HIV-WELLNESS INITIATIVE

Chronic Disease Prevention and Health Promotion's Collaboration with Ryan White

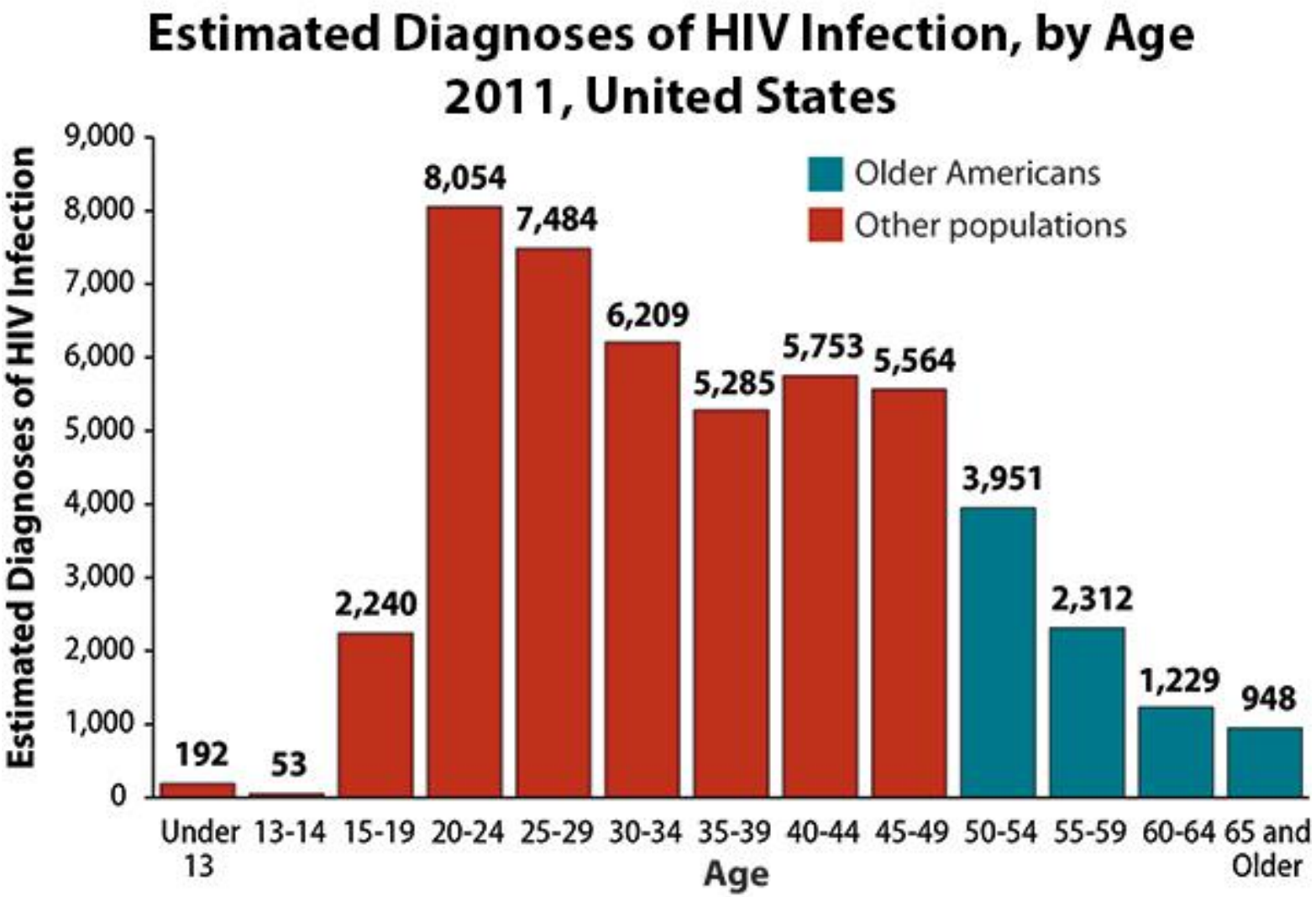
Melanie Flores, MSW

"How can we maximize the quality and quantity of life for people living with HIV receiving antiretroviral treatment?"

- Amy C. Justice, MD, PhD

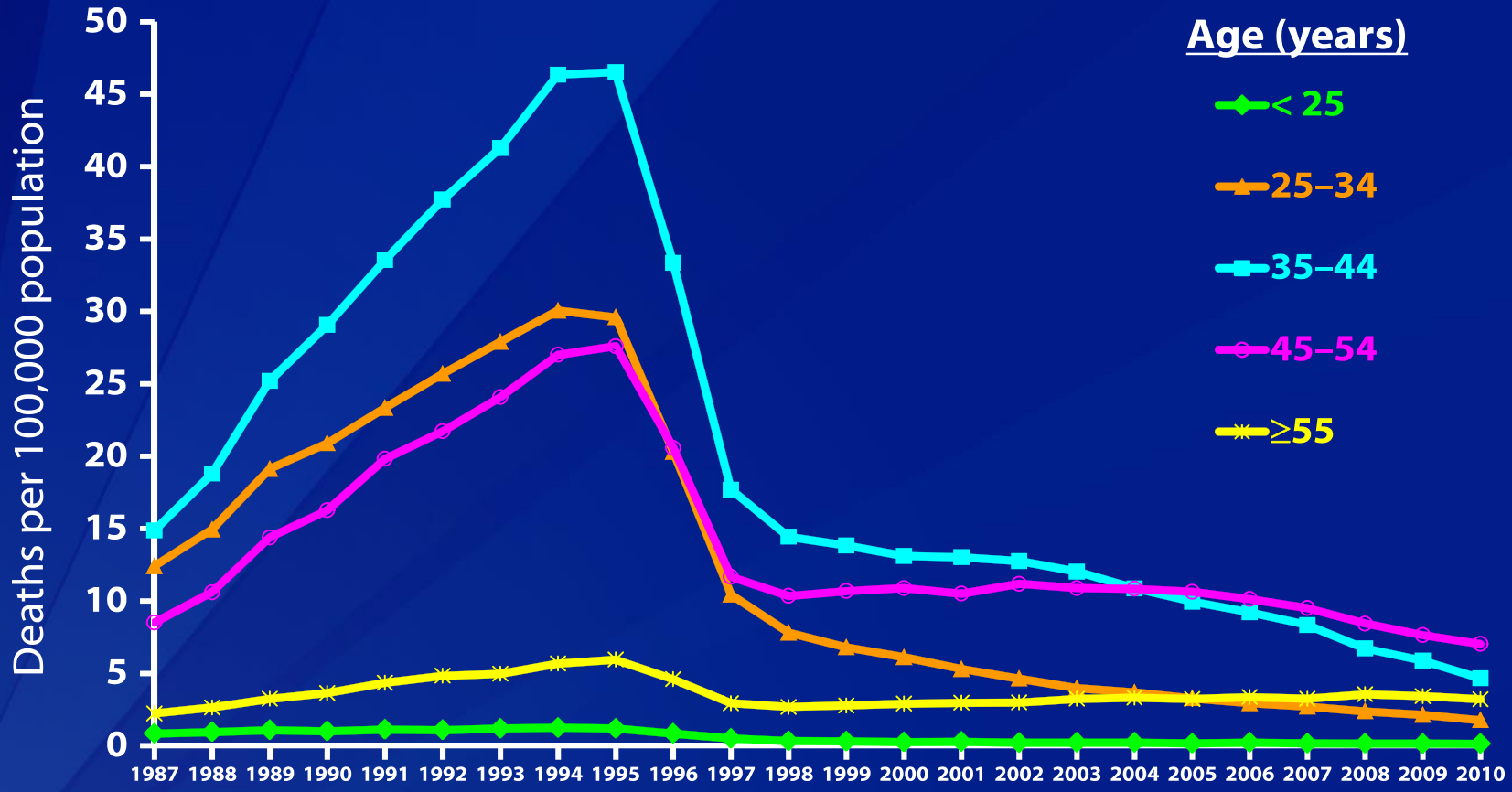
BACKGROUND

HIV and Chronic Disease



Source: CDC. Diagnoses of HIV infection in the United States and dependent areas, 2011. *HIV Surveillance Report* 2013; vol.23.

Trends in Annual Rates of Death due to HIV Infection by Age Group, United States, 1987–2010



Note: For comparison with data for 1999 and later years, data for 1987–1998 were modified to account for *ICD-10* rules instead of *ICD-9* rules.

HIV & Aging

- In 2010, 5% (2500 cases) of new HIV infections were among Americans aged 55 and older.
- Persons aged 55 and older accounted for 19% of the estimated 1.1 million people living with HIV infection in the U.S. in 2010.
- Mortality rates for HIV-positive patients have been reported as 3-5 times higher than those of the general population
  - However less than 20% of deaths attributable to classic AIDS-related conditions

Centers for Disease Control and Prevention, Fact Sheet: HIV Among Older Americans, found at http://www.cdc.gov/hiv/risk/age/olderamericans/index.html

Justice, A.C. (2010). Aging with complex chronic disease: The wrinkled face of AIDS. GMC Treatment Issues. GMHC Inc., New York.

Peters, B., Post, F., Wierzbicki, A.S., Phillips, A., Power, L, et al. (2013). Screening for chronic comorbid diseases in people with HIV: the need for a strategic approach. HIV Medicine, 4(1), 1-11.

HIV & Chronic Disease

- People living with HIV taking Antiretroviral Therapy are living longer and are experiencing age related conditions:
  - Osteoporosis
  - Cardiovascular disease
  - Chronic obstructive pulmonary disease (COPD)
  - Renal disease
  - Liver cirrhosis
  - Cancer
- Reasons: 1) HIV progression, 2) treatment toxicity, and 3) modifiable risk factors/behaviors

Justice, A.C. (2010). Aging with complex chronic disease: The wrinkled face of AIDS. GMC Treatment Issues. GMHC Inc., New York.

Comorbidities: HIV & Chronic Disease

- High prevalence of modifiable risk factors: cigarette smoking, recreational drug use, increased alcohol intake and reduced physical activity
- While 20% of the general population in the US smoke, between 39%-59% of HIV-infected people smoke
- Growing incidence of lung cancer
- Type 2 diabetes mellitus is reported to be as much as 4x higher in HIV-infected patients
- Incidence of metabolic syndrome is higher

AIDS Community Research Initiative of America. (2011). The HIV and aging consensus project: Recommended treatment strategies for clinicians managing older patients with HIV. The American Academy of HIV Medicine. The American Geriatrics Society.

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Comorbidities: HIV & Chronic Disease

- Risk of COPD is increased in HIV-infected persons with a high viral load (>200,000 copies/ml) and may progress more rapidly with poorly controlled HIV
- Some antiretroviral treatments (ART) increase risk of heart disease, diabetes, while HIV itself increases the risk of some cancers

AIDS Community Research Initiative of America. (2011). The HIV and aging consensus project: Recommended treatment strategies for clinicians managing older patients with HIV. The American Academy of HIV Medicine. The American Geriatrics Society.

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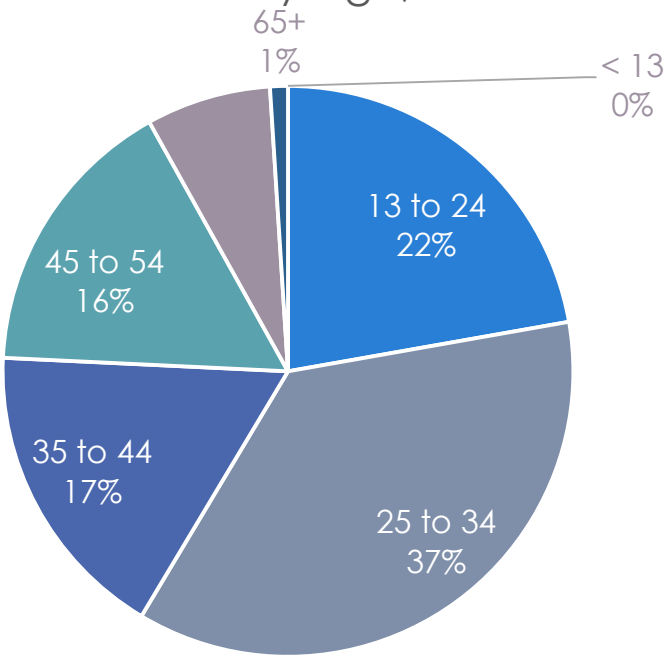
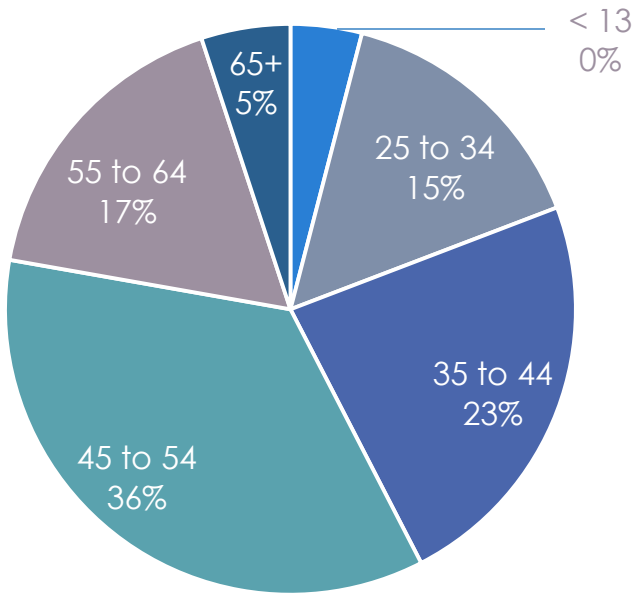
HIV & Nevada

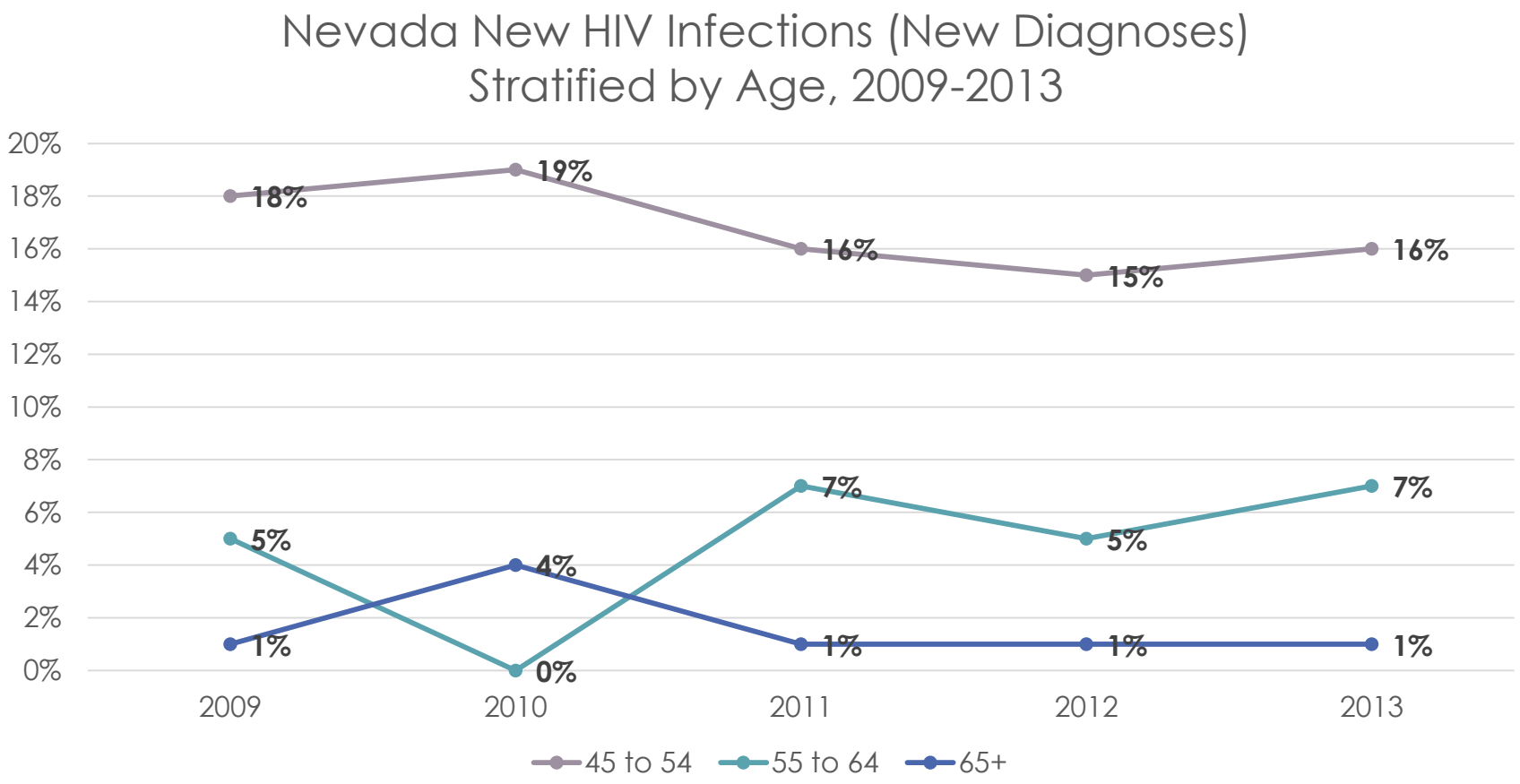
Nevada New HIV Infections Stratified by Age, 2013



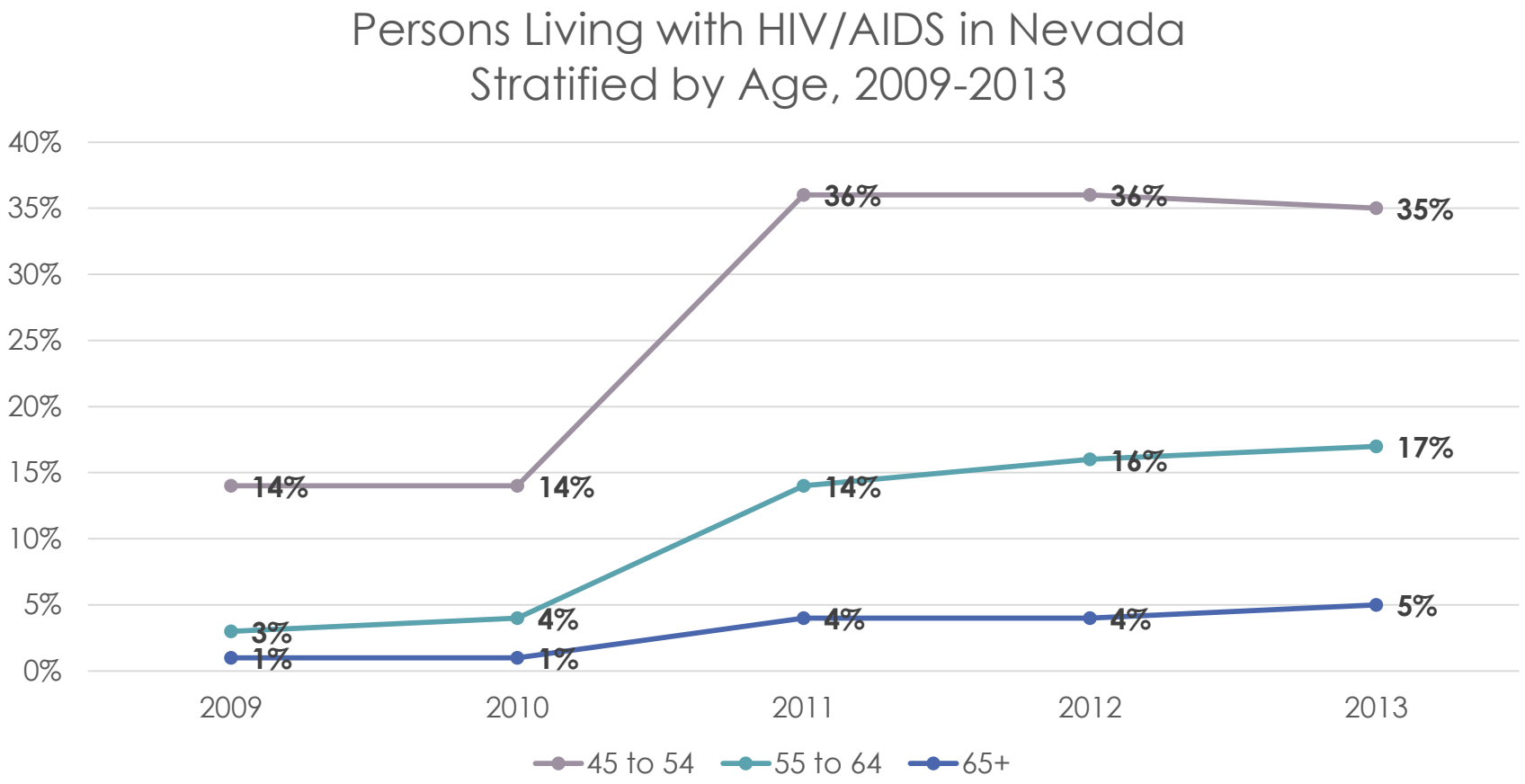
Persons Living with HIV/AIDS in NV Stratified by Age, 2013



Division of Public and Behavioral Health. (2013). Fast Facts: http://health.nv.gov/PUBLICATIONS/2013_HIV-AIDS_Fast_Facts_e_1.0_2014-08-13.pdf



Nevada Division of Public and Behavioral Health. HIV Surveillance Program: Fast Facts 2009-2013. Retrieved from: http://health.nv.gov/HIV_AIDS_SurveillancePgm.htm



Nevada Division of Public and Behavioral Health. HIV Surveillance Program: Fast Facts 2009-2013. Retrieved from: http://health.nv.gov/HIV_AIDS_SurveillancePgm.htm

Recommendations

- Early and regular screenings for non-communicable diseases
  - At diagnosis, before ART, after ART
- Coordination of HIV/AIDS and non-communicable disease interventions
- Behavioral interventions to increase protective behaviors at the individual, group and community level

AIDS Community Research Initiative of America. (2011). The HIV and aging consensus project: Recommended treatment strategies for clinicians managing older patients with HIV. The American Academy of HIV Medicine. The American Geriatrics Society. Website: http://hiv-age.org/

Community Preventive Services Task Force. Interventions to reduce sexual risk behaviors or increase protective behaviors to prevent acquisition of HIV in men who have sex with men: Individual, group, and community level behavioral interventions. Retrieved from: http://www.thecommunityguide.org/hiv/mensexmen.html

Haregu, T.N., Oldenburg, B., Setswe, G., Elliott, J., & Nanayakkara, V. (2012). Epidemiology of comorbidity of HIV/AIDS and non-communicable diseases in developing countries: A systematic review. *Journal of Global Health Care Systems, 2(1).*

Assessment & Treatment Recommendations for Noninfectious Comorbidities in the European AIDS Clinical Society (EAC) Guidelines (Peters, 2013)

Assessment	At HIV diagnosis	Prior to starting ART	Follow-up frequency
Haematology			
• FBC	+	+	3–12 months
• Haemoglobinopathies: screen at-risk patients	+		
• G6PD: screen at-risk patients	+		
Body composition			
• Body mass index	+	+	Annual
Cardiovascular disease			
• Risk assessment (Framingham score) in all men > 40 years and women > 50 years without CVD	+	+	Annual
• ECG: consider baseline ECG prior to starting PIs associated with potential conduction problems	+	+/–	
Hypertension			
• Blood pressure	+	+	Annual
Lipids			
• TC, HDL-C, LDL-C, TG: repeat in fasting state if used for medical intervention (i.e. ≥ 8h without caloric intake)	+	+	Annual
Diabetes mellitus			
• Plasma glucose: consider oral glucose tolerance test/HbA1c if fasting glucose levels 5.7–6.9 mmol/L (100–125 mg/dL)	+	+	6–12 months
Liver disease			
• Risk assessment: more frequent monitoring prior to starting and on treatment with hepatotoxic drugs	+	+	Annual
• ALT/AST, ALP and bilirubin	+	+	3–12 months
Renal disease			
• Risk assessment	+	+	Annual
• eGFR (aMDRD): more frequent monitoring if CKD risk factors present and/or prior to starting and on	+	+	3–12 months
treatment with nephrotoxic drugs	+	+	Annual
• Urine dipstick analysis: every 6 months if eGFR < 60 ml/min (using MDRD equation); if proteinuria ≥ 1 and/or eGFR <60 ml/min perform UP/C or UP/A			
Bone disease			
• Bone profile: calcium (albumin corrected)	+	+	6–12 months
• Risk assessment (FRAX in patients > 40 years): consider DXA in at-risk patients	+	+	2 years
• 25-OH vitamin D (screen at-risk patients)	+		As indicated
Neurocognitive impairment			
• Screening questions: screen all patients without highly confounding conditions. If abnormal or symptomatic, refer to algorithm page for further assessment	+	+	2 years
Depression			
• Screening questions: screen at-risk patients	+	+	1–2 years
Cancer			
• Mammography: for women 50–70 years			1–3 years
• Cervical PAP: for sexually active women			1–3 years
• Anoscopy and PAP (MSM): but evidence is of uncertain benefit			1–3 years
• Ultrasound and alpha fetoprotein: for persons with cirrhosis			6 months
• Others: controversial			

HIV-WELLNESS INITIATIVE

Collaboration Among CDPHP and Ryan White

Activities 2014-2015

- Self-Management Education: Chronic Disease Self-Management and HIV Positive Self-Management
- Data and Report Development
  - Comorbidities report on HIV and Chronic Disease in Nevada
    - Pilot with Northern Nevada HOPES
    - Utilizing electronic health records to:
      - Flag at-risk clients: obesity, tobacco, pre-diabetics, etc
      - Developing feedback loops between primary doc and specialty care or service
- Quality Improvement
  - Increase screening and referral protocols
  - Referrals into lifestyle prevention programming (e.g. DPP)
  - Referrals to management programs (e.g. Tobacco Quitline, CDSMP, DSMP, PSMP)

Self-Management Education

- Stanford model developed by Kate Lorig out of Stanford University. It is a peer-to-peer model.
- Patients learn to take day-to-day responsibility for their diseases
- Two programs:
  - Chronic disease self-management
  - HIV Positive self-management
- Workshops are conducted with people with HIV, 2 ½ hours, 1 time a week, for 7-weeks in a community setting

Self-Management Education

- Learning Objectives
  - Medication and treatment adherence
  - Physical activity and nutrition
  - Coping and mental health (frustration, anger, depression)
  - Effective communication (family, friends, health care providers)
  - Making better-informed treatment decisions
- Outcomes
  - Improved self-reported health
  - Improved physical activity
  - Decreased hospitalization

Self-Management Education

- Partnership with the Quality and Technical Assistance Center (QTAC)
  - CDSMP training at the end of January
  - PSMP add-on in the Summer
- Solicitation of AIDS Service Organizations (ASOs)
  - Northern Nevada HOPES (NVHOPES)
  - Community Counseling Center (CCC)
  - Southern Nevada Health District (SNHD)
  - Southern Nevada Adult Mental Health Services (SNAMHS)
  - Community Outreach Medical Center (Com-C)

Pilot with Northern Nevada HOPES

- Co-morbidities profile of HIV and Chronic disease begins with Northern Nevada HOPES
- Collect data from their electronic health records
- Variables include diabetes, hypertension, BMI, smoking arthritis, cancer and COPD as well as demographics, and social determinants of health (i.e. age, gender, sexual orientation, ethnicity, income, zip code)
- Report available July of 2015
- Data will dictate further collaboration into 2016 to ensure referral mechanisms and feedback loops with clients

Questions

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