

# Persons with Diagnosed HIV Aged 50 and Older in New York State

## Introduction

With widespread use and clinical effectiveness and tolerability of antiretroviral therapy (ART), persons with diagnosed HIV now live longer and healthier. The Centers for Disease Control and Prevention (CDC) reports that in 2020, 53% of persons with diagnosed HIV in United State (US) and dependent areas were aged 50 and older<sup>1</sup>. However, the life expectancy of persons with diagnosed HIV still lags that of the general population<sup>2</sup>. In addition, as persons living with HIV age, they face possible higher rates of co-morbidities. To understand the relationship of HIV and aging, this report examines the characteristics of the HIV epidemic among persons with diagnosed HIV and aged 50 and older in New York State (NYS).

## Data and Methods

Persons diagnosed with HIV and reported to the NYS HIV registry through the year 2020 were included in the study. Characteristics of persons with diagnosed HIV and aged 50 and older were compared to those aged less than 50 years.

## Findings

### *Persons Newly Diagnosed with HIV*

Overall, the number of persons newly diagnosed with HIV decreased from 2011 to 2020 in both age groups of 50 and older and less than 50. Despite the decline of HIV diagnoses, the proportion of HIV diagnoses among persons aged 50 and older remained relatively stable over the years, ranging from 16% to 20% (Figure 1).

In 2020, there were 1,933 new HIV diagnoses in NYS<sup>3</sup>. Of those, 18% were among persons aged 50 and older. There was a greater percentage of females diagnosed with HIV among persons aged 50 and older compared to persons aged less than 50 (32% vs 17%) (Figure 2).

A greater percentage of non-Hispanic White persons and a lower percent of Hispanic and Asian/Pacific Islander individuals was seen among the 50 and older

## Highlights

- The proportion of HIV diagnoses among persons aged 50 and older has remained relatively stable over the years.
- There were more females and a higher rate of reported heterosexual-contact transmission risk among persons aged 50 and older.
- Persons aged 50 and older were more likely to have late-stage HIV infection at the time of diagnoses.
- In NYS, PLWDH aged 50 and older had higher rates of receiving some care, being retained in care, and being virally suppressed.
- An increasing number of deaths along with a growing median age at death was observed among persons aged 50 and older.

age group newly diagnosed with HIV. All other race/ethnicity groups had similar rates between the two age groups (Figure 3).

While more than 50% of persons newly diagnosed and aged less than 50 in 2020 had reported a history of male-to-male sexual contact (MSM), the proportion of MSM was much lower (24%) in the 50 and older age group compared to the less than 50 group (53%). Meanwhile, the number of persons with reported heterosexual-contact or unknown risk was about 15% higher among persons aged 50 and older compared to the less than age 50 group (Figure 4).

Persons aged 50 and older were more likely to have late-stage (Stage 3) HIV infection—defined as having a Stage 3 HIV diagnosis within 30 days of HIV diagnosis—at the time of diagnosis. Over 1/3 (34%) of new diagnoses were late-stage diagnoses among persons aged 50 and older compared to 16% in persons less than 50 years (Figure 5).

### ***Persons Living with Diagnosed HIV (PLWDH)***

At the end of 2020, there were 105,610 New Yorkers living with diagnosed HIV. Of those, 55,779 (57%) were aged 50 and older (Table 1).

These individuals had similar demographic patterns as newly diagnosed individuals. There were more women, more non-Hispanic White, fewer Hispanic and Asian/Pacific Islander individuals, more persons with reported heterosexual-contact and unknown risk factors, and fewer MSM in the aged 50 and older group compared to the less than 50 group. Of persons aged 50 and older, 53% were less than the age of 60 years and 89% were less than the age of 70 years (Table 1).

In NYS, PLWDH aged 50 and older had higher rates of receiving some care (89%), being retained in care (65%), and being virally suppressed (91%), while the less than age 50 group had lower rates across these metrics (Table 2).

### ***Death Among Persons Diagnosed with HIV***

The total number of deaths for all ages from all causes did not change substantially over the period of 2011-2019<sup>3</sup>. A higher number of deaths in 2020 is most likely related to COVID-19 mortality. An increasing number of deaths, along with a growing median age at death, were observed among persons aged 50 and older (Figure 6). However, the median death age in persons with HIV over age 50 was still less than that of HIV-negative individuals (64.9 years)<sup>4</sup>.

## **Conclusions**

In NYS, persons with diagnosed HIV aged 50 and older live longer now than in the past, and have higher rates of accessing care and being virally suppressed compared to their younger counterparts. The higher percentage of persons over age 50 reporting sexual contact as a possible mode of transmission suggests a need for enhanced clinician education and sexual health discussions among this group. The findings of more late-stage HIV diagnoses and a lower median age at death than HIV-negative individuals in persons aged 50 and older emphasize the importance of targeted HIV testing and treatment, care for co-morbidities, and social supports among the aged 50 and older population.

## References

1. <https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2020-updated-vol-33.pdf>.
2. [Do people with HIV infection have a normal life expectancy in the ear of combination antiretroviral therapy?](#) Sabin CA. BMC Med 2013; 11:251.
3. [New York State HIV/AIDS Surveillance Annual Report 2020 \(health.ny.gov\)](#)
4. [Narrowing the gap in life expectancy between HIV-infected and HIV-uninfected individuals with access to care.](#) Marcus JL, Chao CR, Leyden WA, et al. J Acquir Immune Defic Syndr. 2016; 73:39-46.

## Tables and Figures

Figure 1. Persons Newly Diagnosed with HIV in New York State, 2011-2020

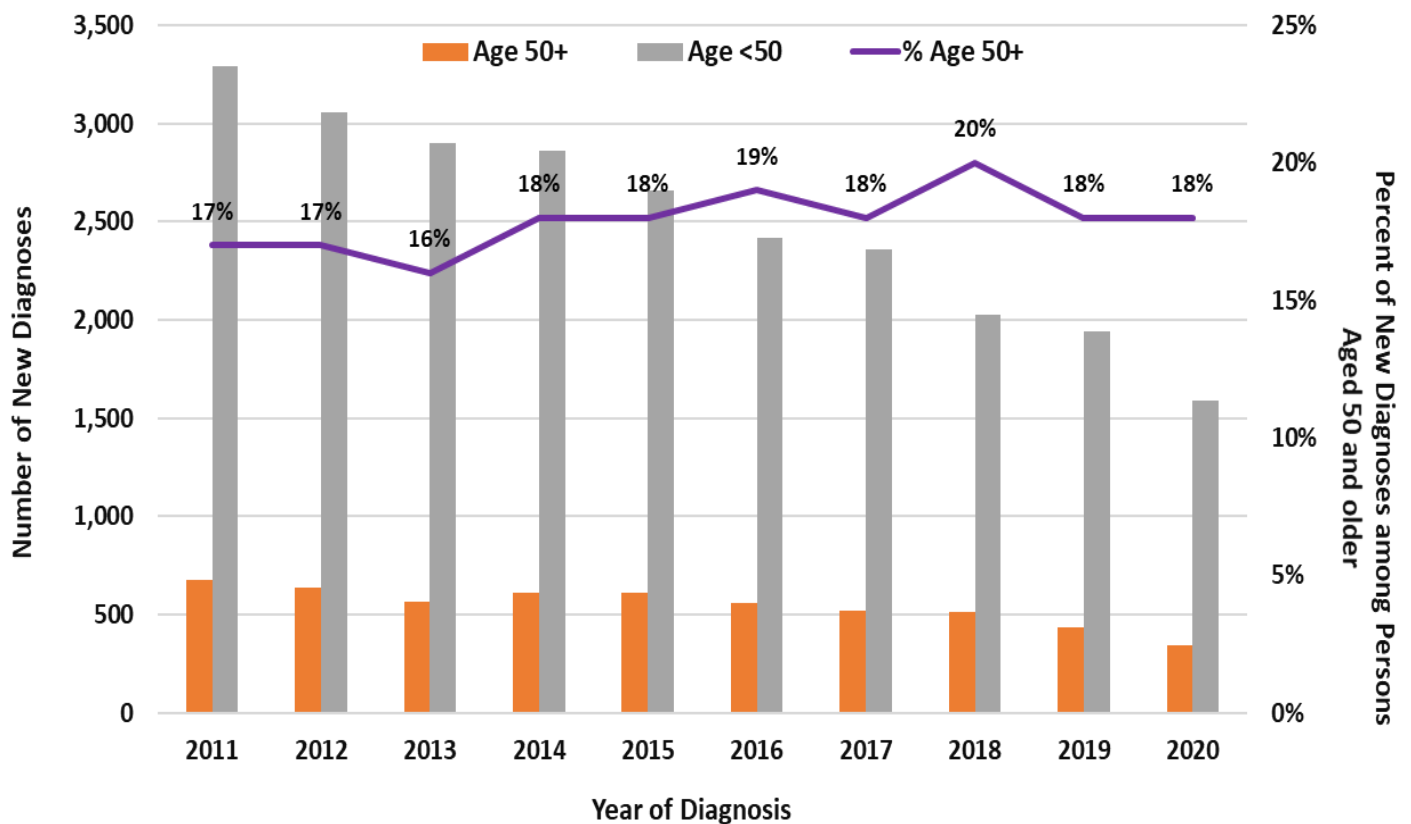


Figure 2. Persons Newly Diagnosed with HIV by Sex at Birth in New York State, 2020

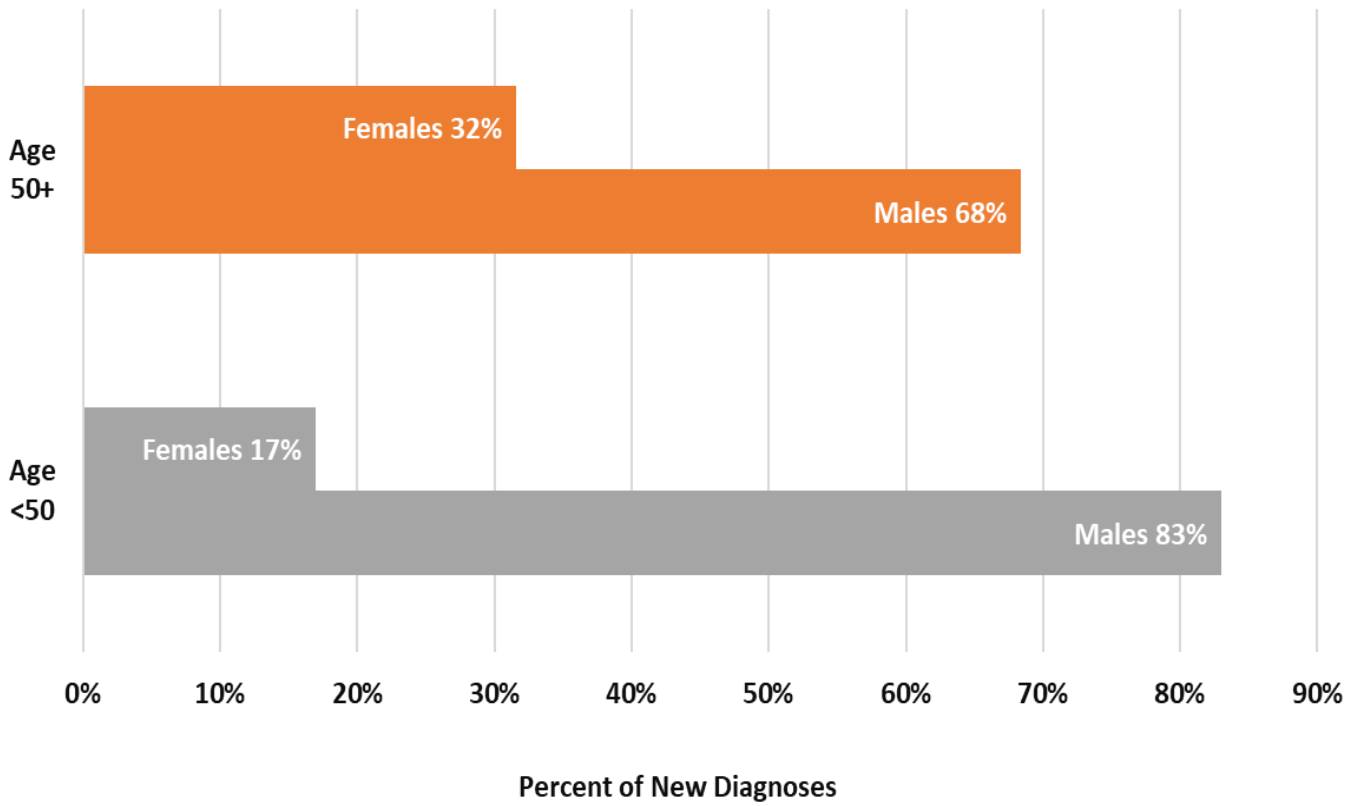


Figure 3. Persons Newly Diagnosed with HIV by Race/Ethnicity in New York State, 2020

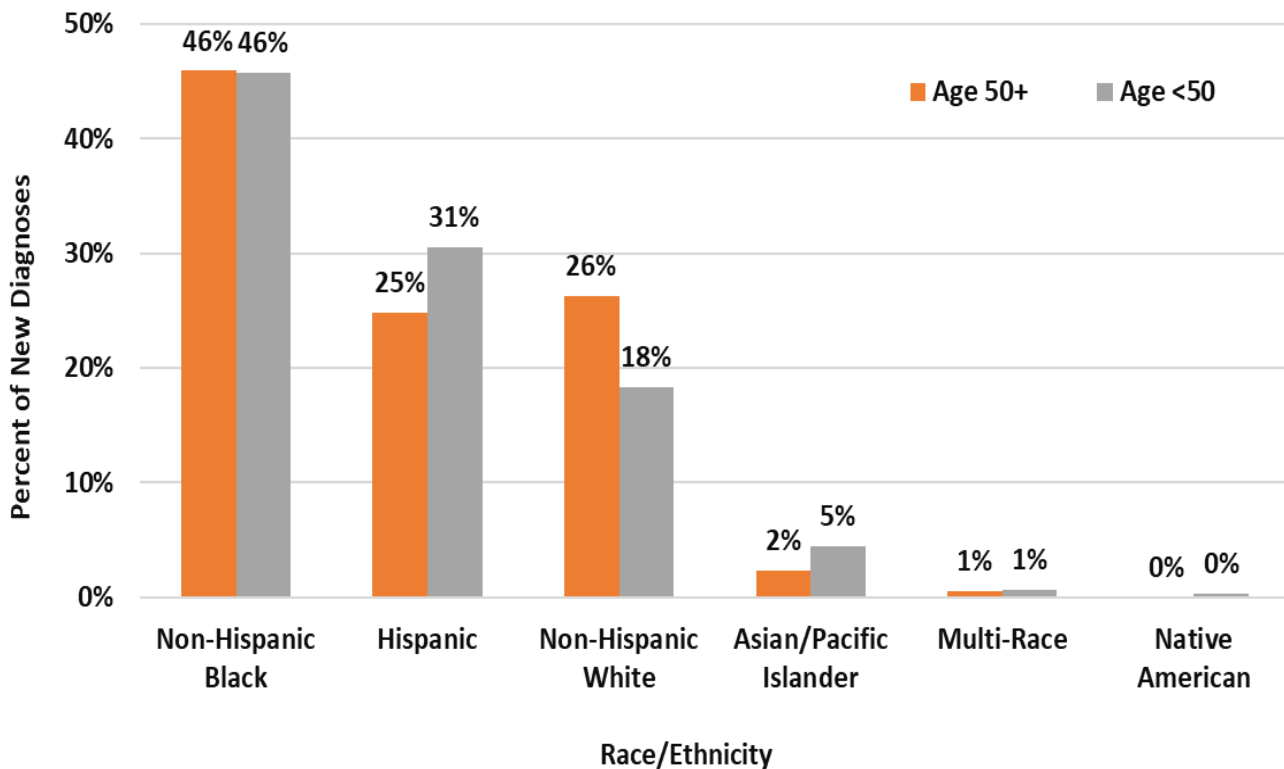


Figure 4. Persons Newly Diagnosed with HIV by Transmission Risk in New York State, 2020

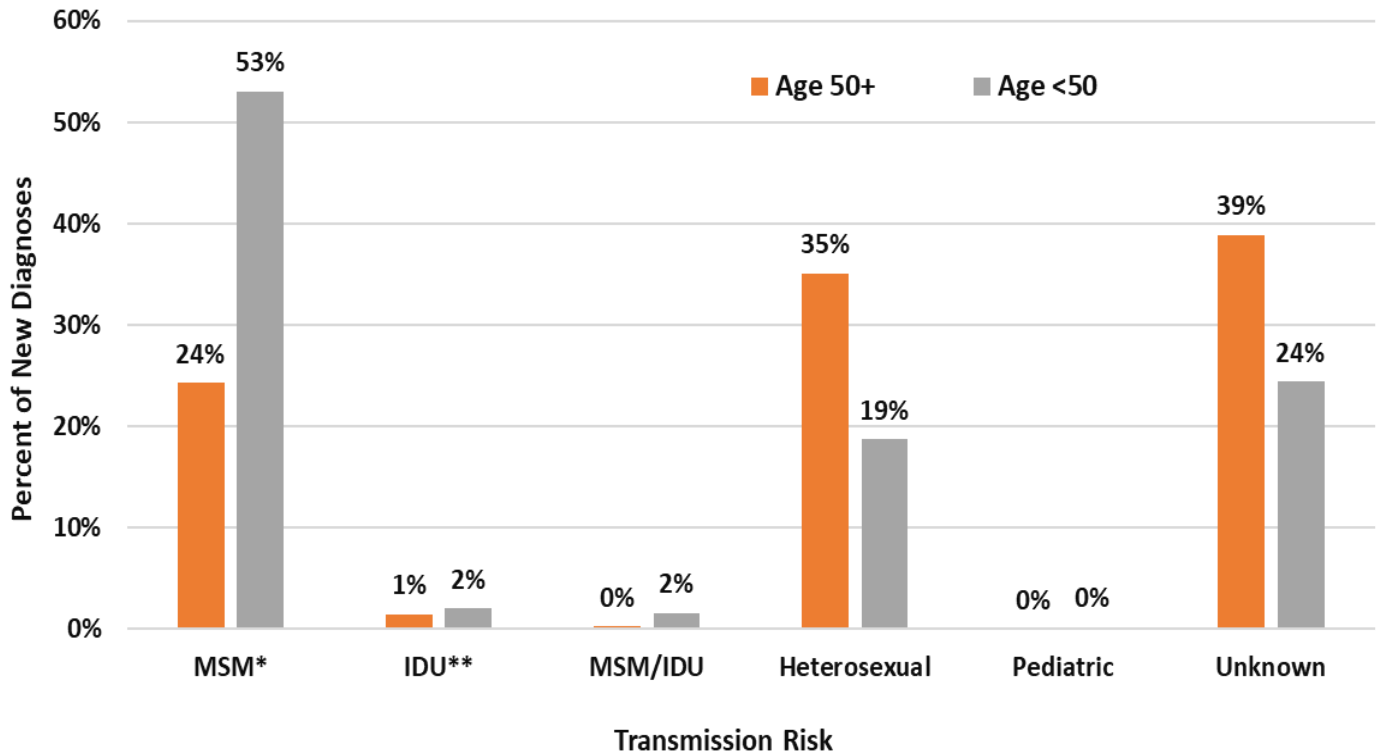
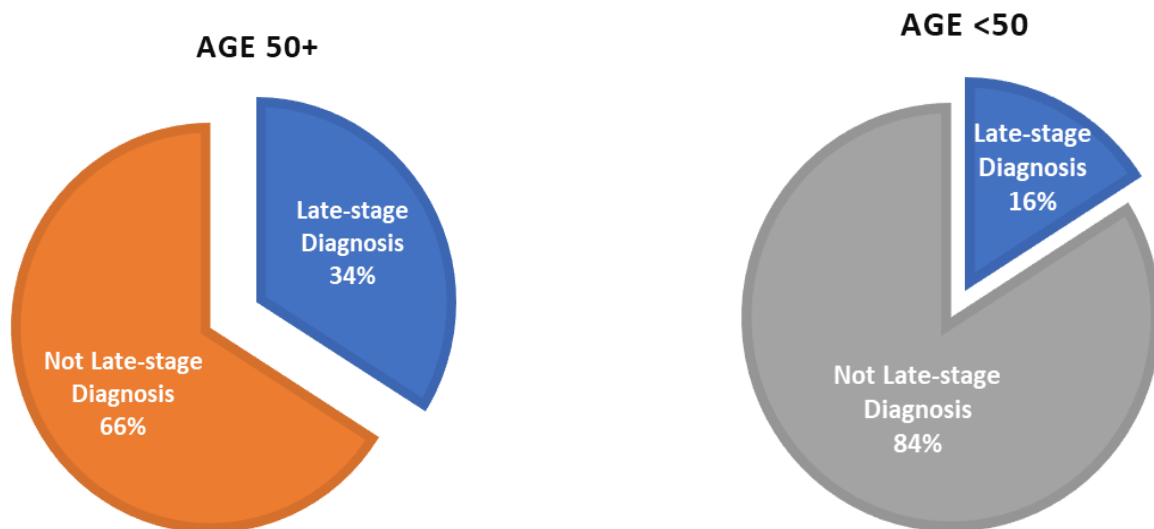


Figure 5. Late-stage\* Diagnosis among Persons Newly Diagnosed with HIV, New York State, 2020



\*Late-stage diagnosis is defined as having stage 3 HIV diagnosis within 30 days of HIV diagnosis.

Table 1. New York State Persons Living with Diagnosed HIV (PLWDH) as of December 2020, by Sex at Birth, Age Groups, Race/Ethnicity and Risk

|  | Age 50+         |          | Age < 50        |          |
|--|-----------------|----------|-----------------|----------|
|  | Number          | Column % | Number          | Column % |
| <b>Total</b>                             | 59,779 (56.6%*) |          | 45,825 (43.3%*) |          |
| <b>Sex at Birth</b>                      |                 |          |                 |          |
| <b>Male</b>                              | 40,895          | 68.4%    | 35,253          | 76.9%    |
| <b>Female</b>                            | 18,884          | 31.6%    | 10,578          | 23.1%    |
| <b>Race/Ethnicity</b>                    |                 |          |                 |          |
| <b>Non-Hispanic White</b>                | 15,422          | 25.8%    | 8,764           | 19.1%    |
| <b>Non-Hispanic Black</b>                | 26,516          | 44.4%    | 21,125          | 46.1%    |
| <b>Hispanic</b>                          | 16,334          | 27.3%    | 13,875          | 30.3%    |
| <b>Asian/Pacific Islander</b>            | 1,073           | 1.8%     | 1,585           | 3.5%     |
| <b>Native American</b>                   | 104             | 0.2%     | 95              | 0.2%     |
| <b>Multi Race</b>                        | 251             | 0.4%     | 366             | 0.8%     |
| <b>Unknown</b>                           | 79              | 0.1%     | 15              | 0.0%     |
| <b>Transmission Risk</b>                 |                 |          |                 |          |
| <b>Male-to-Male Sexual Contact (MSM)</b> | 20,737          | 34.7%    | 26,617          | 58.1%    |
| <b>Injection Drug Use (IDU)</b>          | 9,305           | 15.6%    | 1,333           | 2.9%     |
| <b>MSM/IDU</b>                           | 2,966           | 5.0%     | 1,712           | 3.7%     |
| <b>Heterosexual</b>                      | 19,342          | 32.4%    | 10,429          | 22.8%    |
| <b>Blood</b>                             | 0               | 0.0%     | 21              | 0.0%     |
| <b>Pediatric</b>                         | 134             | 0.2%     | 2,056           | 4.5%     |
| <b>Unknown</b>                           | 7,295           | 12.2%    | 3,663           | 8.0%     |
| <b>Current Age (Age 50+)</b>             |                 |          |                 |          |
| <b>50-59</b>                             | 31,560          | 52.8%    |                 |          |
| <b>60-69</b>                             | 21,638          | 36.2%    |                 |          |
| <b>70-79</b>                             | 5,737           | 9.6%     |                 |          |
| <b>80-89</b>                             | 801             | 1.3%     |                 |          |
| <b>90-99</b>                             | 43              | 0.1%     |                 |          |

\* Of total PLWDH (Data as of March 2021)

Table 2. Care and Viral Suppression among PLWDH\* by Age Groups, New York State

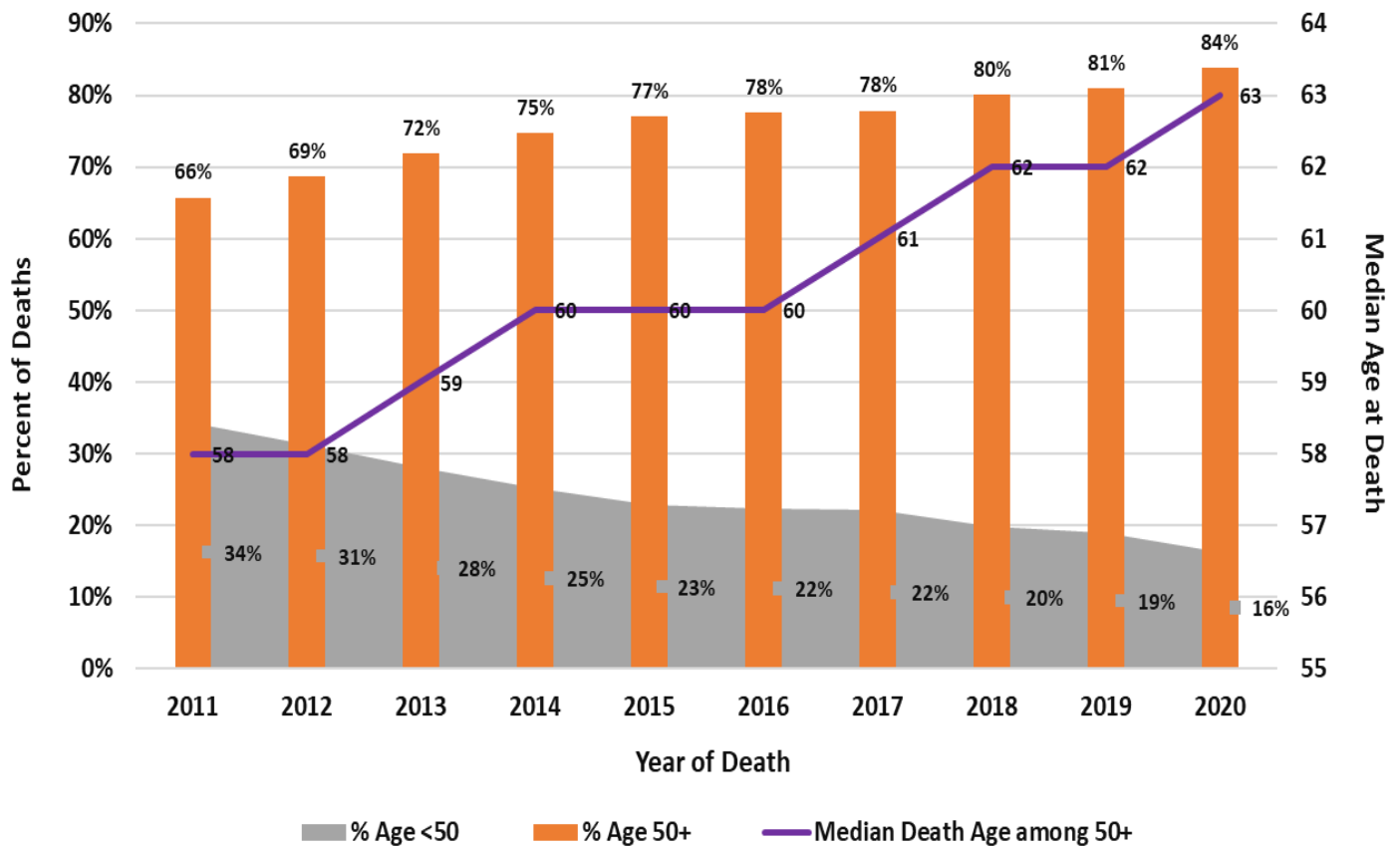
|  |             | Age 50+ | Age < 50 |
|--|-------------|---------|----------|
| All  |             | 59,779  | 45,767   |
| Any care†  | #           | 52,978  | 37,419   |
|  | %           | 89%     | 82%      |
| Retained in care (≥2 tests, ≥91 days apart)        | #           | 38,670  | 24,941   |
|  | %           | 65%     | 54%      |
| ≥1 Viral load test during the year                 | #           | 51,787  | 36,763   |
|  | % of All    | 87%     | 80%      |
| Virally suppressed at test closest to end-of-year‡ | #           | 47,344  | 31,624   |
|  | % of Tested | 91%     | 86%      |
|  | % of All    | 79%     | 69%      |

\*Persons Living with Diagnosed HIV in Dec. 2019 and Alive in Dec. 2020

†Any VL, CD4, or nucleotide sequence test during the year

‡Viral load <200 copies/ml.

Figure 6. Deaths among Persons with Diagnosed HIV by Age Groups, New York State, 2011-2020



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