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Characterized by development of vascular nodules in skin, mucous membranes, or viscera. Endemic KS is indolent with lesions primarily located on extremities; epidemic KS is aggressive, and lesions can be widespread.
Why We Did this Study

• Prior to effective antiretroviral therapy (ART) for HIV, KS risk was elevated by over 1,000-fold for people living with HIV (PLWH) compared to the general population
• Since the wide-spread availability of ART, the world-wide incidence of KS decreased but regional differences persist,
  • percent decline is lower in Sub-Saharan Africa compared to other parts of the world
• In the United States, KS incidence rates in PLWH declined 83.5% between 1990-1995 and 1996-2002.

Dal Maso, Eur J Cancer 2001
The AIDS-defining Cancer Project Working Group for IeDEA and COHERE in EuroCoord, Clin Inf Dis, 2017
Engels EA, Int J Cancer 2008;
What We Did

• National Cancer Institute’s (NCI’s) Surveillance, Epidemiology, and End Results (SEER)
  – Higher incidence of KS was associated with areas of increased poverty (2005-2009)
  – Among southern SEER sites, KS incidence increased among African American men (2000-2013)
  – registry-confirmed cancer cases (CA, CT, GA, HI, IA, KY, LA, NJ, NM, and UT) as well as data on select population (AL: Alaska Natives; AZ: Native American Indian; MI: Detroit; and WA: Seattle/Puget Sound)
What We Did

• Primary Objective:
  • To identify differences by age, race, and geographic differences in KS incidence trends using the United States Cancer Statistics (USCS) registry

• Methods:
  • USCS registry were assessed via the CDC’s Wide-ranging Online Data for Epidemiologic Research platform (WONDER, accessed 12/2017)
  • All incident KS cases are coded within this registry using the International Classification of Disease for Oncology (ICD-O) as 9140/03
  • Limited to males aged 20-54 as compose most AIDS-related KS
What We Found - Age

Male 20-54

Crude Rate vs Year

20 - 29 - 0 Joinpoint
2000-2014 APC = 2.67*

30 - 44 - 0 Joinpoint
2000-2014 APC = -5.35*

45 - 54 - 0 Joinpoint
2000-2014 APC = -0.03
What We Found - Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Joinpoint</th>
<th>2000 - 2014 APC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>0</td>
<td>-4.22*</td>
</tr>
<tr>
<td>Midwest</td>
<td>0</td>
<td>-1.76*</td>
</tr>
<tr>
<td>South</td>
<td>1</td>
<td>-1.94*</td>
</tr>
<tr>
<td>West</td>
<td>0</td>
<td>-4.72*</td>
</tr>
</tbody>
</table>
What We Found - Metropolitan Area

Age-Adjusted Rate by MSA

- **Atlanta-Sandy, GA** - 0 Joinpoint
  - 2000-2014 APC = 1.49

- **Los Angeles-Long Beach, CA** - 0 Joinpoint
  - 2000-2014 APC = -3.84*

- **Miami-Fort Lauderdale, FL** - 0 Joinpoint
  - 2000-2014 APC = -8.64*

- **New York-Newark, NY-NJ-PA** - 0 Joinpoint
  - 2000-2014 APC = -5.46*

- **San Francisco-Oakland, CA** - 0 Joinpoint
  - 2000-2014 APC = -6.19*
What We Found- AA men by Region

African American

Northeast - 3 Joinpoints
- 2000 - 2002 APC = 4.29
- 2002 - 2009 APC = -8.53*
- 2009 - 2012 APC = -0.23
- 2012 - 2014 APC = -26.17*

Midwest - 0 Joinpoint
- 2000 - 2014 APC = -3.40*

South - 0 Joinpoint
- 2000 - 2014 APC = -0.86

West - 0 Joinpoint
- 2000 - 2014 APC = -5.59*
What Our Results Mean and Why this Matters

• Between 2000-2014, APC of KS significantly increased among men age 20-29, decreased in those 30-44, and was unchanged among men aged 45-54

• Among African American Men, APC significantly increased in the 20-29 age-group, and there was no significant change in APC in AA men overall in the Southern United States

• Among the top 5 MSAs, KS incidence APC non-significantly increased in Atlanta, Georgia, and in 2014, its KS incidence was nearly twice that of NY, NY
Acknowledgments

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