

TUPEC0854

## International trends in new HIV diagnoses among men who have sex with men in North America, Western Europe and Australia 2000-2014

J. Chapin-Bardales<sup>1</sup>, P.S. Sullivan<sup>1</sup>, R.J. Guy<sup>2</sup>, J. Kaldor<sup>2</sup>, S. McGregor<sup>2</sup>, A. Sasse<sup>3</sup>, C. Archibald<sup>4</sup>, C. Rank<sup>4</sup>, J. Casabona Barbarà<sup>5</sup>, C. Folch-Toda<sup>5</sup>, N. Vives Martin<sup>5</sup>, S.A. Cowan<sup>6</sup>, F. Cazein<sup>7</sup>, A. Velter<sup>7</sup>, M. an der Heiden<sup>8</sup>, B. Günsenheimer-Bartmeyer<sup>8</sup>, U. Marcus<sup>8</sup>, E.L.M. Op de Coul<sup>9</sup>, A. Van Sighem<sup>10</sup>, I. Aldir<sup>11</sup>, H. Cortes Martins<sup>12</sup>, T. Berglund<sup>13</sup>, I. Velicko<sup>13</sup>, M. Gebhardt<sup>14</sup>, A.J. Schmidt<sup>14</sup>, V. Delpech<sup>15</sup>, G. Hughes<sup>15</sup>, A. Nardone<sup>15</sup>, H.I. Hall<sup>16</sup>, A.S. Johnson<sup>16</sup>

<sup>1</sup> Emory University, Dept of Epidemiology, Atlanta, United States, <sup>2</sup> Kirby Institute, University of New South Wales, Sydney, Australia, <sup>3</sup> Institut Scientifique de Santé Publique, Brussels, Belgium, <sup>4</sup> Public Health Agency of Canada, Ottawa, Canada, <sup>5</sup> Centre d'Estudis Epidemiològics sobre les ITS i Sida de Catalunya (CEEISCAT), Dept Salut, Generalitat de Catalunya / CIBER Epidemiologia y Salud Pública (CIBERESP), Catalonia, Spain, <sup>6</sup> Statens Serum Institute, Copenhagen, Denmark, <sup>7</sup> French Public Health Agency, Saint-Maurice, France, <sup>8</sup> Robert Koch Institute, Berlin, Germany, <sup>9</sup> National Institute for Public Health and the Environment, Bilthoven, Netherlands, <sup>10</sup> Stichting HIV Monitoring, Amsterdam, Netherlands, <sup>11</sup> Directorate-General of Health, Lisbon, Portugal, <sup>12</sup> National Institute of Health, Lisbon, Portugal, <sup>13</sup> Public Health Agency of Sweden, Stockholm, Sweden, <sup>14</sup> Swiss Federal Office of Public Health, Bern, Switzerland, <sup>15</sup> Public Health England, London, United Kingdom, <sup>16</sup> Centers for Disease Control and Prevention, Atlanta, United States

Presenting author email: [jchapi2@emory.edu](mailto:jchapi2@emory.edu)

**Background:** An increase in HIV diagnoses in men who have sex with men (MSM) in high-income countries was identified from 2000-2005. We sought to investigate recent trends through 2014 to better inform treatment and prevention strategies.

**Methods:** Data on annual rates of HIV diagnoses among MSM ages 15-65 from 2000-2014 were collected from 13 high-income countries. Joinpoint regression software was used to empirically determine country-specific trend periods. Trends in the annual HIV diagnoses rates and in the proportion of diagnoses occurring in young MSM ages 15-24 were analyzed using Poisson regression and log-binomial regression respectively.

**Results:** Four trend typologies were identified. Six countries experienced an increasing trend from 2000 to 2007-08 followed by either a stable or declining trend through 2014. Five countries had recently increasing trends and two countries had one stable trend from 2000-2014. Trends in unprotected anal intercourse and syphilis rates increased in most countries. All 13 countries experienced increasing trends in the proportion of HIV diagnoses in young MSM during this period.

**Conclusions:** High-income countries differed in HIV trend typologies. Half of the countries experienced a stable or decreasing trend in recent years despite increasing UAI and STIs, suggesting that recent treatment advances and improved ART coverage and adherence may be contributing to declines in HIV rates among MSM. Still, young MSM do not appear to be benefitting equally from such treatment-as prevention initiatives. Global efforts to support early sexual health promotion, reduce barriers to PrEP, and improve care engagement for YMSM are critical to addressing current international HIV trends.