**Table S1.** Completeness of measures from HIV mortuary surveillance study among cadavers aged ≥ 15 years, Nairobi, Kenya 2015 (N=807)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Enrolled | Blood specimen collected | | | Cause of death available | | | Viral load results available‡ | | | HIV diagnosis history available§ | | |
|  | N | n | (%) | χ2 (df) p-value | n | (%) | χ2 (df) p-value | n | (%) | χ2 (df) p-value | n | (%) | χ2 (df)  p-value |
|
| **Sex** | | | | | | | | | | | | | |
| Male | 535 | 411 | 76.8 | χ2 (1)=1.31 p=0.252 | 243 | 59.3 | χ2 (1)=0.28 p=0.593 | 40 | 66.7 | χ2 (1)=0.11 p=0.741 | 42 | 70 | χ2 (1)=2.08 p=0.149 |
| Female | 272 | 199 | 73.2 | 114 | 57 | 41 | 69.5 | 48 | 81.4 |
| Total | 807 | 610 | 75.6 | 357 | 58.5 | 81 | 68.1 | 90 | 75.6 |
| **Age in years** | | | | | | | | | | | | | |
| 15–24 | 80 | 62 | 77.5 | χ2 (2)=0.36 p=0.834 | 38 | 61.3 | χ2 (2)=0.99 p=0.610 | 9 | 90 | χ2 (2)=2.42 p=0.298 | \* | \* | χ2 (2)=5.56 p=0.062 |
| 25–44 | 400 | 304 | 76 | 182 | 59.9 | 49 | 66.2 | 55 | 74.3 |
| 45+ | 327 | 244 | 74.6 | 137 | 56.1 | 23 | 65.7 | 30 | 85.7 |
| Total | 807 | 610 | 75.6 | 357 | 58.5 | 81 | 68.1 | 90 | 75.6 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Mortuary** | | | | | | | | | | | | | |
| City | 281 | 214 | 76.2 | χ2 (1)=0.075 p=0.784 | 110 | 51.4 | χ2 (1)=6.89 p=0.009 | 16 | 59.3 | χ2 (1)=1.25 p=0.264 | n/a | n/a | n/a† |
| KNH | 526 | 396 | 75.3 | 247 | 62.4 | 65 | 70.7 | 90 | 97.8 |
| Total | 807 | 610 | 75.6 | 357 | 58.5 | 81 | 68.1 | 90 | 75.6 |
| **Medico-legal case** | | | | | | | | | | | | | |
| Yes | 226 | 164 | 72.6 | χ2 (1)=8.20 p=0.004 | 101 | 61.6 | χ2 (1)=29.14 p<0.001 | \* | \* | χ2 (1)=0.77 p=0.381 | n/a† | | |
| No | 55 | 50 | 90.9 | \* | \* | \* | \* |
| Total | 281 | 214 | 76.2 | 110 | 51.4 | 16 | 59.3 |

**Notes**: Analyses are unweighted. df = degrees of freedom. \* Percentages not shown are based on <20 cases. † Medical histories not available for deaths from City Mortuary. ‡ Among HIV-positive specimens. § Among KNH cadavers.

**Table S2.** Interaction between sex and age on risk of HIV infection among cadavers aged ≥ 15 years, HIV mortuary surveillance study, Nairobi, Kenya 2015 (N=610)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Males | | Females | |
| Age group (years) | N infected / total | Odds Ratio (OR) (95% CI) | N infected / total | OR (95% CI) |
| 15-24 | 4/47 | 1.0 | 6/15 | 6.39 (1.47-27.69)  p=0.013 |
| 25-44 | 33/215 | 1.86 (0.62-5.56)  p=0.265 | 41/89 | 7.09 (2.29-21.9)  p=0.001 |
| 45+ | 23/148 | 1.58 (0.51-4.93)  p=0.428 | 12/96 | 1.15 (0.34-3.89)  p=0.818 |
| Within-strata ORs (95% CI)  p-value | | | | |
| 25-44 |  |  |  | 1.11 (0.36-3.44)  p=0.856 |
| 45+ |  |  |  | 0.18 (0.05-0.61)  p=0.006 |
| Ratio of ratios of ORs (95% CI)  p-value | | | | |
| 25-44 |  |  |  | 0.60 (0.12–2.87)  p=0.518 |
| 45+ |  |  |  | 0.11 (0.02–0.59)  p=0.010 |

Notes: all odds ratios adjusted for mortuary.

**Figure S1.** Predictive margins of HIV prevalence among cadavers for age when controlling for sex, HIV mortuary surveillance study, Nairobi, Kenya 2015

1. B. 

Panel A shows larger age grouping used throughout analysis. Panel B shows finer-grained age grouping with peak marginal probability of HIV infection by sex peaking at 35–44 years among females and 45–54 years among males.