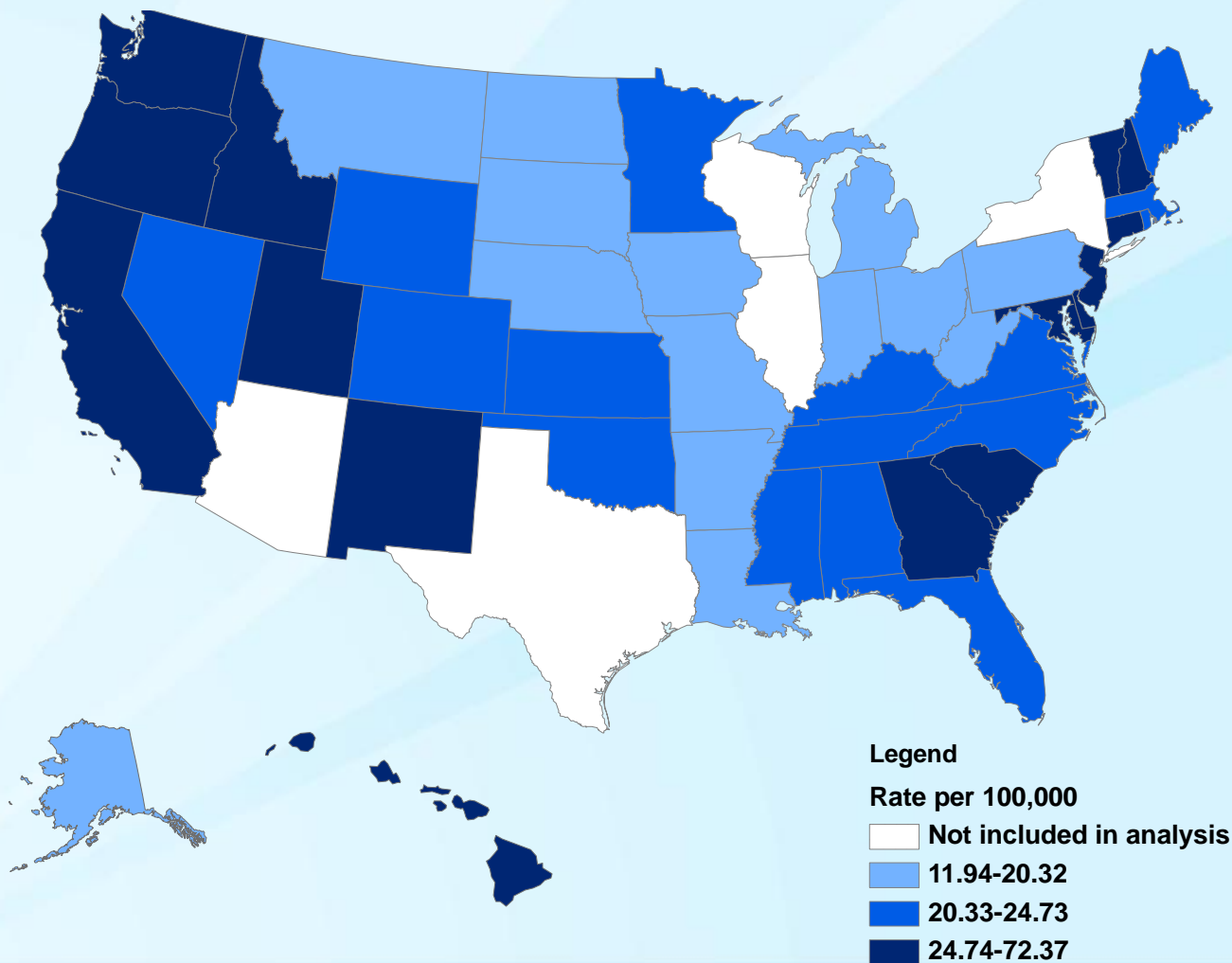
Results

Melanoma by race and Hispanic ethnicity, United States, 2004-2006

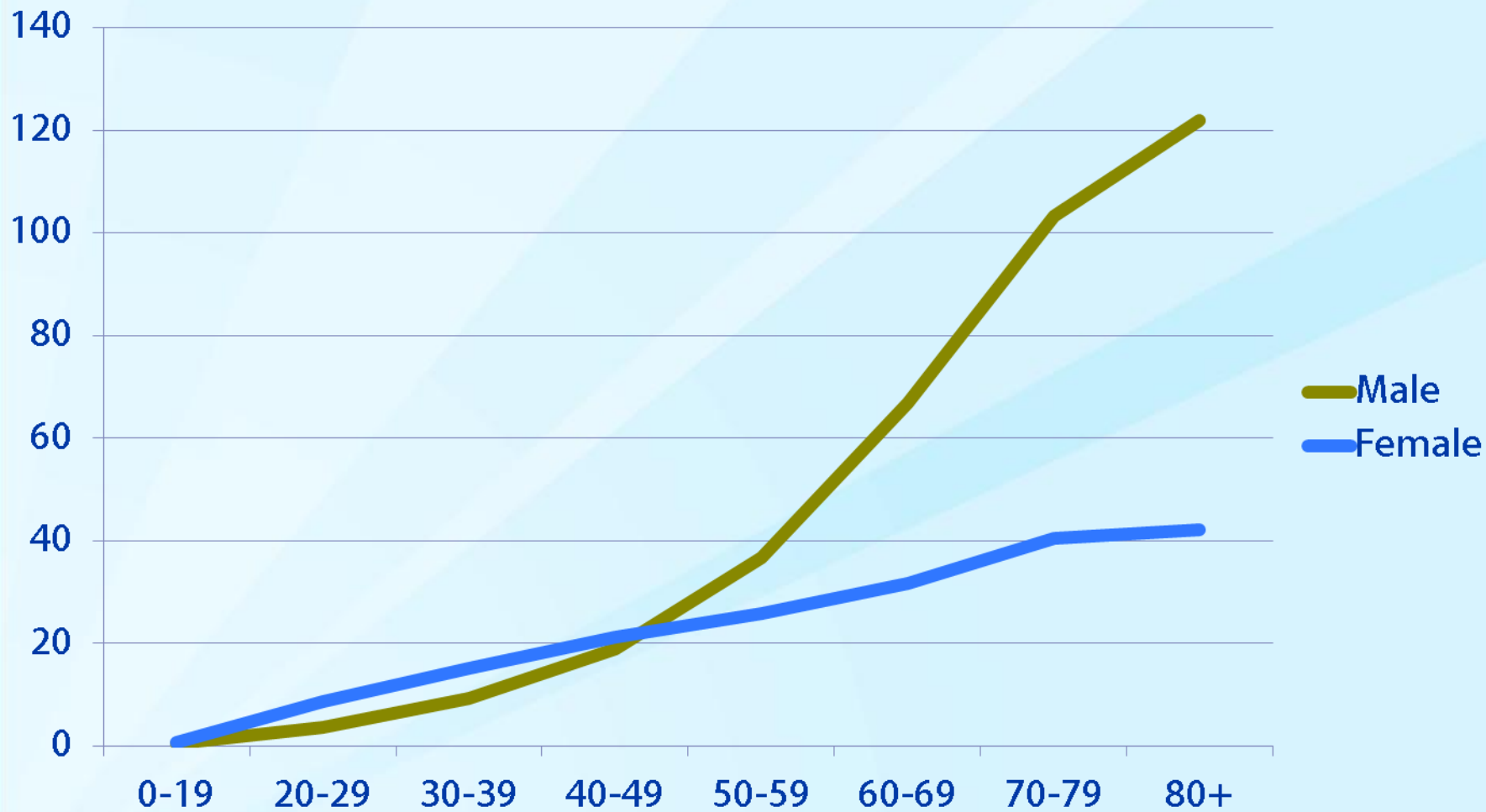
	Average Annual Count*	Age-Adjusted Incidence Rate	95% C.I.
All races/ethnicities	45,566	19.22	(19.12, 19.33)
White	43,168	21.55	(21.43, 21.67)
White, Hispanic	779	4.71	(4.51, 4.92)
White, non-Hispanic	42,389	23.27	(23.14, 23.40)
Black	240	1.06	(0.98, 1.14)
API	144	1.51	(1.36, 1.66)
AI/AN	84	4.58	(4.00, 5.22)
Hispanic	826	4.69	(4.50, 4.90)

**based on 78% of the population.*

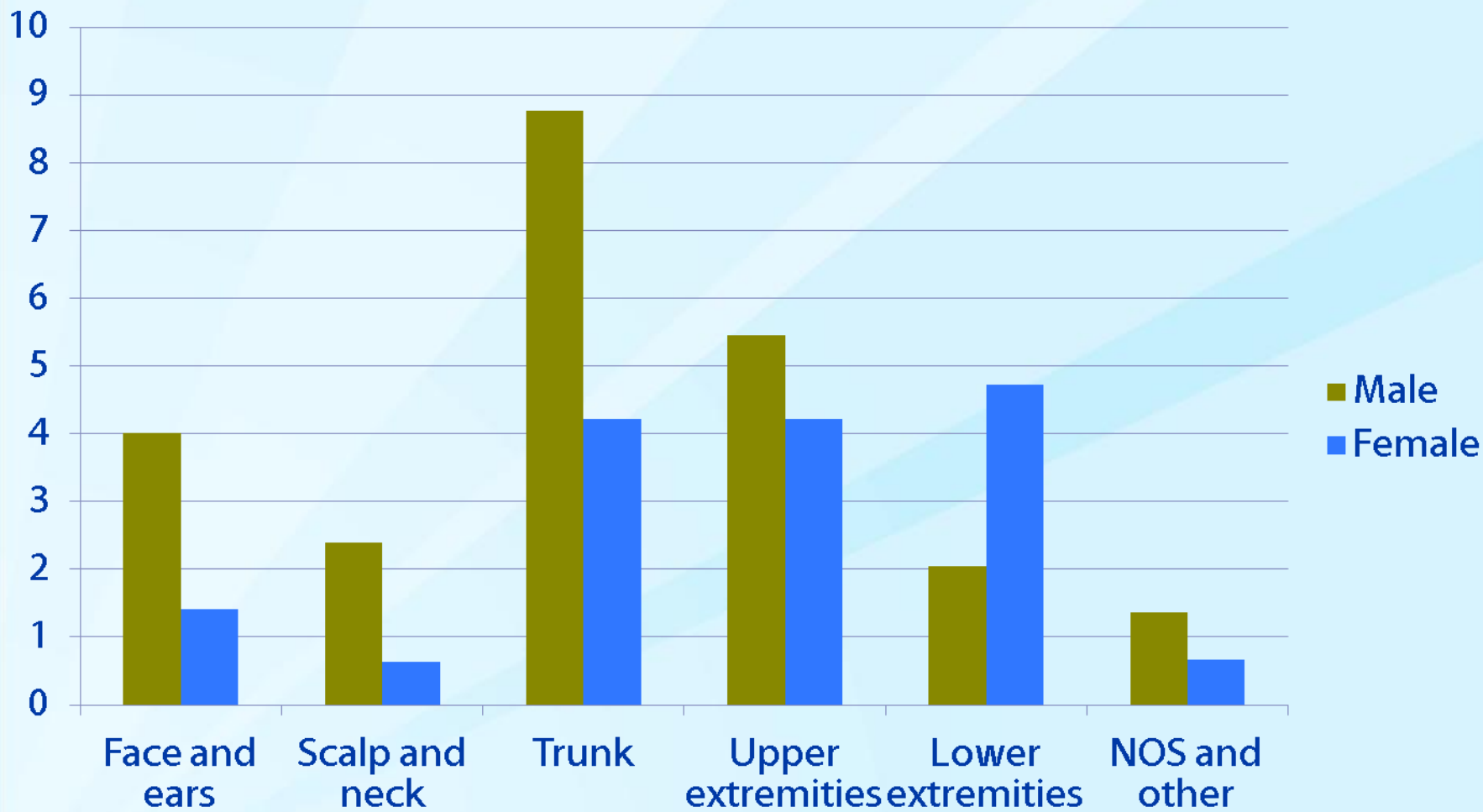
Rates of Invasive Melanoma among Non-Hispanic Whites by State, United States, 2004—2006



Incidence rate of melanoma by age and sex, United States, 2004–2006

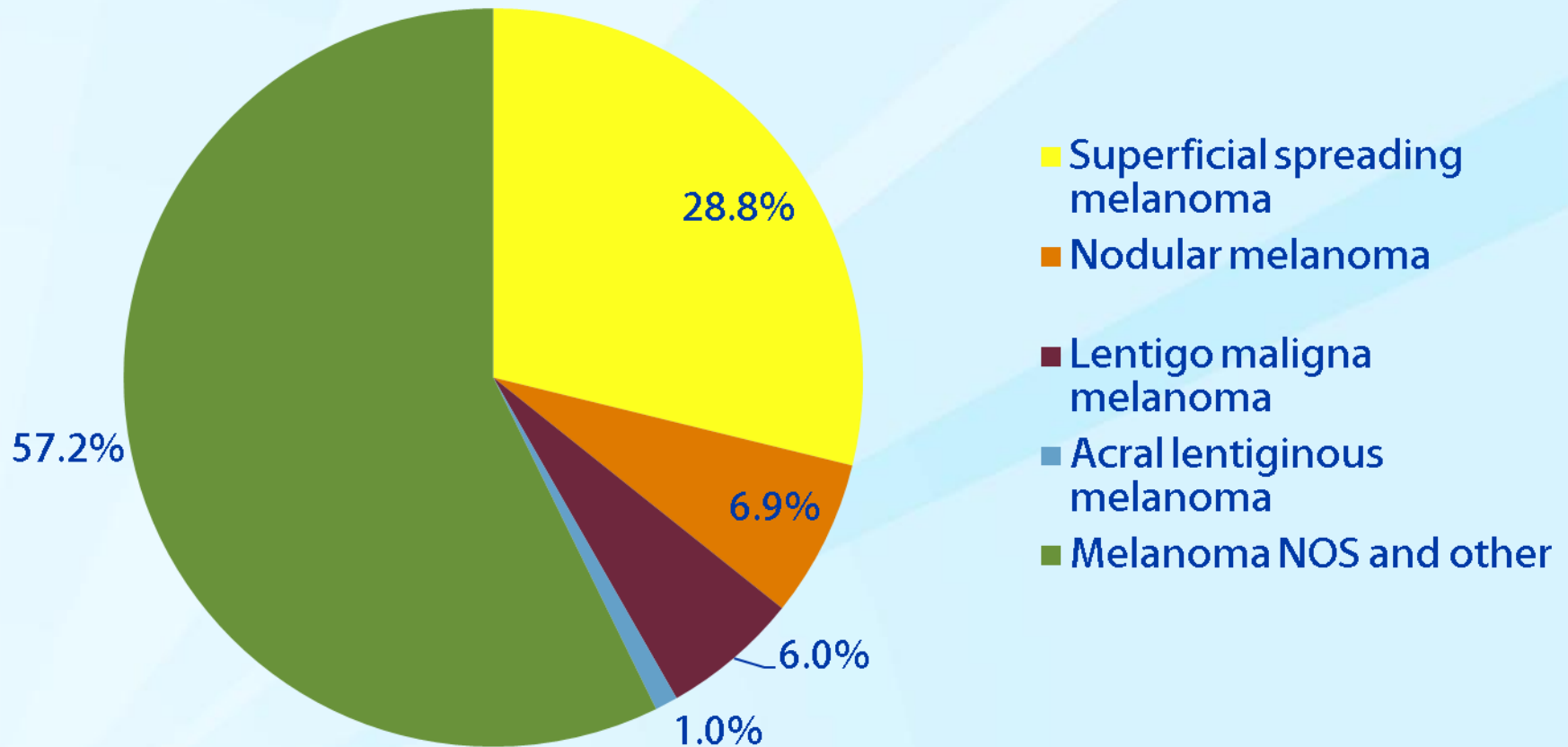


Melanoma by site on the body and sex, United States, 2004-2006



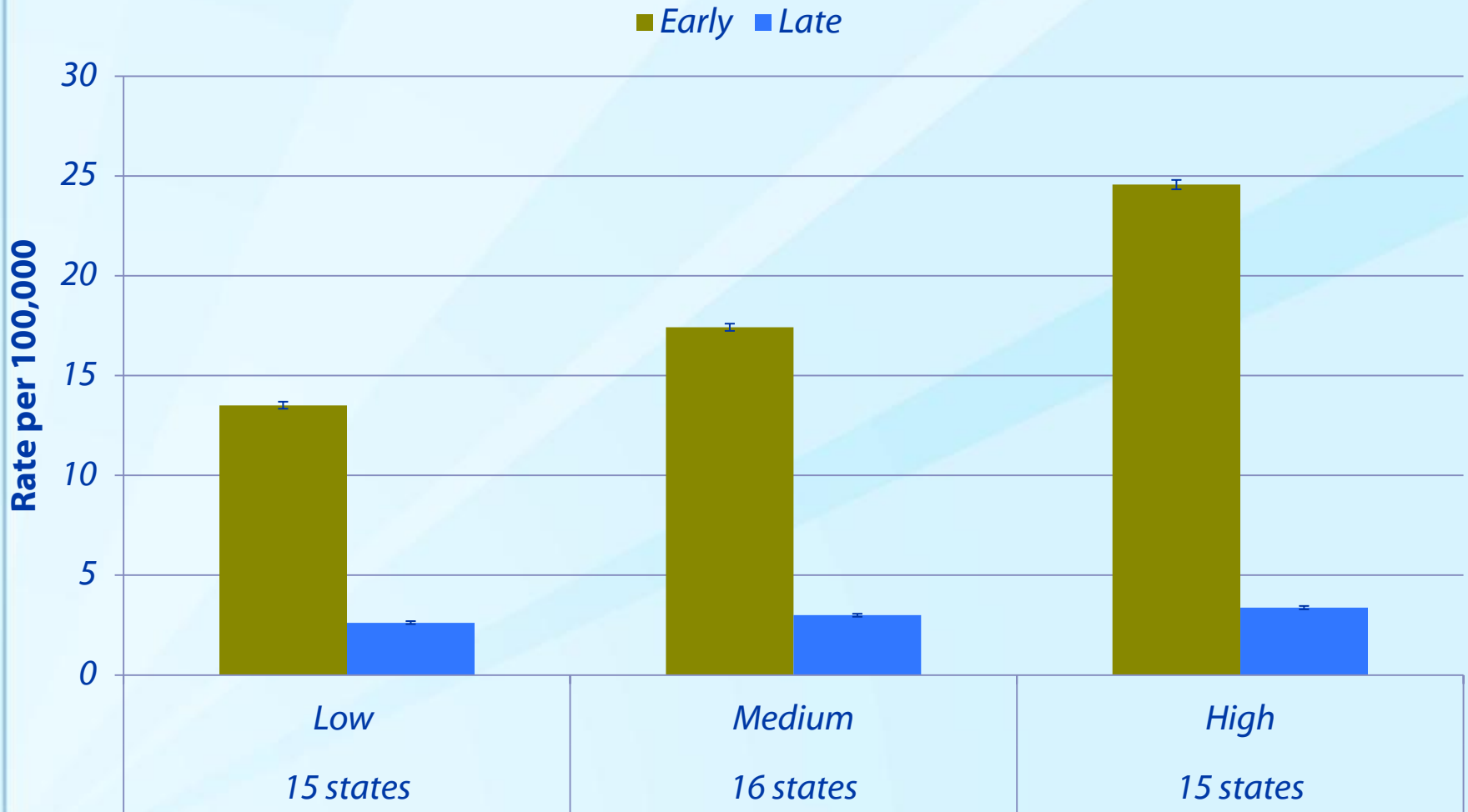
*based on 78% of the population.

Melanoma by histology, United States, 2004—2006



*based on 78% of the population.

Melanoma Incidence Rates By Stage and State, Grouped into Low, Medium, and High Tertile Groups, 2004—2006



Conclusion

- Limitations
 - Potential for undercount
 - Unable to look at thickness (Breslow score)
 - Many “melanoma NOS” histologies
- Comprehensive look at melanoma covering majority of US population
 - Geographic variation (UV)
 - Racial/ethnic variation
 - Histologic subtypes

Acknowledgements

- Christopher J. Johnson, MPH, Cancer Data Registry of Idaho
- Recinda Sherman, MPH, Florida State Cancer Registry
- Cheryll C. Thomas, MSPH, Division of Cancer Prevention and Control, CDC
- Myles Cockburn, PhD, USC/Keck School of Medicine
- Hannah K. Weir, PhD, Division of Cancer Prevention and Control, CDC
- Jeannette Jackson-Thompson, PhD, Missouri Cancer Registry
- Vivien W. Chen, PhD, Louisiana Tumor Registry
- Mona Saraiya, MD, MPH, Division of Cancer Prevention and Control, CDC
- Melanoma monograph steering committee
- Suephy Chen
- *The findings and conclusions in this presentation are those of the presenter, and do not necessarily represent the official position of the Centers for Disease Control and Prevention.*

Thank you

Meg Watson

770-488-3097

eze5@cdc.gov