# All figures of the Monitoring Report 2018

This PowerPoint contains all figures of the Monitoring Report 2018, including those from the Appendix. When using any of these figures, please include "Source: Stichting HIV Monitoring; *Monitoring Report 2018"* as a reference.

The full report should be cited as follows:

van Sighem A.I., Boender T.S., Wit F.W.N.M., Smit C., Matser A., Reiss P. Monitoring Report 2018. Human Immunodeficiency Virus (HIV) Infection in the Netherlands. Amsterdam: Stichting HIV Monitoring, 2018. Available online at www.hiv-monitoring.nl



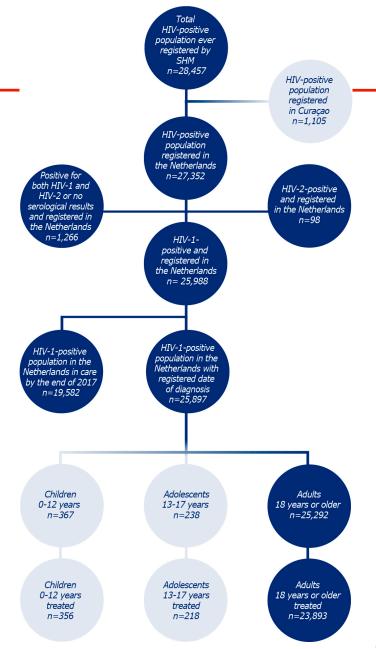
#### **HIV** treatment centres in the Netherlands



1	Noordwest Ziekenhuisgroep	Alkmaar
2	Flevoziekenhuis	Almere
3	Academic Medical Center of the University of Amsterdam (AMC-UvA)	Amsterdam
4	DC Klinieken Lairesse – HIV Focus Centrum	Amsterdam
5	OLVG	Amsterdam
6	MC Slotervaart	Amsterdam
7	Medisch Centrum Jan van Goyen (MC Jan van Goyen)	Amsterdam
8	VUmc	Amsterdam
9	Rijnstate	Arnhem
10	HagaZiekenhuis (Leyweg site)	Den Haag
11	HMC (Haaglanden Medisch Centrum)	Den Haag
12	Catharina Ziekenhuis	Eindhoven
13	Medisch Spectrum Twente (MST)	Enschede
14	Admiraal De Ruyter Ziekenhuis	Goes
15	Universitair Medisch Centrum Groningen (UMCG)	Groningen
16	Spaarne Gasthuis	Haarlem
17	Medisch Centrum Leeuwarden (MCL)	Leeuwarden
18	Leids Universitair Medisch Centrum (LUMC)	Leiden
19	MC Zuiderzee	Lelystad
20	Maastricht UMC+ (MUMC+)	Maastricht
21	Radboudumc	Nijmegen
22	Erasmus MC	Rotterdam
23	Maasstad Ziekenhuis	Rotterdam
24	ETZ (Elisabeth-TweeSteden Ziekenhuis)	Tilburg
25	Universitair Medisch Centrum Utrecht (UMC Utrecht)	Utrecht
26	Isala	Zwolle
Α	Emma Kinderziekenhuis (EKZ), AMC-UvA	Amsterdam
В	Beatrix Kinderziekenhuis (BKZ), UMCG	Groningen
С	Erasmus MC-Sophia Kinderziekenhuis	Rotterdam
D	Wilhelmina Kinderziekenhuis (WKZ), UMC Utrecht	Utrecht

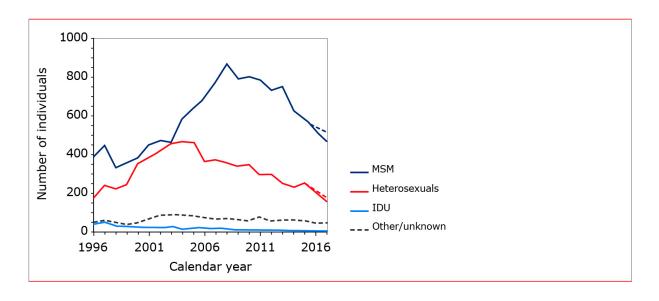


Overview of the HIV-positive population registered by Stichting HIV Monitoring (SHM) as of the end of 2017.





Annual number of new HIV-1 diagnoses among adults, according to most likely mode of transmission.

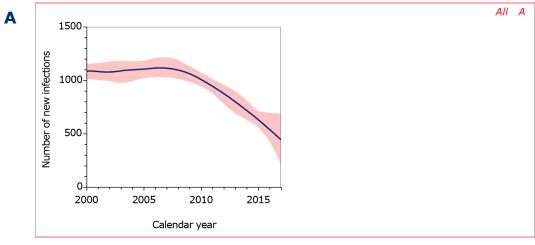


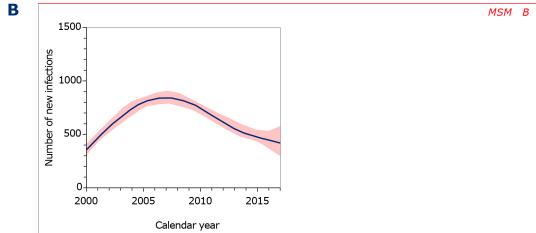
Legend: MSM=men who have sex with men; IDU=injecting drug users.



## Figure 1.3A & B

Estimated annual number of newly-acquired HIV infections and number of people living with undiagnosed HIV (A, C) in the entire HIV-positive population in the Netherlands and (B, D) in men who have sex with men.

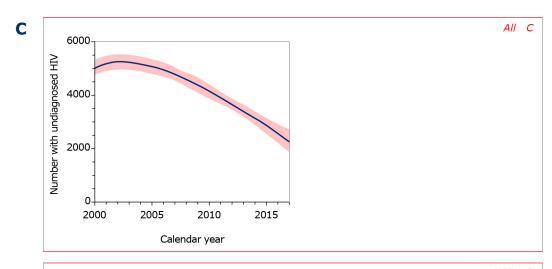


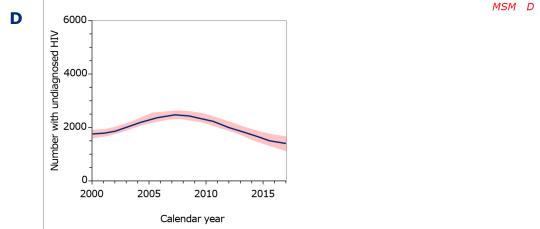




## **Figure 1.3 C & D**

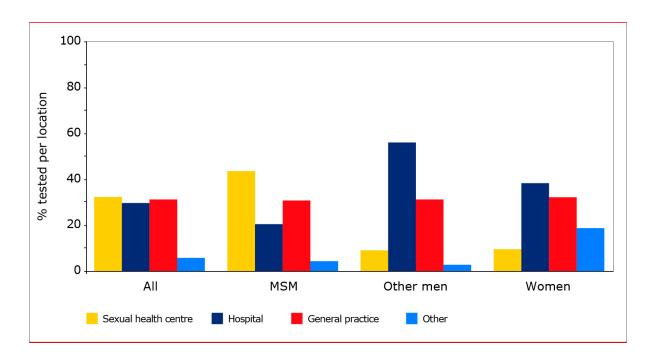
Estimated annual number of newly-acquired HIV infections and number of people living with undiagnosed HIV (A, C) in the entire HIV-positive population in the Netherlands and (B, D) in men who have sex with men.







Proportion of individuals diagnosed in 2015 or later, stratified by location of testing and transmission risk group.

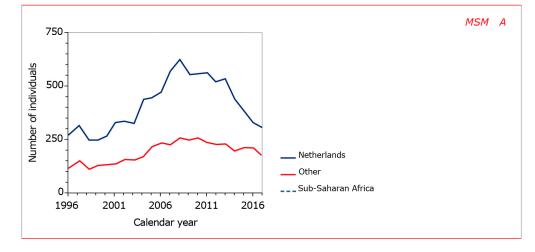


Legend: MSM=men who have sex with men

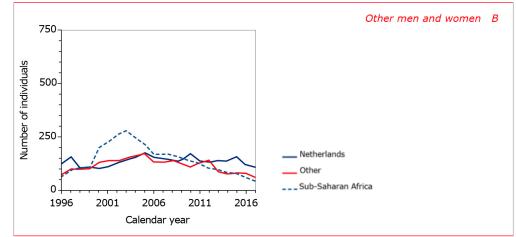


Annual number of diagnoses by region of origin among (A) men who have sex with men (MSM) and (B) other people aged 18 years or older at the time of diagnosis.



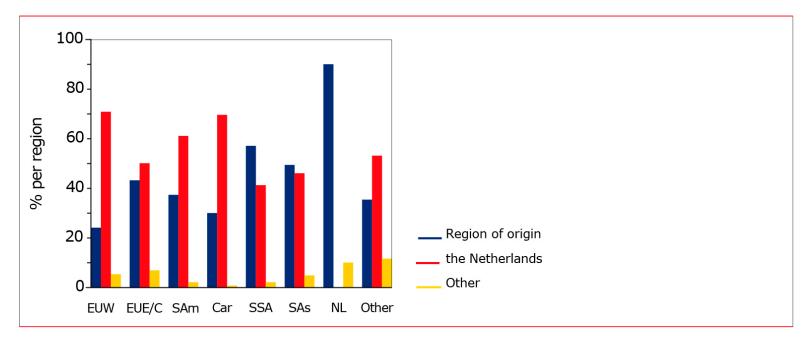


#### В





Proportion of (A) all HIV-1-positive adults diagnosed in 2015 or later per region of origin who reported to have acquired their HIV infection in their own region of origin, in the Netherlands, or elsewhere.

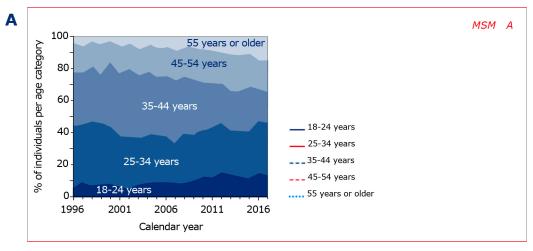


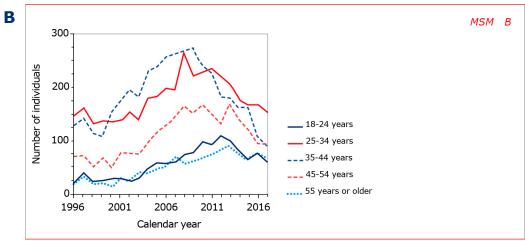
Legend: EUW=western Europe; EUE/C=eastern and central Europe; SAm=south America; Car=Caribbean; SSA=Sub-Saharan Africa; SAs=South and Southeast Asia; NL=the Netherlands; Other=other regions of origin.



### **Figure 1.7 A & B**

Age distribution at the time of diagnosis among HIV-1-positive (A, B) men who have sex with men (MSM) and (C, D) other men and women.

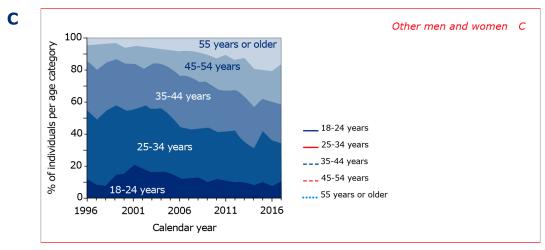


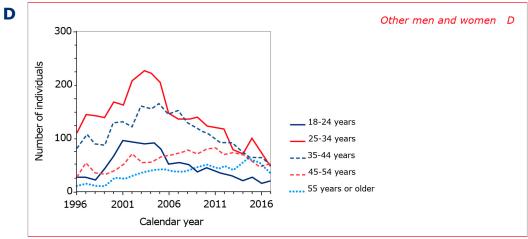




## **Figure 1.7 C & D**

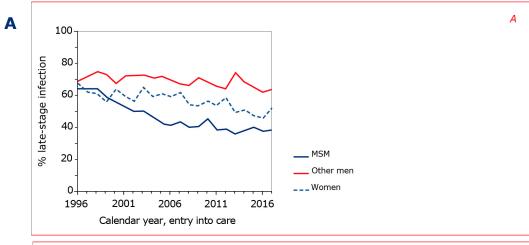
Age distribution at the time of diagnosis among HIV-1-positive (A, B) men who have sex with men (MSM) and (C, D) other men and women.

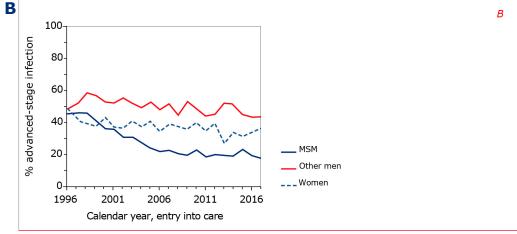






Proportion of individuals classified as presenting with (A) late-stage or (B) advanced-stage HIV infection at the time of entry into care.

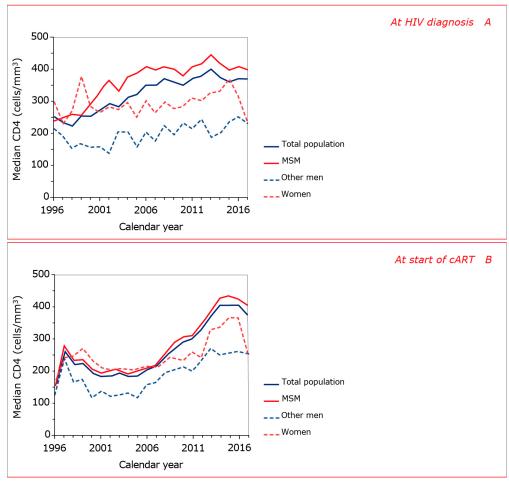






Legend: MSM=men who have sex with men.

Changes over calendar time in median CD4 counts (A) at HIV diagnosis and (B) at the start of combination antiretroviral therapy (cART).

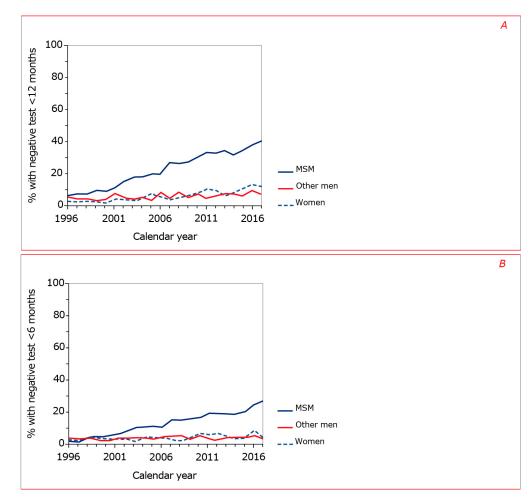




Legend: MSM=men who have sex with men.

### **Figure 1.10A & B**

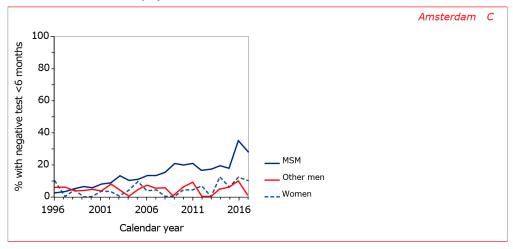
Proportion of people diagnosed and having (A) a last negative test at most 12 months before diagnosis, or (B) a last negative test at most 6 months before diagnosis.

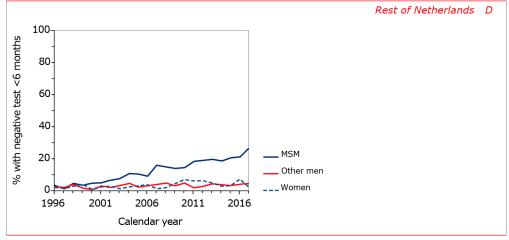




# **Figure 1.10C & D**

Proportion of people diagnosed and having a last negative test in the preceding 6 months for (C) Amsterdam and (D) the rest of the Netherlands.

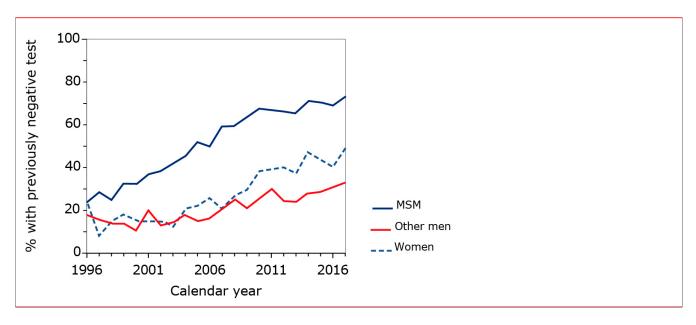






Legend: MSM=men who have sex with men.

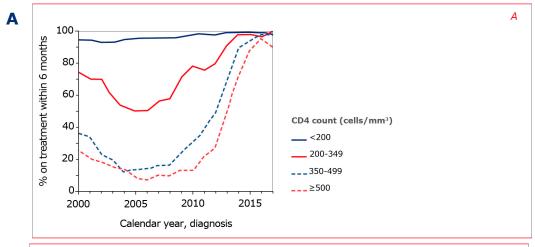
Proportion of individuals diagnosed after a previously negative HIV test. Altogether, 73% of men who have sex with men (MSM), 33% of other men, and 49% of women diagnosed in 2017 had a previously negative HIV test.

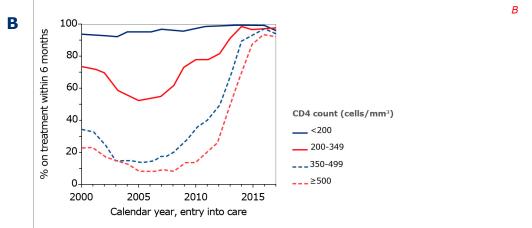


Legend: MSM=men who have sex with men.



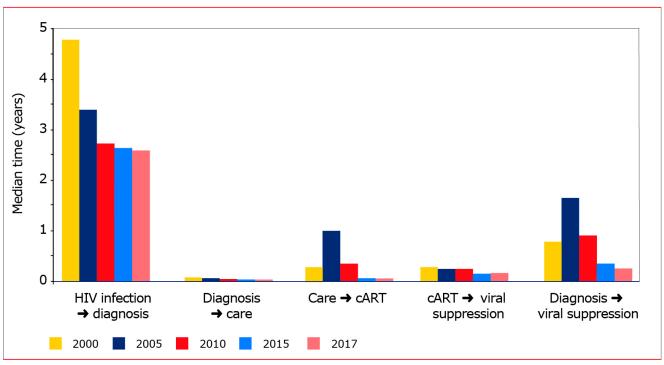
(A) Proportion of individuals who started combination antiretroviral treatment (cART) within 6 months after HIV diagnosis by CD4 count at the time of diagnosis. (B) Proportion of individuals who started cART within 6 months after entry into care stratified by CD4 counts at the time of entry into care.







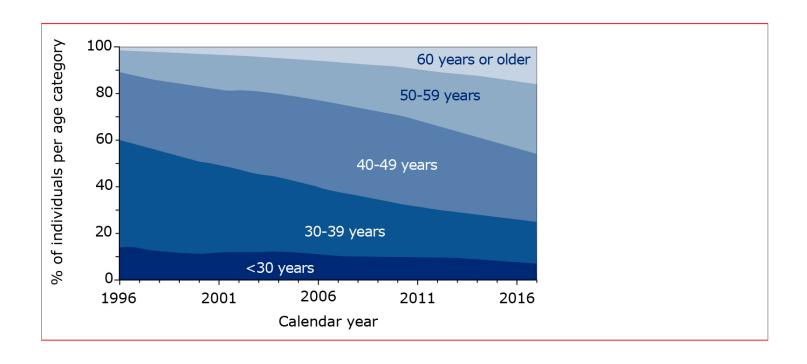
Estimated time to reach key stages in the HIV care continuum for HIV-1-positive individuals, including time from infection to diagnosis, from diagnosis to entry into care, from entry into care to starting combination antiretroviral treatment (cART), from starting cART to reaching viral suppression (defined as an RNA measurement below 200 copies/ml), and from diagnosis to viral suppression.



Legend: cART=combination antiretroviral therapy.



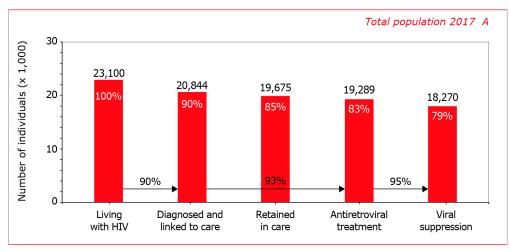
Increasing age of the HIV-1-positive population in clinical care over calendar time.

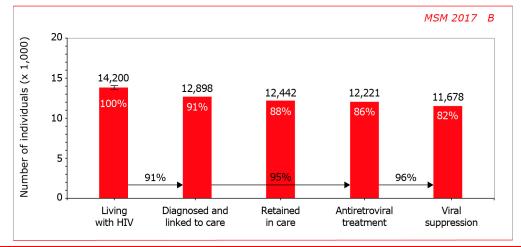




### **Figure 1.15A & B**

Continuum of HIV care for (A, C) the total estimated HIV-positive population and for (B, D) men who have sex with men estimated to be living with HIV in the Netherlands by the end of 2017 and by the end of 2016.

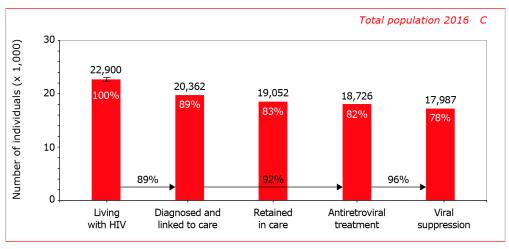


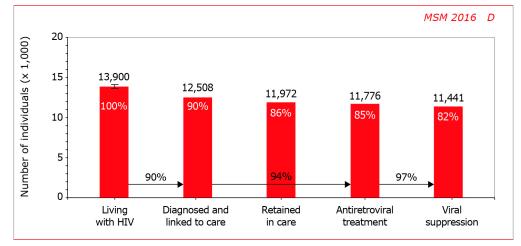




# **Figure 1.16 C & D**

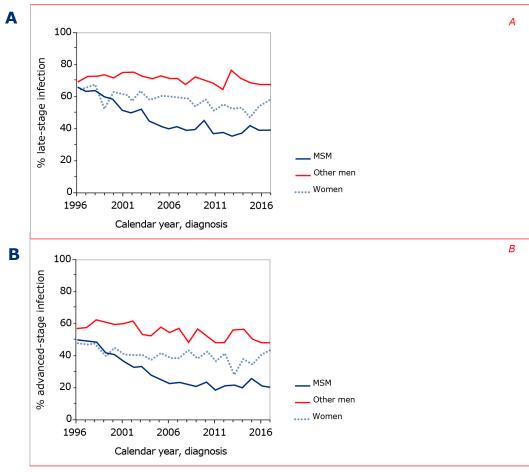
Continuum of HIV care for (A, C) the total estimated HIV-positive population and for (B, D) men who have sex with men estimated to be living with HIV in the Netherlands by the end of 2017 and by the end of 2016.







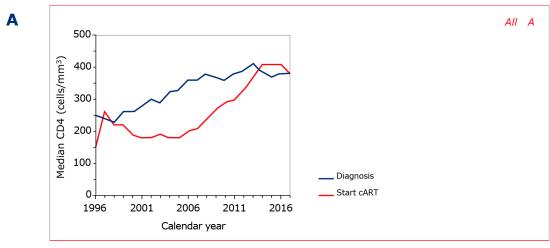
Proportion of people classified as presenting with (A) late-stage or (B) advanced-stage HIV infection at the time of HIV diagnosis.

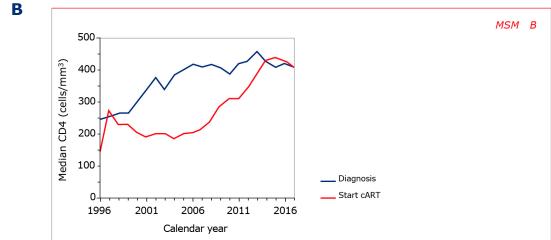




Legend: MSM=men who have sex with men.

Changes over calendar time in median CD4 counts at HIV diagnosis and at the start of combination antiretroviral therapy (cART) for (A) all individuals with an HIV-1 diagnosis, and (B) men who have sex with men, (C) other men, and (D) women.

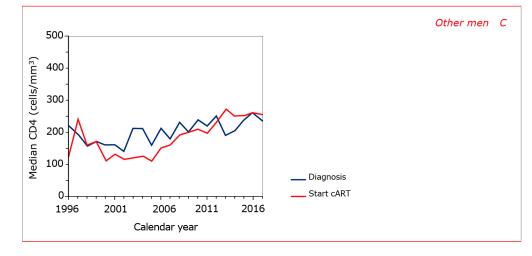




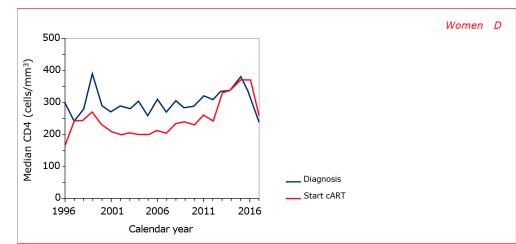


Changes over calendar time in median CD4 counts at HIV diagnosis and at the start of combination antiretroviral therapy (cART) for (A) all individuals with an HIV-1 diagnosis, and (B) men who have sex with men, (C) other men, and (D) women.



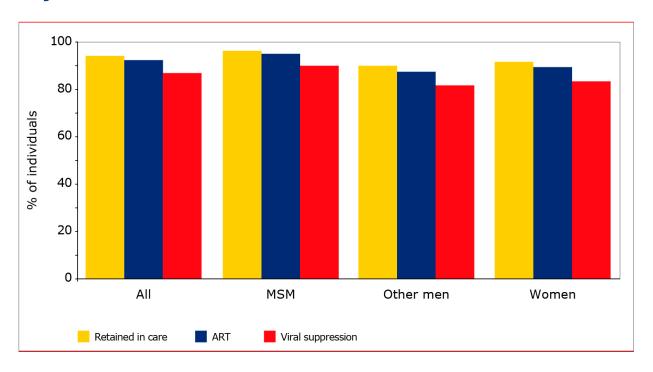


#### В





Continuum of HIV care by transmission risk group. Proportions are given relative to the number of people diagnosed and linked to care.

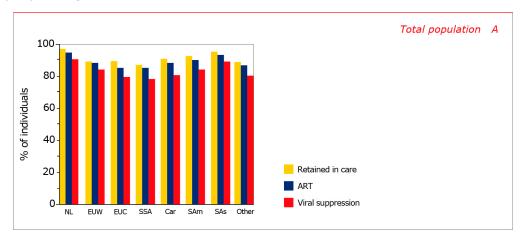


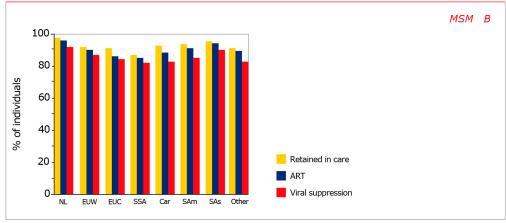
Legend: MSM=men who have sex with men; ART=antiretroviral therapy.



### **Appendix figure 1.4A & B**

Continuum of HIV care by region of origin for (A) the total HIV-1-positive population and for (B) men who have sex with men, (C) other men, and (D) women. Proportions are given relative to the number of people diagnosed and linked to care.



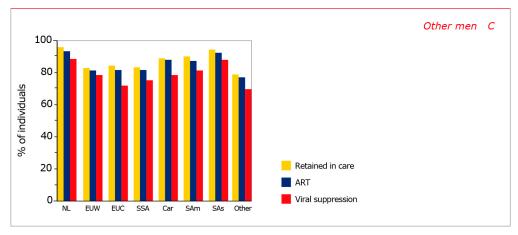


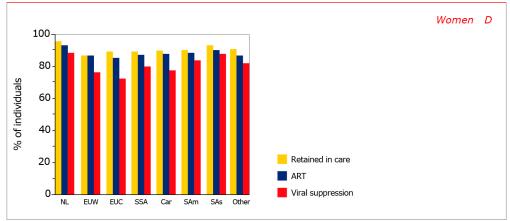


Legend: NL=the Netherlands; EUW=western Europe; EUC=central Europe; SSA=sub-Saharan Africa; Car=Caribbean; SAm=South America; SAs=South and South-East Asia; Other=other regions of origin; ART=antiretroviral therapy.

### **Appendix figure 1.4C & D**

Continuum of HIV care by region of origin for (A) the total HIV-1-positive population and for (B) men who have sex with men, (C) other men, and (D) women. Proportions are given relative to the number of people diagnosed and linked to care.



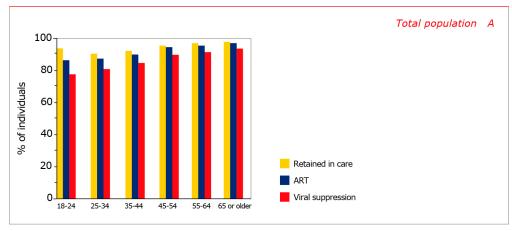


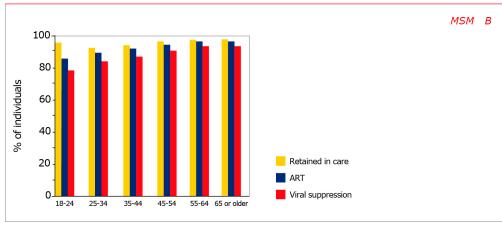


Legend: NL=the Netherlands; EUW=western Europe; EUC=central Europe; SSA=sub-Saharan Africa; Car=Caribbean; SAm=South America; SAs=South and South-East Asia; Other=other regions of origin; ART=antiretroviral therapy.

# **Appendix figure 1.5A & B**

Continuum of HIV care by age group for (A) the total HIV-1-positive population and for (B) men who have sex with men, (C) other men, and (D) women. Proportions are given relative to the number of people diagnosed and linked to care.



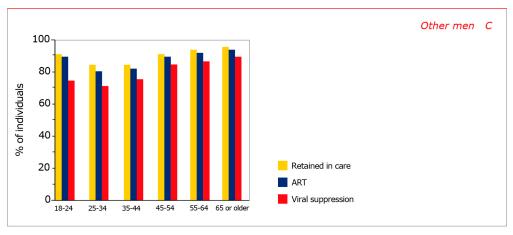


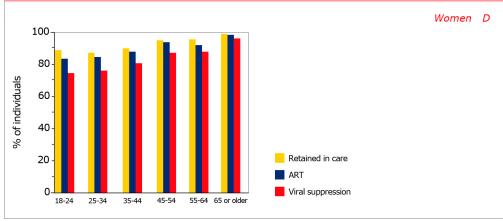


Legend: ART=antiretroviral therapy.

# **Appendix figure 1.5C & D**

Continuum of HIV care by age group for (A) the total HIV-1-positive population and for (B) men who have sex with men, (C) other men, and (D) women. Proportions are given relative to the number of people diagnosed and linked to care.

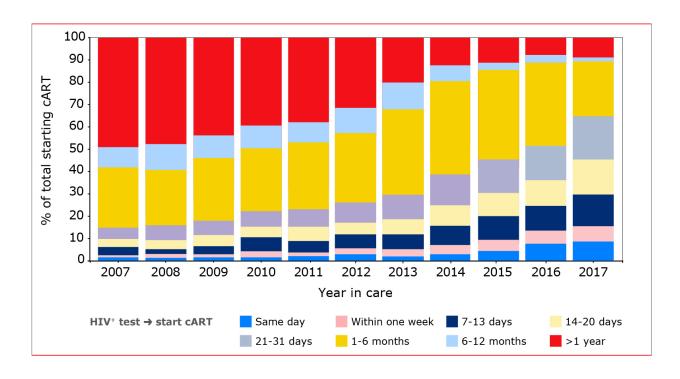






Legend: ART=antiretroviral therapy.

Time between HIV diagnosis and initiation of combination antiretroviral therapy (cART) from 2007-2017.

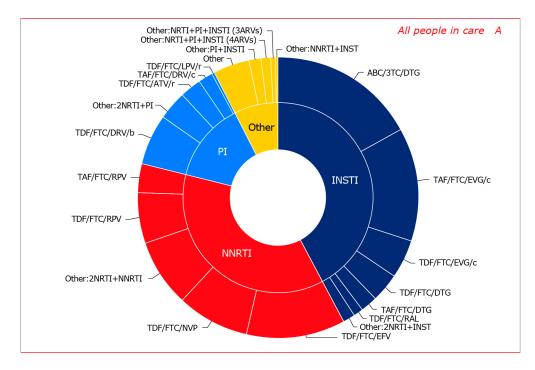


<sup>\*</sup>The time between entry into HIV care and initiation of cART therapy can be found in Appendix Figure 2.1.

Legend: cART=combination antiretroviral therapy.



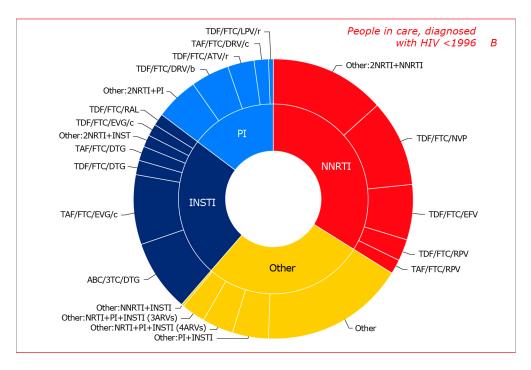
Combination antiretroviral therapy use in 2017 by (A) all people in care and (B) people in care who were diagnosed with HIV before 1996.



**Legend:** 3TC=lamivudine; b=boosted (cobicistat or ritonavir); /r=ritonavir-boosted; /c=cobicistat-boosted; cART=combination antiretroviral therapy; ABC=abacavir; ATV=atazanavir; DRV=darunavir; DTG=dolutegravir; EFV=efavirenz; EVG=elvitegravir; FTC=emtricitabine; INSTI=integrase inhibitor; LPV=lopinavir; NRTI=nucleoside analogue reverse transcriptase inhibitor; NNRTI=non-nucleoside reverse transcriptase inhibitor; NVP=nevirapine; PI=protease inhibitor; RAL=raltegravir; RPV=rilpivirine; TAF=tenofovir alafenamide; TDF=tenofovir disoproxil fumarate.



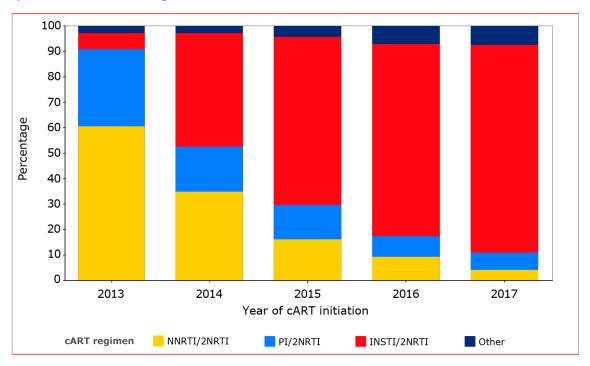
Combination antiretroviral therapy use in 2017 by (A) all people in care and (B) people in care who were diagnosed with HIV before 1996.



**Legend:** 3TC=lamivudine; b=boosted (cobicistat or ritonavir); /r=ritonavir-boosted; /c=cobicistat-boosted; cART=combination antiretroviral therapy; ABC=abacavir; ATV=atazanavir; DRV=darunavir; DTG=dolutegravir; EFV=efavirenz; EVG=elvitegravir; FTC=emtricitabine; INSTI=integrase inhibitor; LPV=lopinavir; NRTI=nucleoside analogue reverse transcriptase inhibitor; NNRTI=non-nucleoside reverse transcriptase inhibitor; NVP=nevirapine; PI=protease inhibitor; RAL=raltegravir; RPV=rilpivirine; TAF=tenofovir alafenamide; TDF=tenofovir disoproxil fumarate.



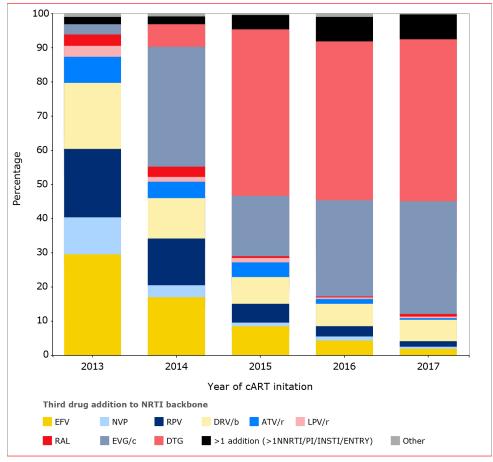
Third-drug class additions to the nucleoside reverse transcriptase backbone used as part of the initial regimen in 2013-2017.



**Legend:** cART=combination antiretroviral therapy; INSTI=integrase inhibitor; NRTI=nucleoside analogue reverse transcriptase inhibitor; NNRTI=non-nucleoside reverse transcriptase inhibitor; PI=protease inhibitor.



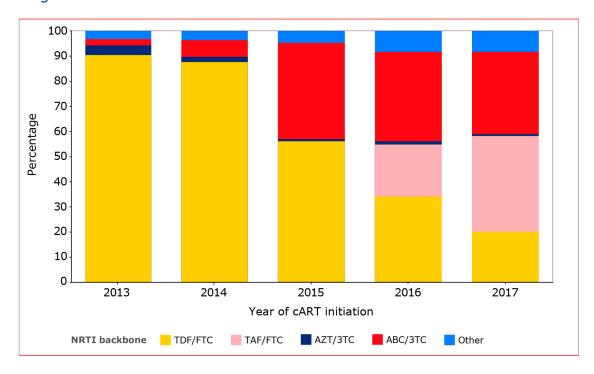
Individual third-drug additions to the nucleoside reverse transcriptase backbone used as part of the initial regimen in 2013-2017.





**Legend:** cART=combination antiretroviral therapy; /b=boosted (cobicistat or ritonavir); /r=ritonavir-boosted; /c=cobicistat-boosted; ATV=atazanavir; DRV=darunavir; DTG=dolutegravir; EFV=efavirenz; EVG=elvitegravir; ENTRY=entry inhibitor; INSTI=integrase inhibitor; LPV=lopinavir; NRTI=nucleoside analogue reverse transcriptase inhibitor; NNRTI=non-nucleoside reverse transcriptase inhibitor; NVP=nevirapine; PI=protease inhibitor; RAL=raltegravir.

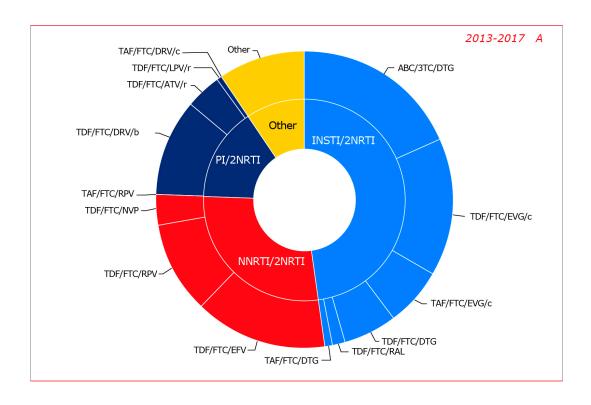
Nucleoside analogue reverse transcriptase backbone used as part of the initial regimen in 2013-2017.



**Legend:** cART=combination antiretroviral therapy; 3TC=lamivudine; ABC=abacavir; AZT=zidovudine; FTC=emtricitabine; NRTI=nucleoside analogue reverse transcriptase inhibitor; TAF=tenofovir alafenamide; TDF=tenofovir disoproxil fumarate.



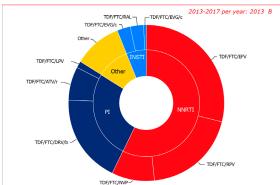
Initial combination antiretroviral therapy (cART) regimen use in A) 2013-2017 and B-F) per individual year.

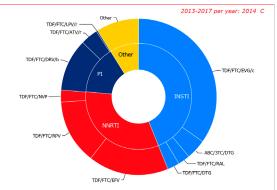




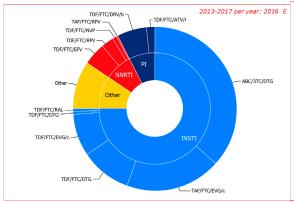
**Legend:** 3TC=lamivudine; ABC=abacavir; ATV=atazanavir; b=boosted (cobicistat or ritonavir); /r=ritonavir-boosted; /c=cobicistat-boosted; DRV=darunavir; DTG=dolutegravir; EFV=efavirenz; EVG=elvitegravir; FTC=emtricitabine; INSTI=integrase inhibitor; LPV=lopinavir; NNRTI=non-nucleoside reverse transcriptase inhibitor; NRTI=nucleoside analogue reverse transcriptase inhibitor; NVP=nevirapine; PI=protease inhibitor; RAL=raltegravir; RPV=rilpivirine; TAF=tenofovir alafenamide; TDF=tenofovir disoproxil fumarate

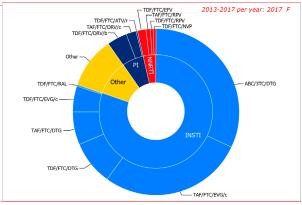
Initial combination antiretroviral therapy (cART) regimen use in A) 2013-2017 and B-F) per individual year.







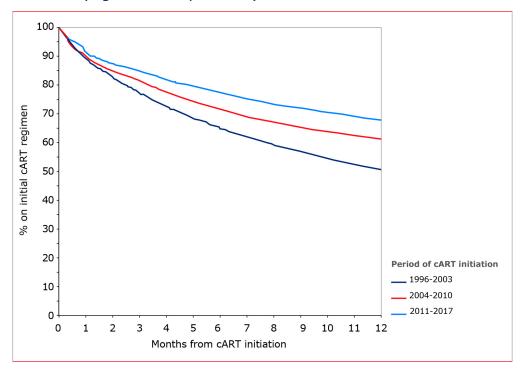






**Legend:** 3TC=lamivudine; ABC=abacavir; ATV=atazanavir; b=boosted (cobicistat or ritonavir); /r=ritonavir-boosted; /c=cobicistat-boosted; DRV=darunavir; DTG=dolutegravir; EFV=efavirenz; EVG=elvitegravir; FTC=emtricitabine; INSTI=integrase inhibitor; LPV=lopinavir; NNRTI=non-nucleoside reverse transcriptase inhibitor; NRTI=nucleoside analogue reverse transcriptase inhibitor; NVP=nevirapine; PI=protease inhibitor; RAL=raltegravir; RPV=rilpivirine; TAF=tenofovir alafenamide; TDF=tenofovir disoproxil fumarate

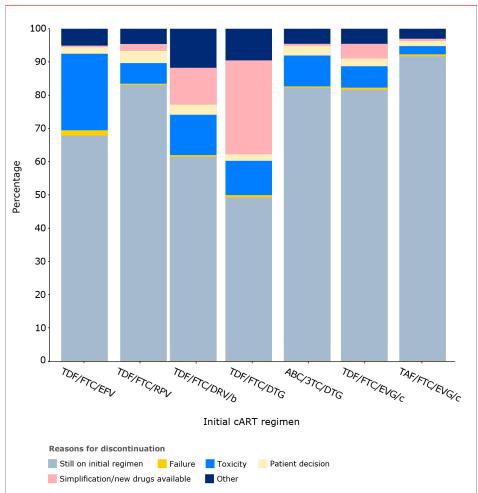
Kaplan-Meier estimate of time on initial regimen by calendar year period of initiation (log-rank test p < 0.001).



Legend: cART=combination antiretroviral therapy.



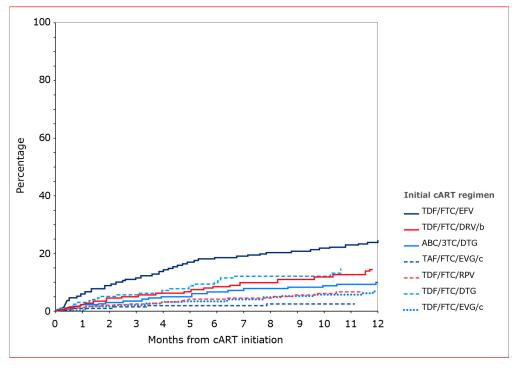
Reasons for discontinuation of the initial regimen during the first year of treatment 2013-2017, by regimen.



Legend: cART=combination antiretroviral therapy; /b=boosted (cobicistat or ritonavir); /r=ritonavir-boosted; / c=cobicistat-boosted; 3TC=lamivudine; ABC=abacavir; DRV=darunavir; DTG=dolutegravir; EFV=efavirenz; EVG=elvitegravir; FTC=emtricitabine; RPV=rilpivirine; TAF=tenofovir alafenamide; TDF=tenofovir disoproxil fumarate.



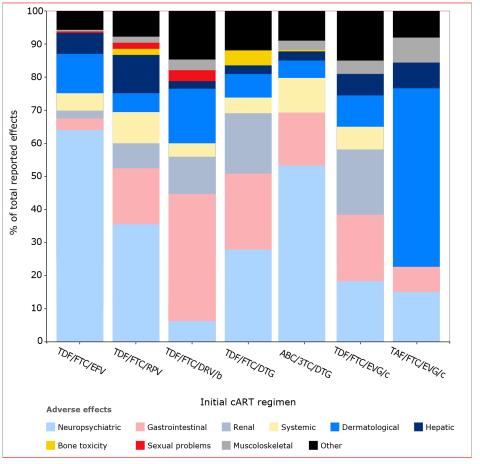
Kaplan-Meier estimate of the time on initial regimen until modification due to toxicity, 2013-2017, by regimen. Time was censored when the initial regimen was discontinued due to reasons other than toxicity (log-rank p<0.001).



**Legend:** cART=combination antiretroviral therapy; /b=boosted (cobicistat or ritonavir); /r=ritonavir-boosted; / c=cobicistat-boosted; 3TC=lamivudine; ABC=abacavir; DRV=darunavir; DTG=dolutegravir; EFV=efavirenz; EVG=elvitegravir; FTC=emtricitabine; RPV=rilpivirine; TAF=tenofovir alafenamide; TDF=tenofovir disoproxil fumarate.



Adverse effects associated with regimen discontinuation due to toxicity during the first year of treatment, 2013-2017. The bars represent the distribution of 709 reported effects among 490 individuals by regimen.

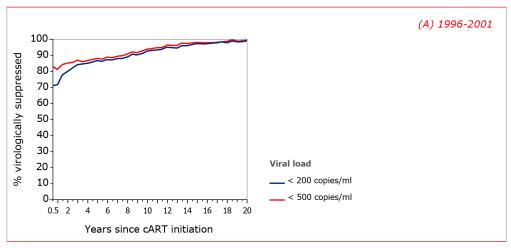


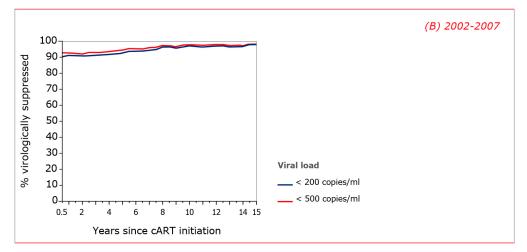
**Legend:** cART=combination antiretroviral therapy; /b=boosted (cobicistat or ritonavir); /r=ritonavir-boosted; / c=cobicistat-boosted; 3TC=lamivudine; ABC=abacavir; DRV=darunavir; DTG=dolutegravir; EFV=efavirenz; EVG=elvitegravir; FTC=emtricitabine; NRTI=nucleoside analogue reverse transcriptase inhibitor; RPV=rilpivirine; TAF=tenofovir alafenamide; TDF=tenofovir disoproxil fumarate.



# **Figure 2.11A & B**

Figure 2.11: Viral suppression since combination antiretroviral therapy initiation, by calendar period of therapy initiation(A) 1996-2001, (B) 2002-2007, (C) 2008-2012, (D) 2013-2017.

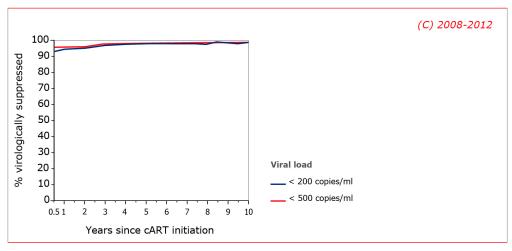


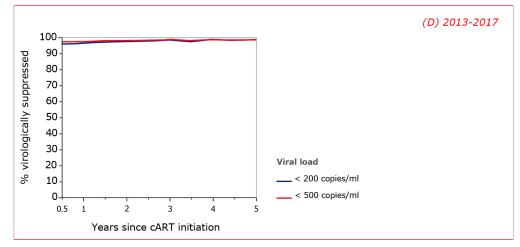




#### **Figure 2.11C & D**

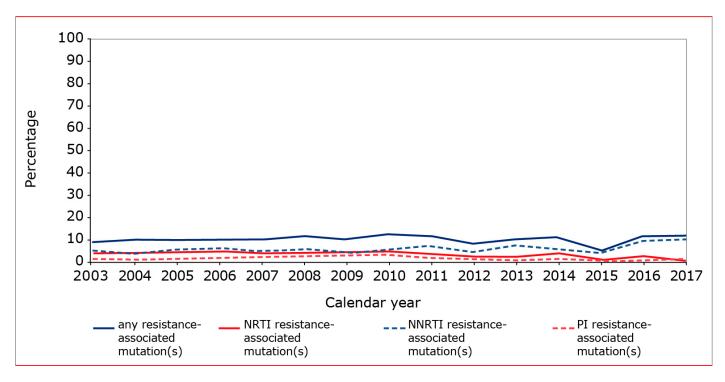
Figure 2.11: Viral suppression since combination antiretroviral therapy initiation, by calendar period of therapy initiation (A) 1996-2001, (B) 2002-2007, (C) 2008-2012, (D) 2013-2017.





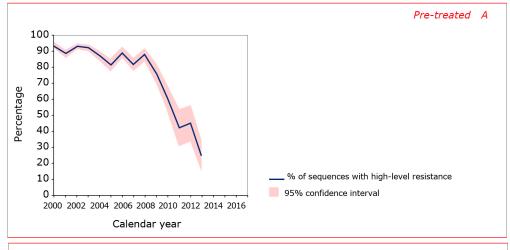


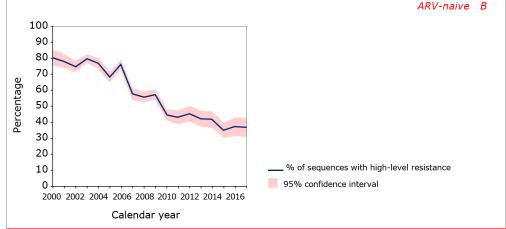
The annual proportion of individuals with evidence of transmitted drug resistance over time.





The annual proportion of sequences with evidence of high-level resistance to any antiretroviral drug obtained at the time of virological failure while receiving cART by prior exposure to antiretroviral drugs: (A) Individuals who were pre-treated and (B) individuals who were previously antiretroviral-drug naive. The shaded area represents the 95% confidence interval.





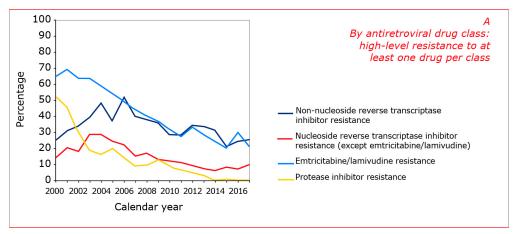


Legend: ARV=antiretroviral drug.

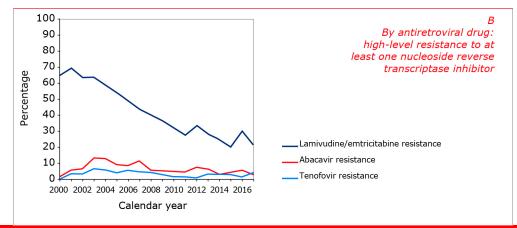
#### **Figure 2.14A & B**

The annual proportion of sequences with evidence of high-level resistance by (A) antiretroviral drug class and (B,C,D) antiretroviral drug obtained at the time of virological failure while receiving cART among previously antiretroviral drug-naive persons.

A) By antiretroviral drug class: high-level resistance to at least one drug per class.



B) By antiretroviral drug: high-level resistance to at least one nucleoside reverse transcriptase inhibitor.

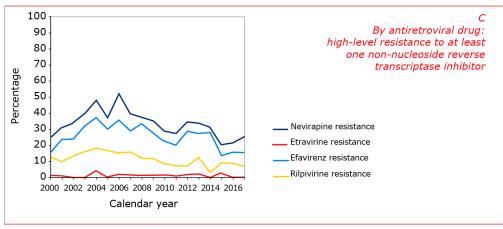




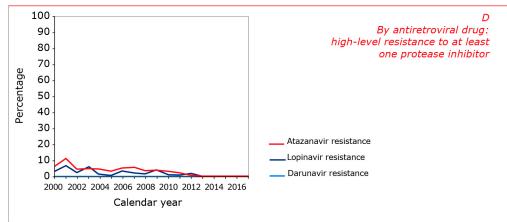
#### **Figure 2.14C & D**

The annual proportion of sequences with evidence of high-level resistance by (A) antiretroviral drug class and (B,C,D) antiretroviral drug obtained at the time of virological failure while receiving cART among previously antiretroviral drug-naive persons.

C) By antiretroviral drug: high-level resistance to at least one non-nucleoside reverse transcriptase inhibitor.

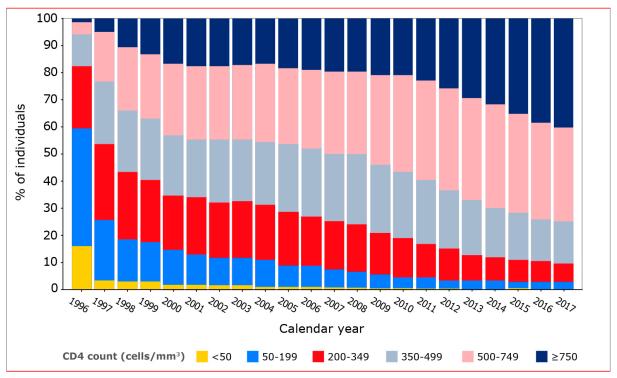


D) By antiretroviral drug: high-level resistance to at least one protease inhibitor.





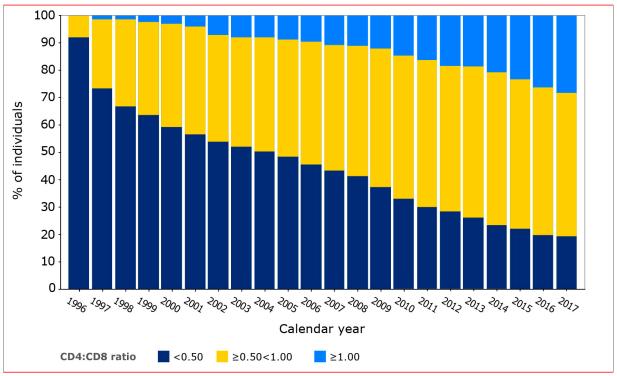
Last available CD4 cell count (cells/mm³) of the treated population by calendar year.



Legend: For each person, the last available CD4 cell count between January and December of each year, after starting cART, was selected (missing measurements/data not taken into account). Figures for 2017 may change slightly because data collection is not yet complete.



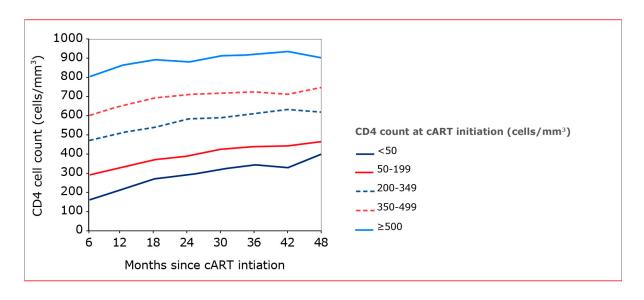
Last available CD4:CD8 ratio in each calendar year after the start of combination antiretroviral therapy (cART).



Legend: For each person, the last available CD4 cell count between January and December of each year, after starting cART, was selected.

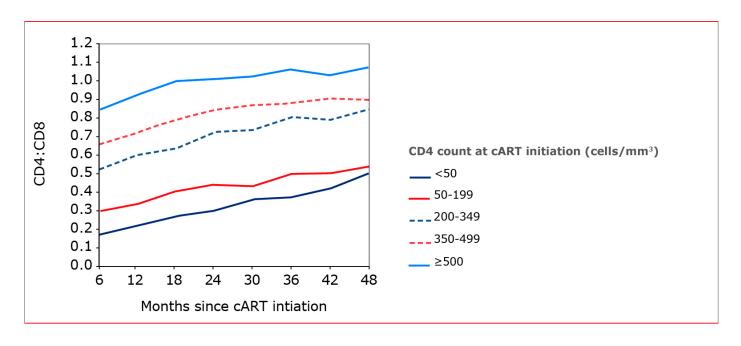


CD4 cell count over time after the start of combination antiretroviral therapy in 2013-2017.



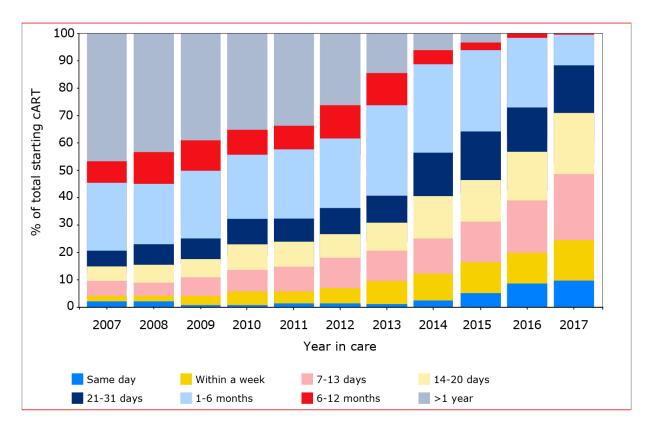


CD4:CD8 ratio over time after the start of combination antiretroviral therapy in 2013-2017.



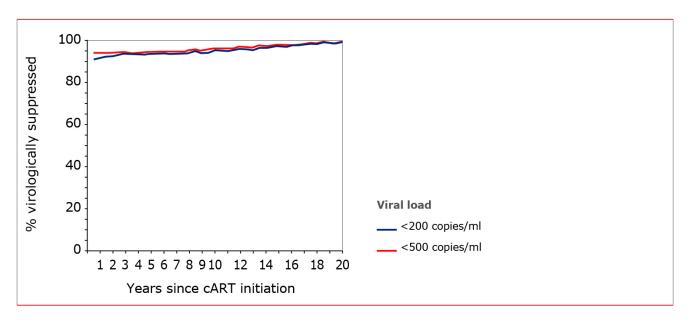


Time between entry into HIV care and initiation of combination antiretroviral therapy (cART) for those starting cART in 2007-2017.





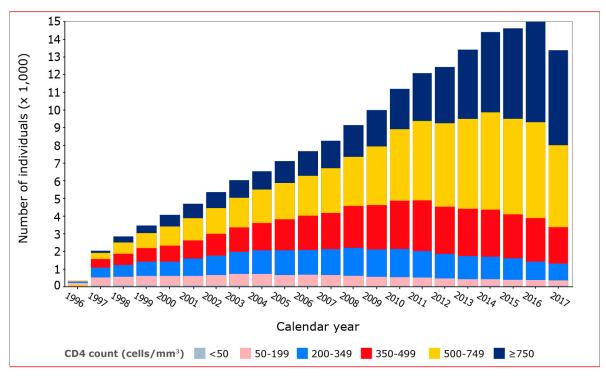
Viral suppression since combination antiretroviral therapy initiation.



Legend: cART=combination antiretroviral therapy.



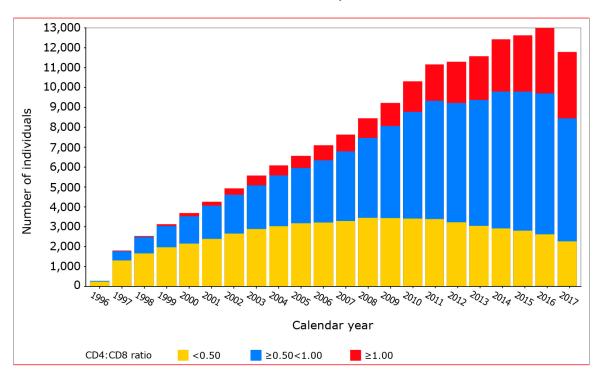
Last available CD4 cell count (cells/mm<sup>3</sup>) in each calendar year after the start of combination antiretroviral therapy.



Legend: cART=combination antiretroviral therapy.



Last available CD4:CD8 ratio in each calendar year after the start of combination antiretroviral therapy.

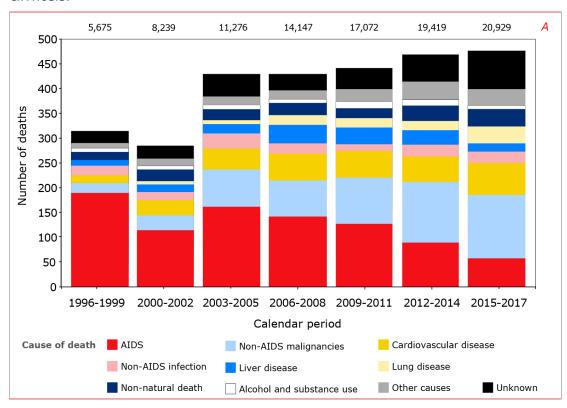


Note: numbers for 2017 may increase slightly because data collection is not yet complete.



#### Figure 3.1A

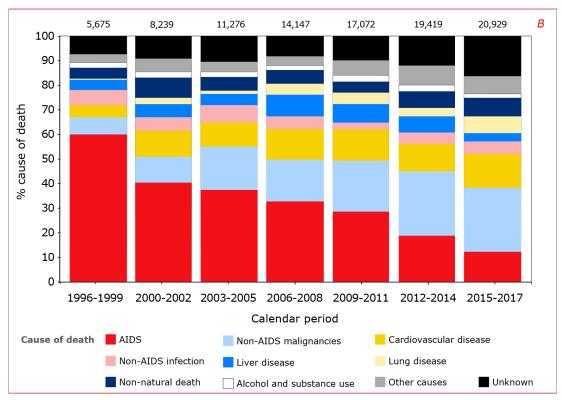
(A) Absolute changes in causes of death in different calendar periods since the introduction of combination antiretroviral therapy (cART) in the Netherlands. The numbers on top of each bar represent the number of individuals that were at risk during that calendar period. Mortality attributed to 'alcohol use' consisted of deaths due to complications of alcohol-related liver cirrhosis.





#### Figure 3.1B

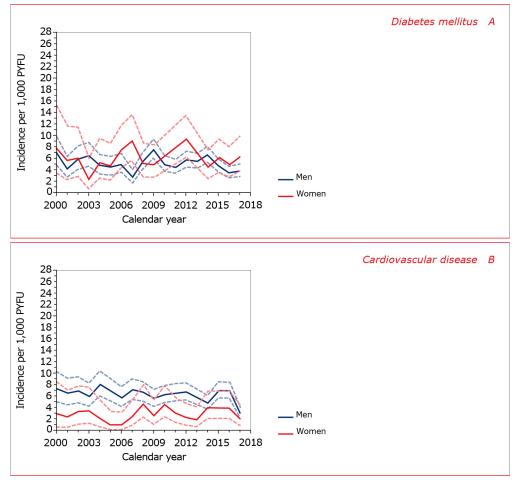
(B) Relative changes in causes of death in different calendar periods since the introduction of combination antiretroviral therapy (cART) in the Netherlands. The numbers on top of each bar represent the number of individuals that were at risk during that calendar period. Mortality attributed to 'alcohol use' consisted of deaths due to complications of alcohol-related liver cirrhosis.





#### Figure 3.2A & B

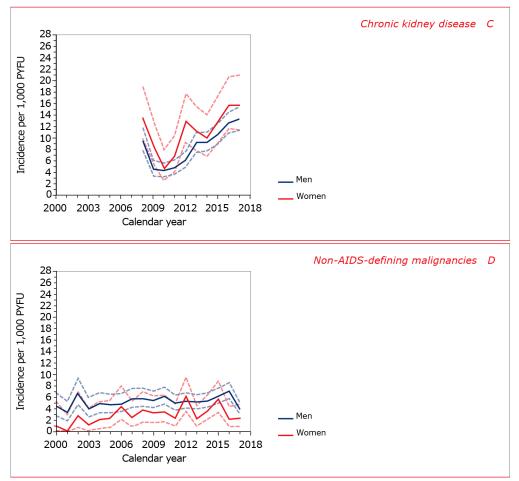
Figure 3.2: Crude incidence rates per 1,000 person years of follow up (solid lines) and 95% confidence intervals (dotted lines) of **(A) diabetes mellitus, (B) cardiovascular disease**, (C) chronic kidney disease, (D) non-AIDS-defining malignancies, (E) myocardial infarction, (F) stroke, (G) anal cancer, and (H) combined endpoint of non-AIDS disease (diabetes mellitus, cardiovascular disease, and non-AIDS-defining malignancies) by gender, with exception of anal cancer, which is presented for males only.





#### Figure 3.2C & D

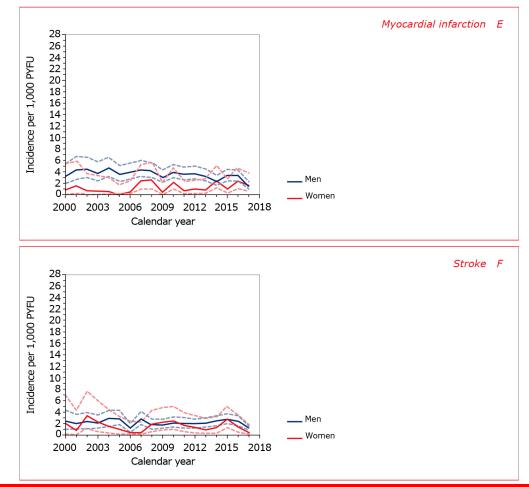
Figure 3.2: Crude incidence rates per 1,000 person years of follow up (solid lines) and 95% confidence intervals (dotted lines) of (A) diabetes mellitus, (B) cardiovascular disease, (C) chronic kidney disease, (D) non-AIDS-defining malignancies, (E) myocardial infarction, (F) stroke, (G) anal cancer, and (H) combined endpoint of non-AIDS disease (diabetes mellitus, cardiovascular disease, and non-AIDS-defining malignancies) by gender, with exception of anal cancer, which is presented for males only.





#### Figure 3.2E & F

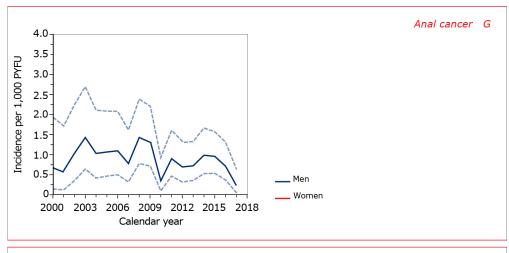
Figure 3.2: Crude incidence rates per 1,000 person years of follow up (solid lines) and 95% confidence intervals (dotted lines) of (A) diabetes mellitus, (B) cardiovascular disease, (C) chronic kidney disease, (D) non-AIDS-defining malignancies, (E) myocardial infarction, (F) stroke, (G) anal cancer, and (H) combined endpoint of non-AIDS disease (diabetes mellitus, cardiovascular disease, and non-AIDS-defining malignancies) by gender, with exception of anal cancer, which is presented for males only.

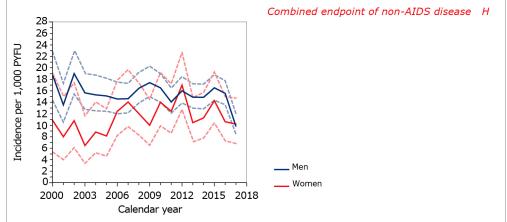




#### Figure 3.2 G& H

Figure 3.2: Crude incidence rates per 1,000 person years of follow up (solid lines) and 95% confidence intervals (dotted lines) of (A) diabetes mellitus, (B) cardiovascular disease, (C) chronic kidney disease, (D) non-AIDS-defining malignancies, (E) myocardial infarction, (F) stroke, (G) anal cancer, and (H) combined endpoint of non-AIDS disease (diabetes mellitus, cardiovascular disease, and non-AIDS-defining malignancies) by gender, with exception of anal cancer, which is presented for males only.

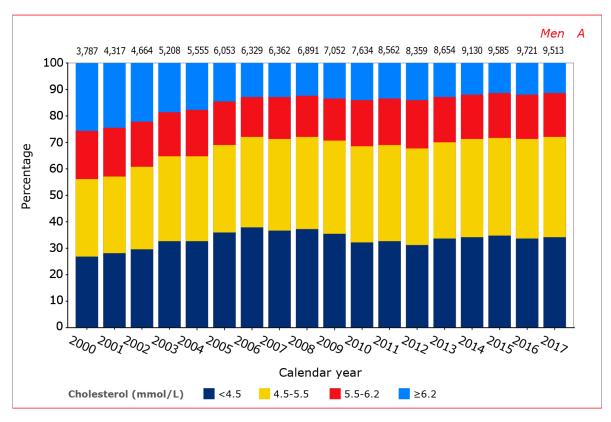






# Figure 3.3A

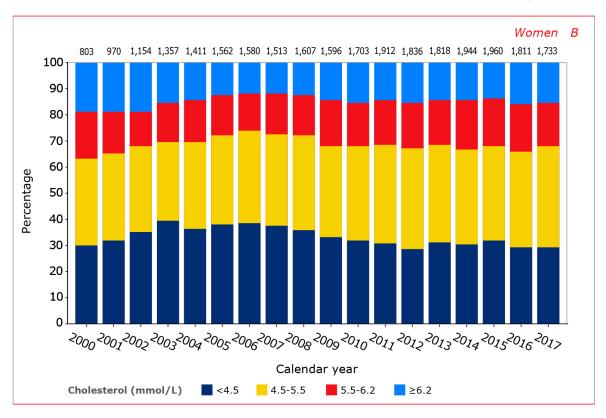
Distribution of cholesterol levels (mmol/l) at the end of each calendar year in (A) men and (B) women as a percentage of the total number of men and the total number of women, respectively, with an available cholesterol measurement. For each individual, the last available measurement in each year was selected.





#### Figure 3.3B

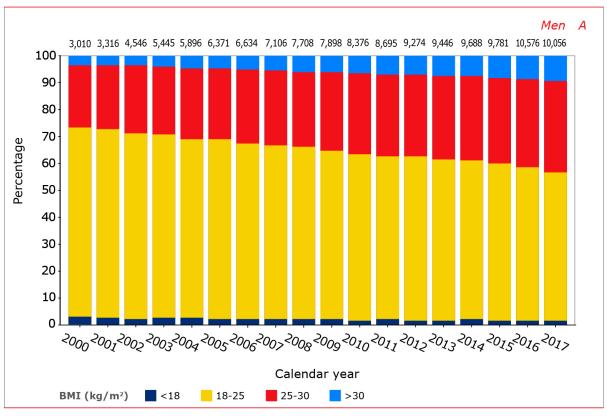
Distribution of cholesterol levels (mmol/l) at the end of each calendar year in (A) men and (B) women as a percentage of the total number of men and the total number of women, respectively, with an available cholesterol measurement. For each individual, the last available measurement in each year was selected.





#### Figure 3.4A

Distribution of the body mass index (BMI) at the end of each calendar year in (A) men and (B) women as a percentage of the total number of men and women with a known BMI in each year. For each individual, the last available weight measurement in each year was selected.

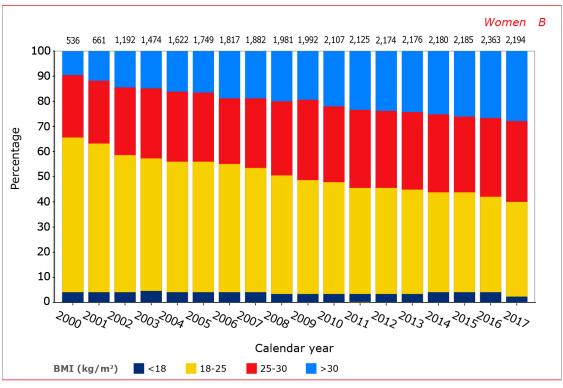






#### Figure 3.4B

Distribution of the body mass index (BMI) at the end of each calendar year in (A) men and (B) women as a percentage of the total number of men and women with a known BMI in each year. For each patient, the last available weight measurement in each year was selected.

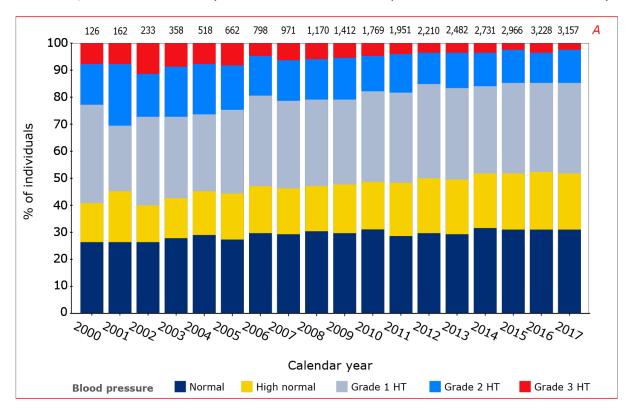


Legend: BMI=body mass index.



#### Figure 3.5A

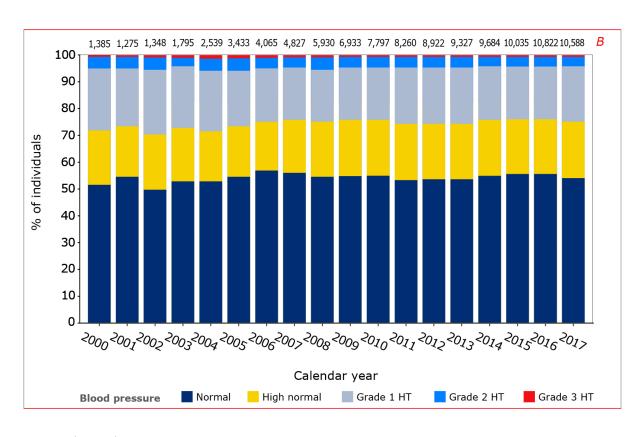
Distribution of graded blood pressure at the end of each calendar year in (A) individuals known to be receiving antihypertensive treatment and (B) individuals not recorded as being treated for hypertension. For each individual, the last available systolic and diastolic blood pressure measurement in each year was selected.





# Figure 3.5B

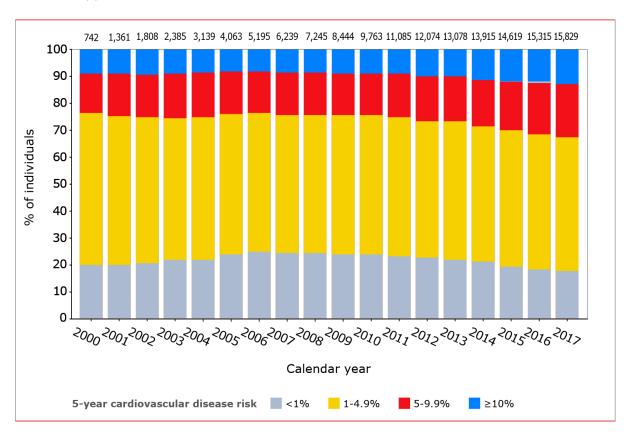
Distribution of graded blood pressure at the end of each calendar year in (A) individuals known to be receiving antihypertensive treatment and (B) individuals not recorded as being treated for hypertension. For each individual, the last available systolic and diastolic blood pressure measurement in each year was selected.





Legend: HT=hypertension

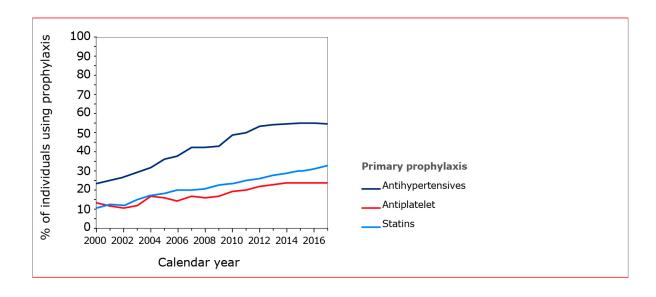
Estimated five-year risk of cardiovascular disease at the end of each calendar year according to the algorithm from the D:A:D study. Calculation of risk included variables such as total cholesterol, HDL-cholesterol and systolic blood pressure. Values for these variables were estimated on the basis of a 'last observation carried forward' approach.





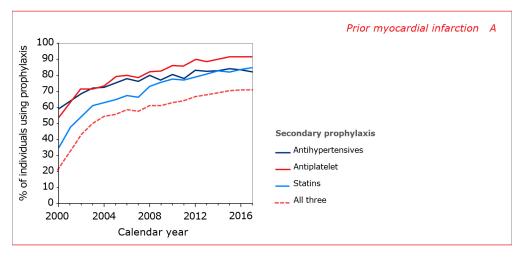
Legend: CVD=cardiovascular risk.

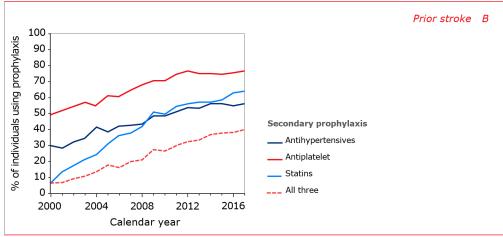
Percentage of individuals without a previous myocardial infarction, stroke, or cardiovascular surgical procedure who, according to European AIDS Clinical Society (EACS) guidelines, should be offered statin therapy, anti-platelet therapy, or antihypertensives as primary prophylaxis for myocardial infarction or stroke.





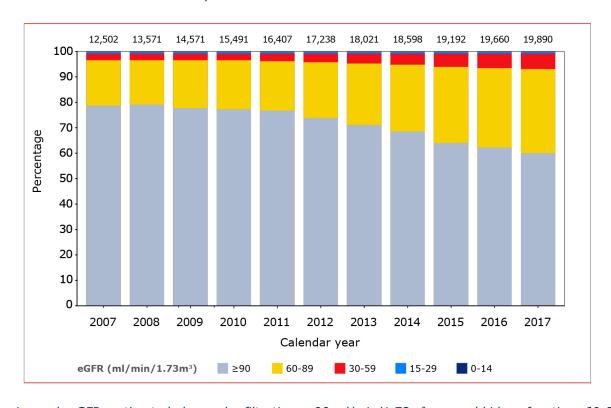
Percentage of individuals with (A) myocardial infarction or (B) ischaemic stroke using statin therapy, antiplatelet therapy, or antihypertensives.







Distribution of categories of estimated glomerular filtration rate (eGFR) at the end of each calendar year as a percentage of the total number of individuals with an available creatinine measurement. For each individual, the last measurement in each year was selected.

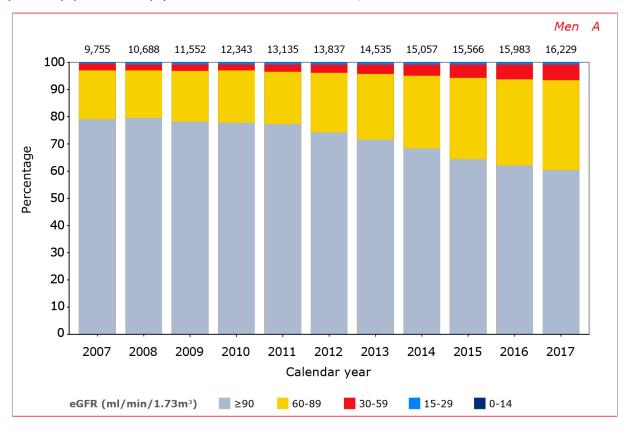




Legend: eGFR=estimated glomerular filtration;  $\geq 90$  ml/min/1.73m³: normal kidney function; 60-89 ml/min/1.73m³: mildly reduced; 30-59 ml/min/1.73m³: moderately reduced; 15-29 ml/min/1.73m³: severely reduced; <15 ml/min/1.73m³: very severely reduced kidney function.

# Figure 3.10A

Distribution of categories of estimated glomerular filtration rate (eGFR) at the end of each calendar year in (A) men and (B) women. For each individual, the last available measurement in each year was selected.

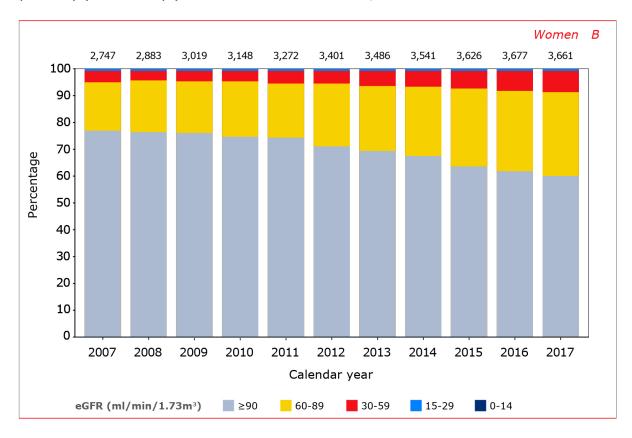




Legend: eGFR=estimated glomerular filtration;  $\geq 90$  ml/min/1.73m³: normal kidney function; 60-89 ml/min/1.73m³: mildly reduced; 30-59 ml/min/1.73m³: moderately reduced; 15-29 ml/min/1.73m³: severely reduced; <15 ml/min/1.73m³: very severely reduced kidney function.

# Figure 3.10B

Distribution of categories of estimated glomerular filtration rate (eGFR) at the end of each calendar year in (A) men and (B) women. For each individual, the last available measurement in each year was selected.

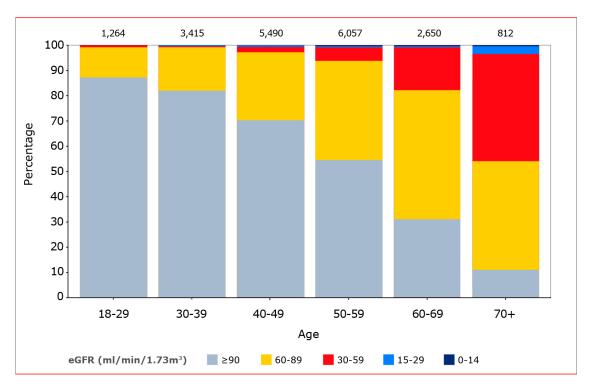




Legend: eGFR=estimated glomerular filtration;  $\geq$ 90 ml/min/1.73m³: normal kidney function; 60-89 ml/min/1.73m³: mildly reduced; 30-59 ml/min/1.73m³: moderately reduced; 15-29 ml/min/1.73m³: severely reduced; <15 ml/min/1.73m³: very severely reduced kidney function.

## **Figure 3.11**

Distribution of categories of estimated glomerular filtration rate (eGFR) in 2017 for different age categories. For each individual, the last available measurement in 2017 was selected.

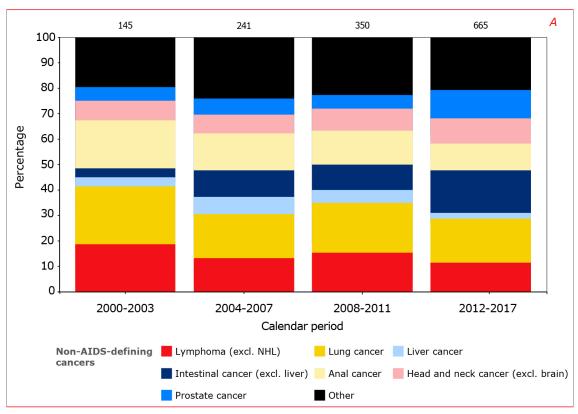


Legend: eGFR=estimated glomerular filtration;  $\geq 90$  ml/min/1.73m³: normal kidney function; 60-89 ml/min/1.73m³: mildly reduced; 30-59 ml/min/1.73m³: moderately reduced; 15-29 ml/min/1.73m³: severely reduced; <15 ml/min/1.73m³: very severely reduced kidney function.



# Figure 3.12A

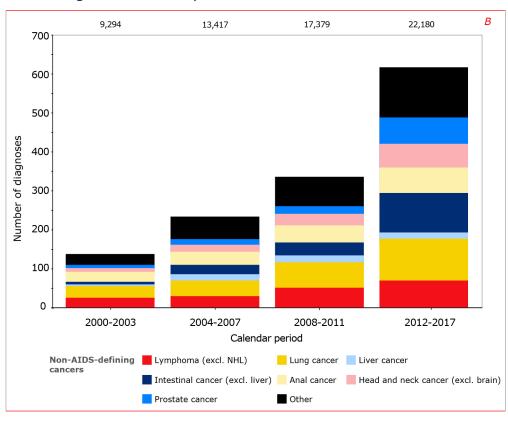
Relative changes in non-AIDS-defining malignancies between 2000 and 2017 in HIV-1-positive individuals in the Netherlands. The numbers on top of each bar represent the number of non-AIDS defining cancer diagnoses during that calendar period.





# Figure 3.12B

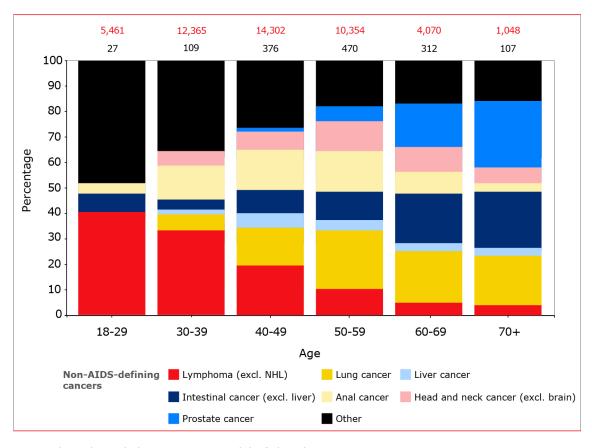
Absolute number of non-AIDS-defining malignancies between 2000 and 2017 in HIV-1-positive individuals in the Netherlands. The numbers on top of each bar represent the number of persons at risk during that calendar period shown.





## **Figure 3.13**

Relative changes in non-AIDS-defining malignancies with increasing age in HIV-1 positive individuals in the Netherlands.

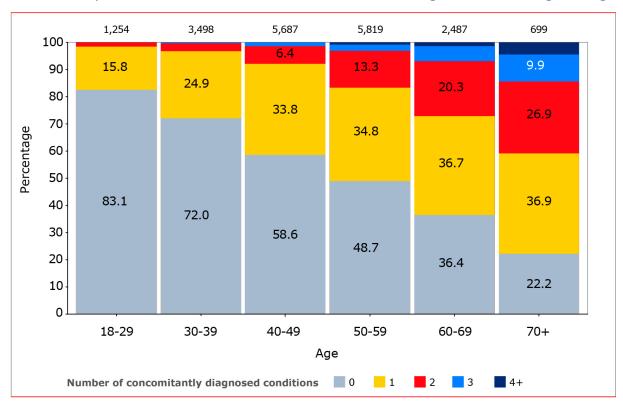




Legend: excl.=excluding; NHL=non-Hodgkin's lymphoma.

## **Figure 3.14**

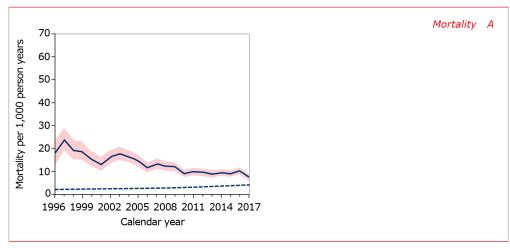
Prevalence of non-HIV/AIDS multimorbidity in the adult population in 2017. The numbers on top of each bar represent the number of individuals contributing data to that age category.

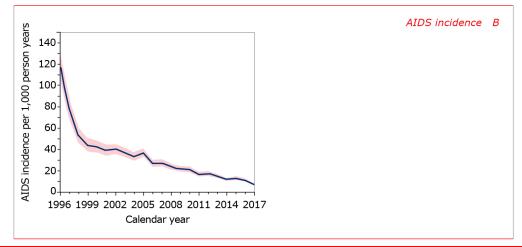




# Appendix figure 3.1 A & B

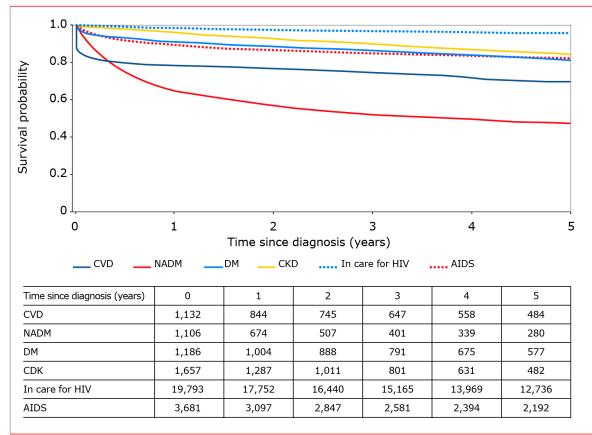
(A) Annual mortality and (B) incidence of AIDS in 25,524 HIV-1-positive individuals in the Netherlands after HIV diagnosis from 1996 onwards. Solid lines represent the incidence, while the shaded areas are the 95% confidence intervals. The dashed line is the mortality rate for age-matched and gender-matched individuals from the general population in the Netherlands.





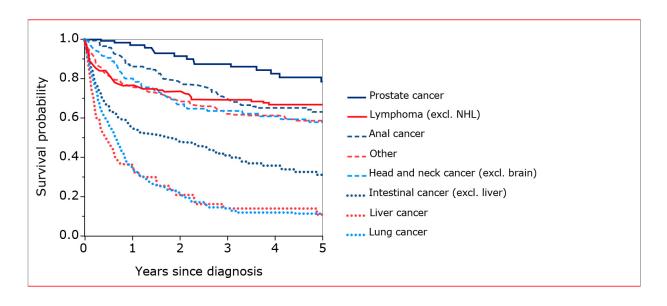


Estimated 5-year survival following the diagnosis of cardiovascular disease (CVD), non-AIDS defining malignancy (NADM), diabetes mellitus (DM), chronic kidney disease (CKD). Two reference groups are included: survival from date of entry into HIV care (after 1 January 2000), and from date of first AIDS diagnosis (after 1 January 2000). The numbers below the graph represent the number of subjects per stratum at risk at each time point.



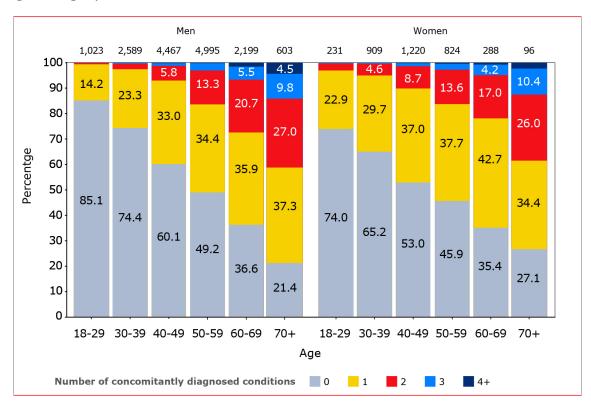


Estimated 5-year survival following the diagnosis of the most common non-AIDS defining malignancies diagnosed between 1 January 2000 and 31 December 2017.



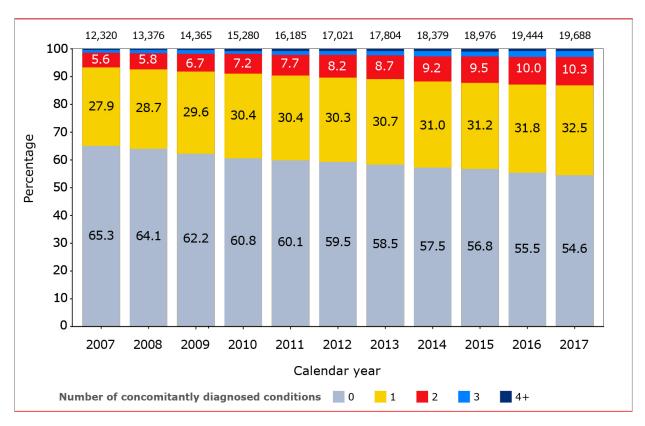


Prevalence of non-HIV/AIDS multimorbidity by gender in the adult population in 2017. The numbers on top of each bar represent the number of individuals contributing data to that age category. The numbers in the stacked bars represent percentages, with all stacked bars adding up to 100% per age category.



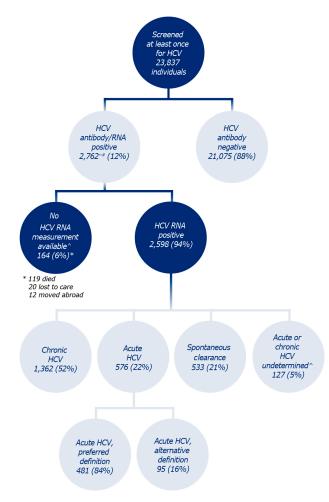


Prevalence of non-HIV/AIDS multimorbidity in the adult population. The numbers on top of each bar represent the number of individuals contributing data to that age category. The numbers in the stacked bars represent percentages, with all stacked bars adding up to 100% per calendar year.



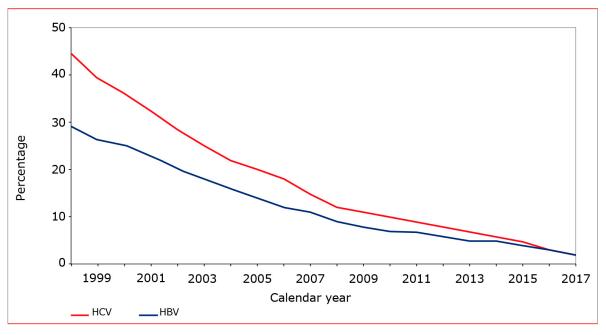


Flowchart of HIV-positive individuals tested at least once for hepatitis C virus (HCV).





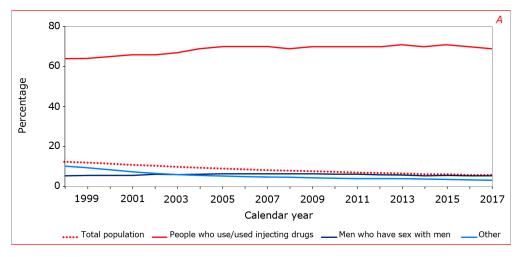
Percentage of individuals in care with an unknown hepatitis B or hepatitis C status per calendar year of care.

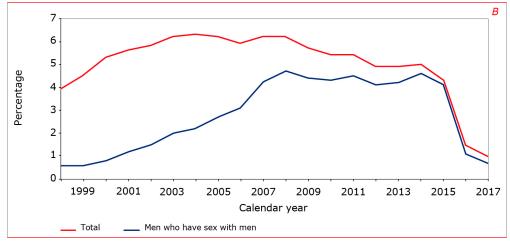


Legend: HBV=hepatitis B virus; HCV=hepatitis C virus.



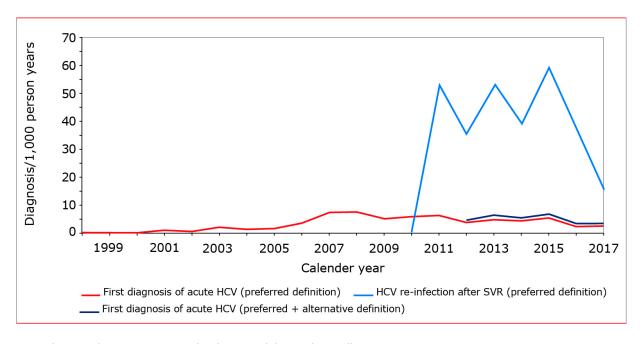
Prevalence of (A) chronic hepatitis C co-infection and (B) detectable HCV RNA per calendar year.







Incidence of acute hepatitis C infection among men who have sex with men, per calendar year.

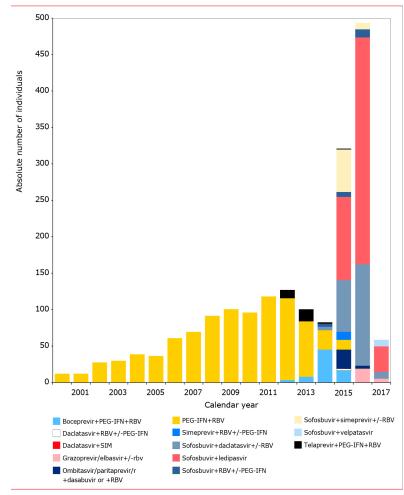


Note: low numbers in 2017 may be due to a delay in data collection.

**Legend:** HCV=hepatitis C virus; SVR=sustained virological response.



Number of HIV/HCV co-infected individuals starting hepatitis C treatment per calendar year.

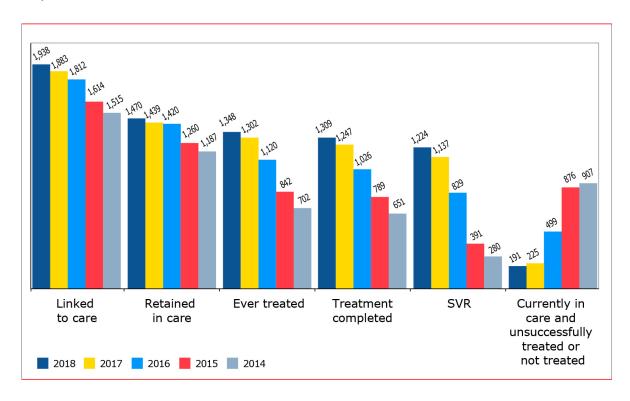




Note: low numbers in 2017 may be due to the use of data from the database lock of 31 December 2017, rather than that of May 2018 as in previous years. 88

**Legend:** RBV=ribavirin; PEG-IFN=pegylated interferon; r=ritonavir.

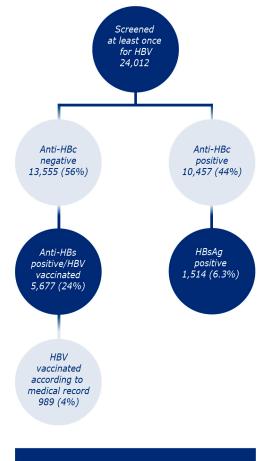
#### Hepatitis C continuum of care.



**Legend:** SVR=sustained virological response.



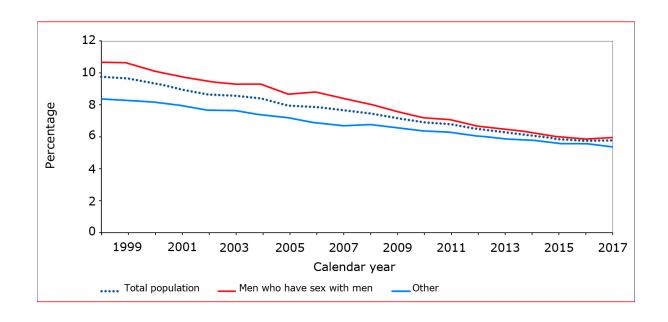
Flowchart of HIV-positive individuals tested at least once for hepatitis B.





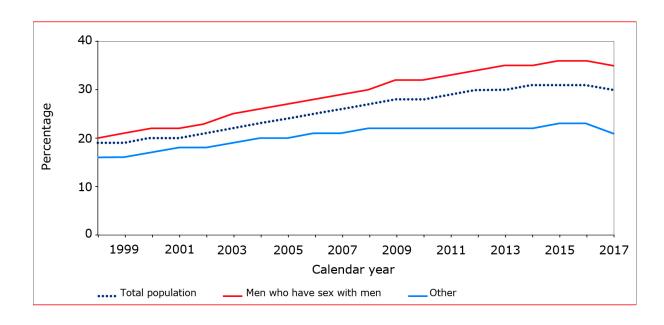
HBV unexposed and non-vaccinated: 24,012-10,457-5,677-989=6,889 (29%)

Prevalence of chronic active hepatitis B co-infection per calendar year.



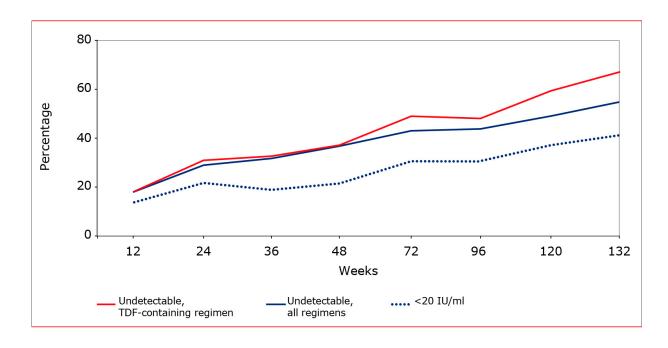


Prevalence of individuals vaccinated against hepatitis B per calendar year.





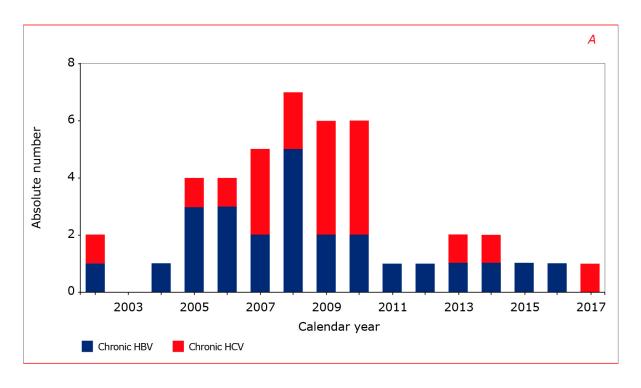
Percentage of individuals with undetectable hepatitis B virus (HBV) DNA levels by assay with a detection limit of either <100, <200, <2000 IU/ml HBV DNA or <20 IU/ml since the start of HBV treatment, regardless of HBeAG status.





# Figure 4.11A

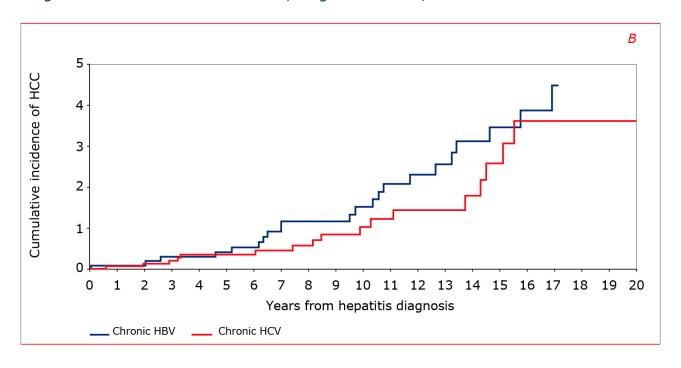
(A) Absolute number of reported hepatocellular carcinoma (HCC) cases over time and (B) cumulative incidence of HCC among individuals co-infected with HIV and hepatitis C (HCV) or hepatitis B (HBV), from date of hepatitis diagnosis onwards. The Kaplan-Meier estimate was used to determine the time to HCC. The follow-up time was measured from the date of hepatitis diagnosis to the date of last contact, diagnosis of HCC, or 1 January 2018.





## Figure 4.11B

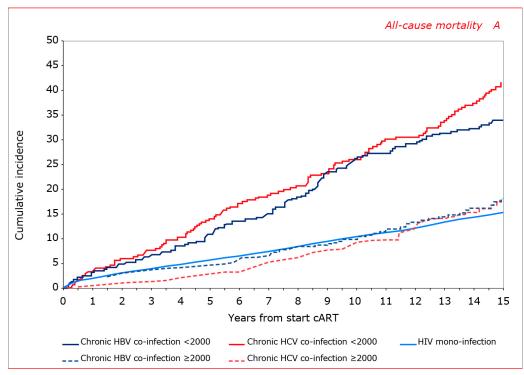
(A) Absolute number of reported hepatocellular carcinoma (HCC) cases over time and (B) cumulative incidence of HCC among individuals co-infected with HIV and hepatitis C (HCV) or hepatitis B (HBV), from date of hepatitis diagnosis onwards. The Kaplan-Meier estimate was used to determine the time to HCC. The follow-up time was measured from the date of hepatitis diagnosis to the date of last contact, diagnosis of HCC, or 31 December 2017.





# Figure 4.12A

Cumulative incidence of (A) **all-cause mortality** and (B) liver-related mortality, stratified by calendar year period. The Kaplan-Meier estimate was used to determine the time to death. The follow-up time was measured from the date of HIV diagnosis to the date of last contact, death or 31 December 2017.

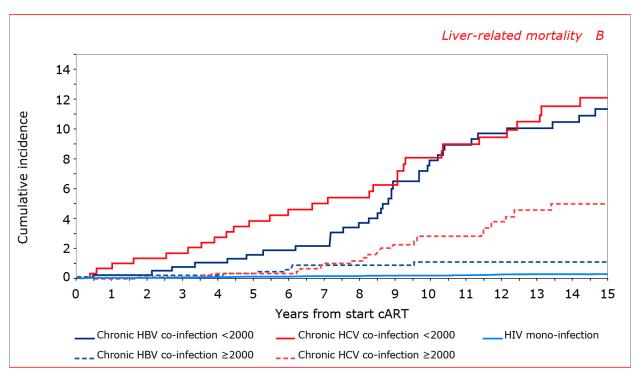


Legend: cART=combination antiretroviral therapy; HCV=hepatitis C virus; HBV=hepatitis B virus.

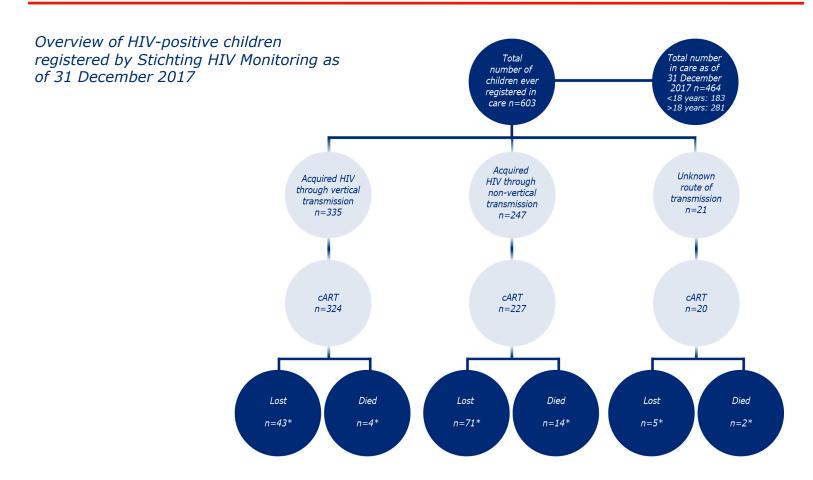


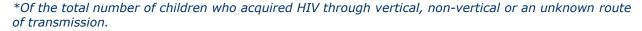
## Figure 4.12B

Cumulative incidence (A) of all-cause mortality and (B) **liver-related mortality**, stratified by calendar year period. The Kaplan-Meier estimate was used to determine the time to death. The follow-up time was measured from the date of HIV diagnosis to the date of last contact, death or 31 December 2017.





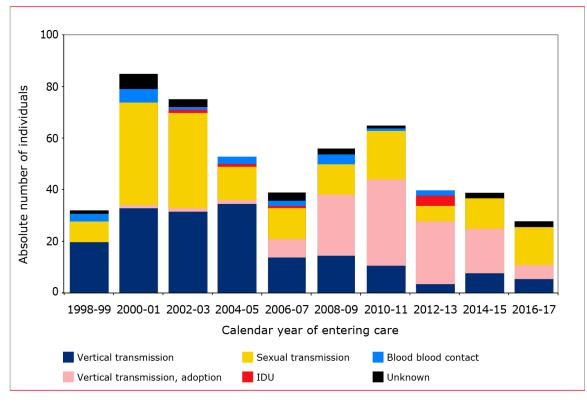






**Legend:** cART=combination antiretroviral therapy.

Number of HIV-positive children by year of entering care in the Netherlands, stratified by HIV transmission mode and, for those who had acquired HIV through vertical transmission, by whether they had been adopted or not, 1998-2017.

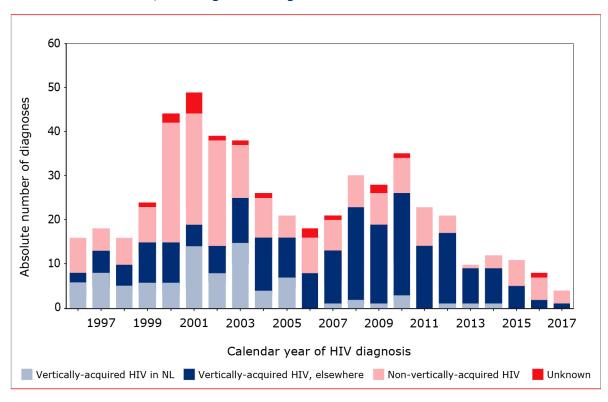




**Note:** low numbers in 2017 may be due to a delay in the treatment centre registering the child with SHM.

**Legend:** IDU=transmission through injecting drug use.

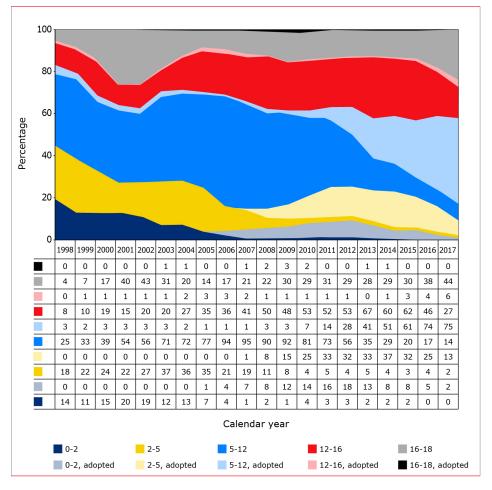
Number of registered HIV diagnoses among children, according to year of HIV diagnosis, route of transmission, and region of origin.





**Note:** low numbers in 2017 may be due to a delay in registration.

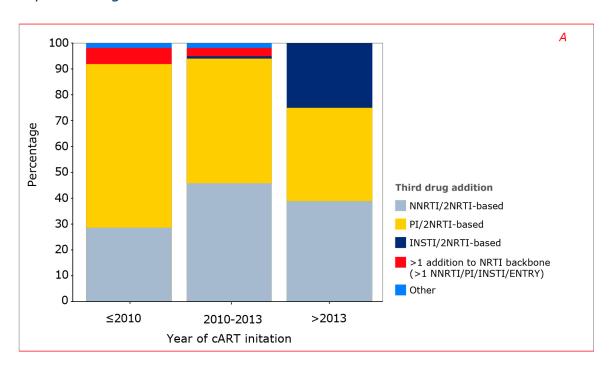
Time-dependent age distribution of HIV-1 positive children in care over time. The shaded areas represent the proportion of adopted children.





# Figure 5.5A

Third-drug additions to the nucleoside analogue reverse transcriptase backbone used as part of the initial cART regimen, stratified by calendar year period, according to (A) antiretroviral class and (B) specific drug.

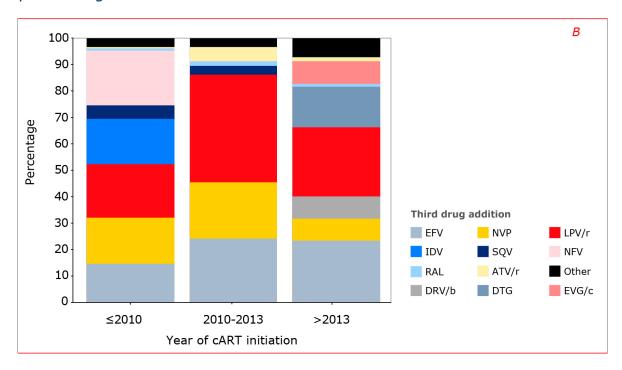


**Legend:** cART=combination antiretroviral therapy; ENTRY=entry inhibitor; INSTI=integrase inhibitor; NRTI=nucleoside analogue reverse transcriptase inhibitor; NNRTI=non-nucleoside reverse transcriptase inhibitor; PI=protease inhibitor; EFV=efavirenz; NVP= nevirapine; LPV/r=ritonavir-boosted lopinavir; IDV=indinavir; SQV=saquinavir; NFV=nelfinavir; RAL=raltegravir; ATV/r=ritonavir-boosted atazanavir; DTG=dolutegravir; EVG/c=cobicistat-boosted elvitegravir; DRV/b=cobicistat/ritonavir-boosted darunavir.



## Figure 5.5B

Third-drug additions to the nucleoside reverse transcriptase backbone used as part of the initial cART regimen, stratified by calendar year period, according to (A) antiretroviral class and (B) specific drug.

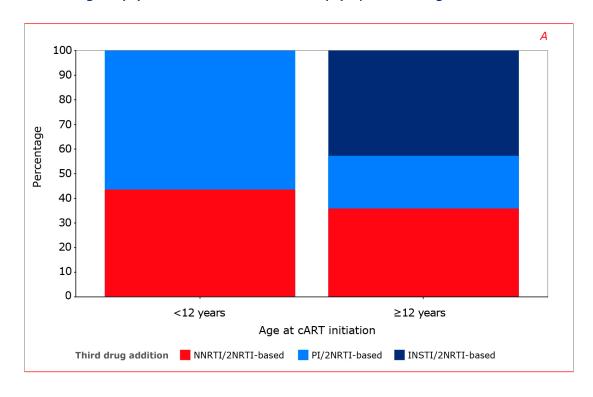


**Legend:** cART=combination antiretroviral therapy; ENTRY=entry inhibitor; INSTI=integrase inhibitor; NRTI=nucleoside analogue reverse transcriptase inhibitor; NNRTI=non-nucleoside reverse transcriptase inhibitor; PI=protease inhibitor; EFV=efavirenz; NVP= nevirapine; LPV/r=ritonavir-boosted lopinavir; IDV=indinavir; SQV=saquinavir; NFV=nelfinavir; RAL=raltegravir; ATV/r=ritonavir-boosted atazanavir; DTG=dolutegravir; EVG/c=cobicistat-boosted elvitegravir; DRV/b=cobicistat/ritonavir-boosted darunavir.



## Figure 5.6A

Third-drug additions to the nucleoside analogue reverse transcriptase backbone used as part of the initial cART regimen in 2013-2016, stratified by age at cART initiation, according to (A) antiretroviral class and (B) specific drug.

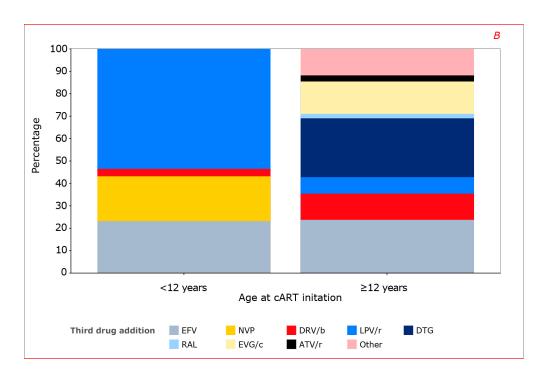




Legend: cART=combination antiretroviral therapy; INSTI=integrase inhibitor; NRTI=nucleoside reverse transcriptase inhibitor; NNRTI=non-NRTI; PI=protease inhibitor.

# Figure 5.6B

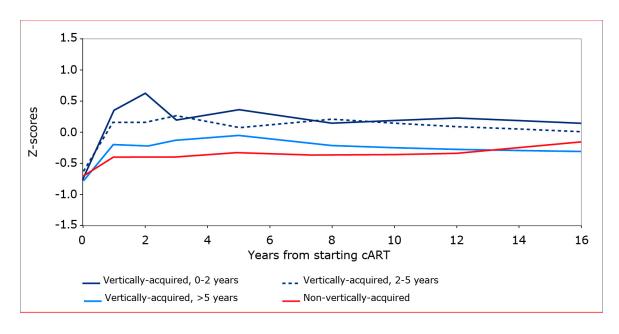
Third-drug additions to the nucleoside reverse transcriptase backbone used as part of the initial cART regimen in 2013-2016, stratified by age at cART initiation, according to (A) antiretroviral class and (B) specific drug.





Legend: cART=combination antiretroviral therapy; EFV= efavirenz; NVP=nevirapine; DRV/b=cobicistat/ritonavir-boosted darunavir; LPV/r=ritonavir-boosted lopinavir; DTG=dolutegravir; RAL=raltegravir; EVG/c=cobicistat-boosted elvitegravir; ATV/r= ritonavir-boosted atazanavir.

Changes in z-scores for CD4 T-cell counts among HIV-1 positive children stratified by age at initiation of combination antiretroviral therapy (cART).

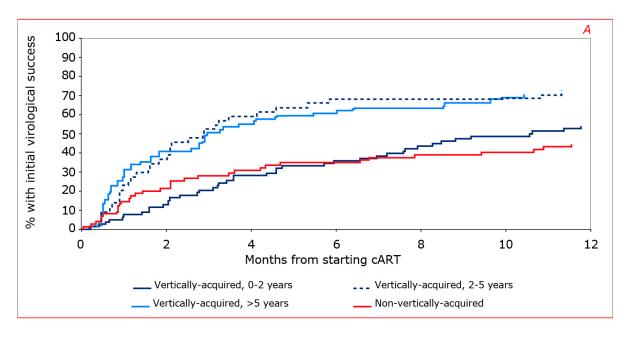


Legend: cART=combination antiretroviral therapy.



## Figure 5.8A

Kaplan-Meier estimates of the percentage of HIV-1 positive children with initial suppression (<500 copies/ml) during the first year after starting combination antiretroviral therapy (cART) by age at cART initiation and HIV transmission mode: (A) initiation of cART between 1998-2010 and (B) initiation of cART between 2010-2017.

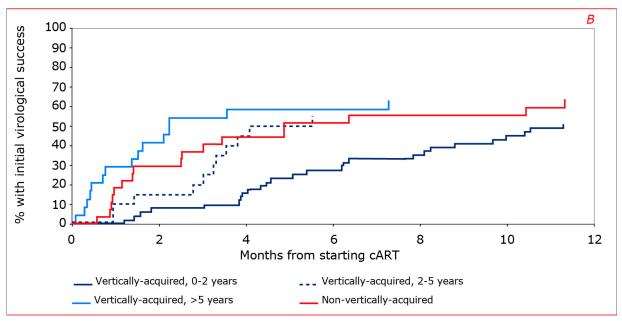


Legend: cART=combination antiretroviral therapy.



## Figure 5.8B

Kaplan-Meier estimates of the percentage of HIV-1 positive children with initial suppression (<500 copies/ml) during the first year after starting combination antiretroviral therapy (cART) by age at cART initiation and HIV transmission mode: (A) initiation of cART between 1998-2010 and (B) initiation of cART between 2010-2016.

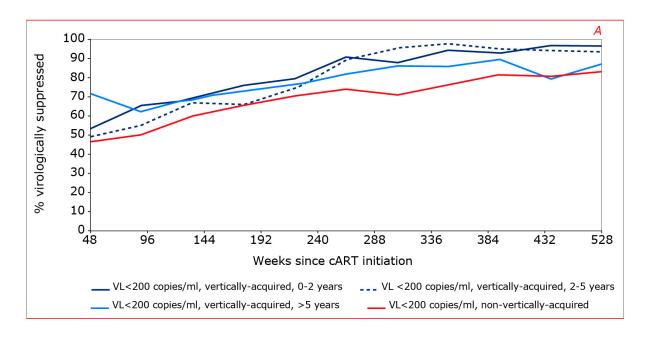


**Legend:** cART=combination antiretroviral therapy.



## Figure 5.9A

Viral suppression since combination antiretroviral therapy initiation, by calendar period of therapy initiation: (A) 1998-2010 and (B) 2010-2017.

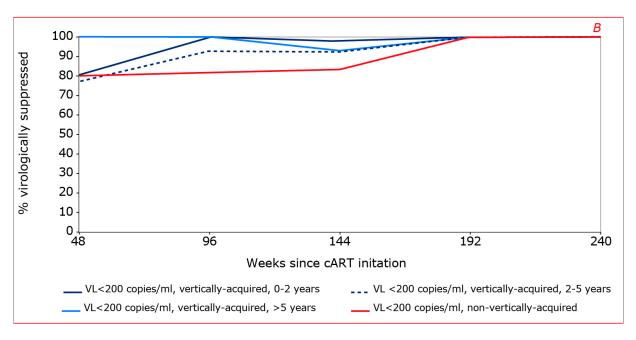


Legend: cART=combination antiretroviral therapy.



## Figure 5.9B

Viral suppression since combination antiretroviral therapy initiation, by calendar period of therapy initiation: (A) 1998-2010 and (B) 2010-2017.

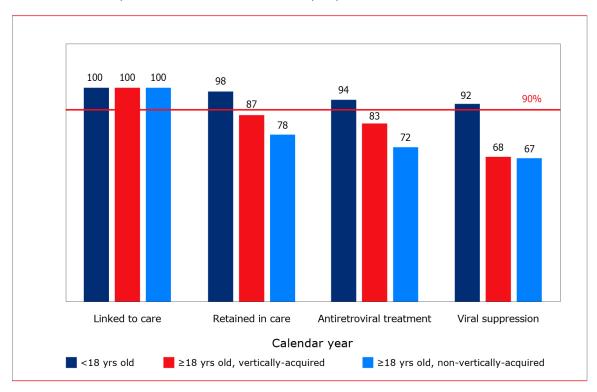


Legend: cART=combination antiretroviral therapy; VL=viral load.



#### **Figure 5.10**

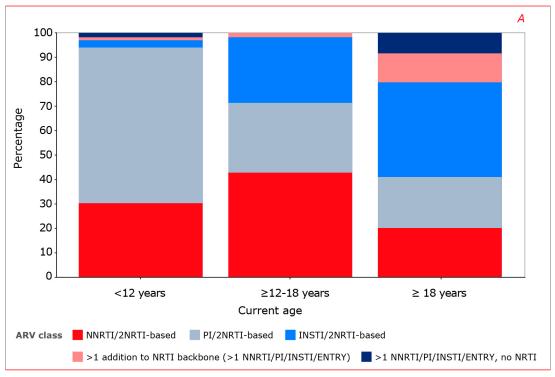
Cascade of care by age and route of HIV acquisition, as of 31 December 2017. The numbers on top of the bars indicate the proportion of individuals.





# Figure 5.11A

Third-drug additions to the nucleoside reverse transcriptase backbone used as part of the current regimen, stratified by current age, according to (A) **antiretroviral class** and (B) specific drug.

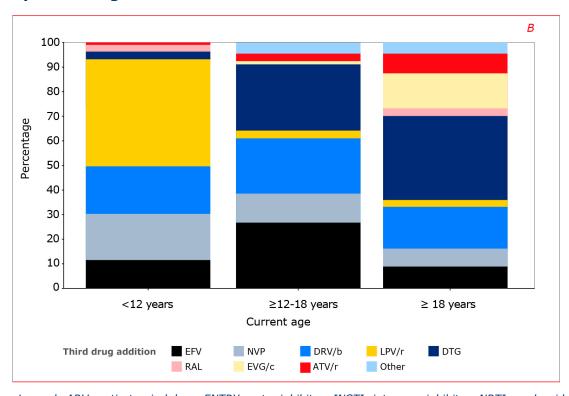




Legend: ARV=antiretroviral drug; ENTRY=entry inhibitor; INSTI=integrase inhibitor; NRTI=nucleoside analogue reverse transcriptase inhibitor; NNRTI=non-nucleoside reverse transcriptase inhibitor; PI=protease inhibitor; EFV=efavirenz; NVP=nevirapine; DRV/b=cobicistat/ritonavir-boosted darunavir; LPV/r=ritonavir-boosted lopinavir; DTG=dolutegravir; RAL=raltegravir; EVG/c=cobicistat-boosted elvitegravir; ATV/r= ritonavir-boosted atazanavir.

# Figure 5.11B

Third-drug additions to the nucleoside reverse transcriptase backbone used as part of the current regimen, stratified by current age, according to (A) antiretroviral class and (B) **specific drug.** 

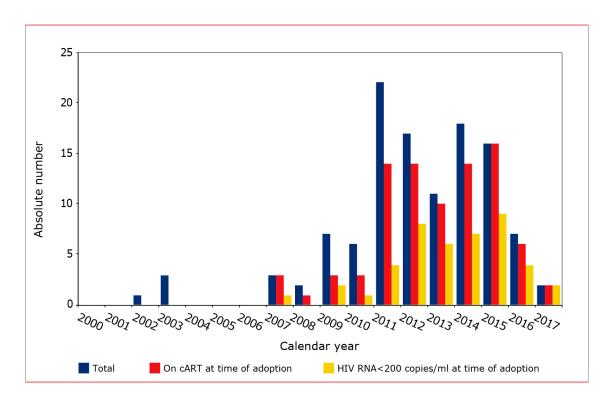




Legend: ARV=antiretroviral drug; ENTRY=entry inhibitor; INSTI=integrase inhibitor; NRTI=nucleoside analogue reverse transcriptase inhibitor; NNRTI=non-nucleoside reverse transcriptase inhibitor; PI=protease inhibitor; EFV=efavirenz; NVP=nevirapine; DRV/b=cobicistat/ritonavir-boosted darunavir; LPV/r=ritonavir-boosted lopinavir; DTG=dolutegravir; RAL=raltegravir; EVG/c=cobicistat-boosted elvitegravir; ATV/r= ritonavir-boosted atazanavir.

# **Figure 5.12**

Number of HIV-1 positive children who came into paediatric care through adoption, by calendar year.

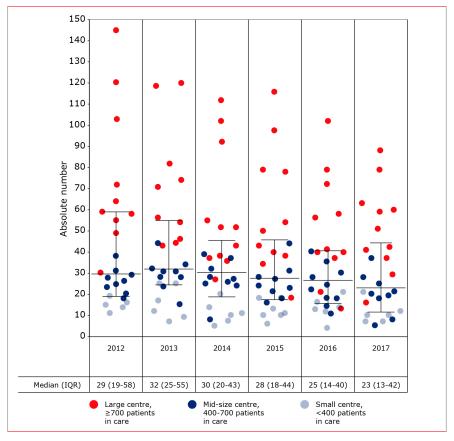




Legend: cART=combination antiretroviral therapy.

## Figure 7.1

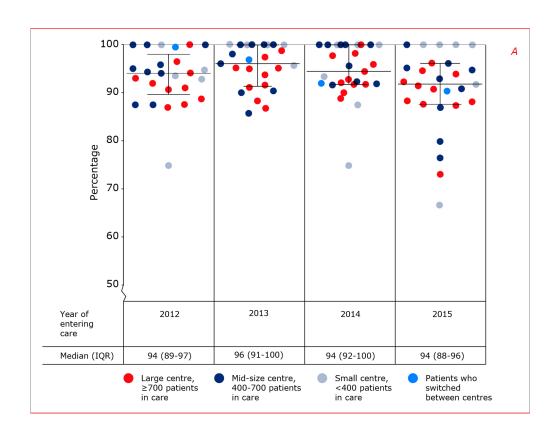
Annual number of individuals newly entering care per HIV treatment centre in the Netherlands in 2012-2017.





## Figure 7.2A

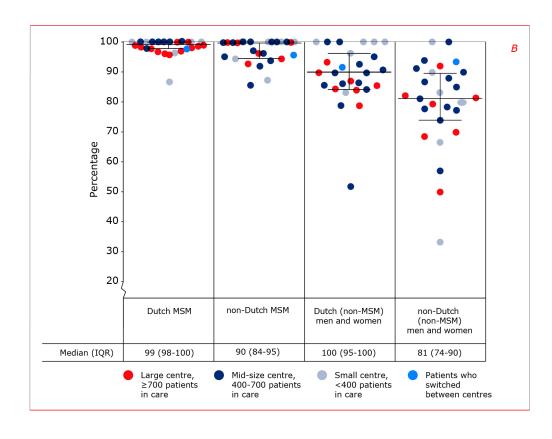
Retention in care: (A) 18 months after entering care, over time by year of entering care and (B) by HIV transmission group and patients' region of origin, C) in 2017 for those who entered care between 2012-2015.





## Figure 7.2B

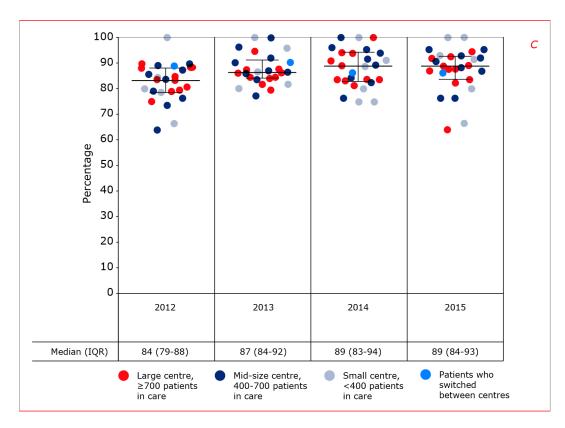
Retention in care: (A) 18 months after entering care, over time by year of entering care and (B) by HIV transmission group and patients' region of origin, C) in 2017 for those who entered care between 2012-2015.





## Figure 7.2C

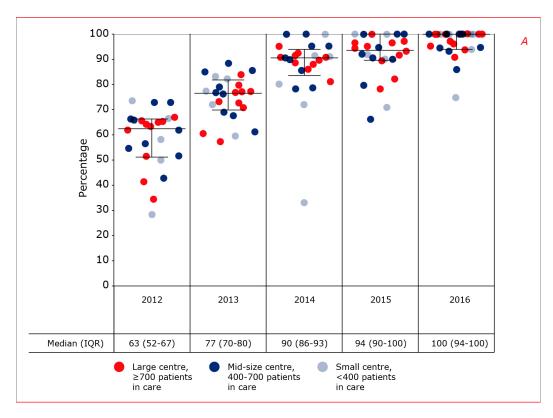
Retention in care: (A) 18 months after entering care, over time by year of entering care and (B) by HIV transmission group and patients' region of origin, C) in 2017 for those who entered care between 2012-2015.





# Figure 7.3A

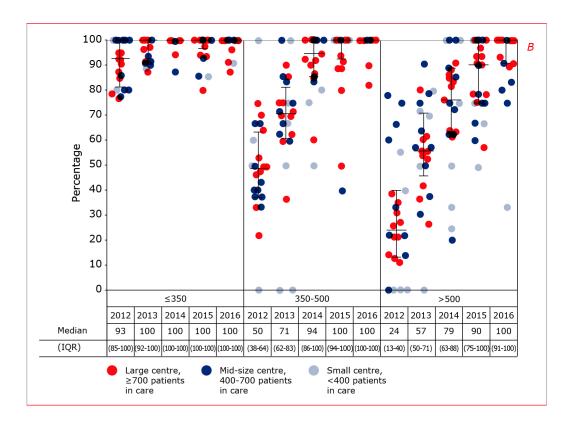
The proportion of patients who entered care between 2012-2016 and started combination antiretroviral therapy (cART) within six months after entry: (A) overall and (B) by CD4 cell count at entry, (C) the proportion with newly entered care between 2012-2016 and who initiated cART and were still in care in 2017.





## Figure 7.3B

The proportion of patients who entered care between 2012-2016 and started combination antiretroviral therapy (cART) within six months after entry: (A) overall and (B) by CD4 cell count at entry, (C) the proportion with newly entered care between 2012-2016 and who initiated cART and were still in care in 2017.

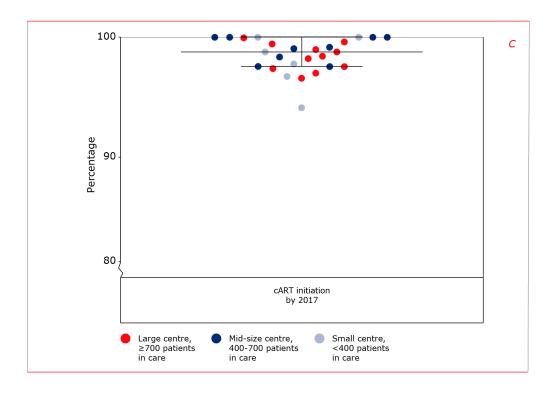


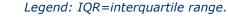


Legend: IQR=interquartile range.

## Figure 7.3C

The proportion of patients who entered care between 2012-2016 and started combination antiretroviral therapy (cART) within six months after entry: (A) overall and (B) by CD4 cell count at entry, (C) the proportion with newly entered care between 2012-2016 and who initiated cART and were still in care in 2017.

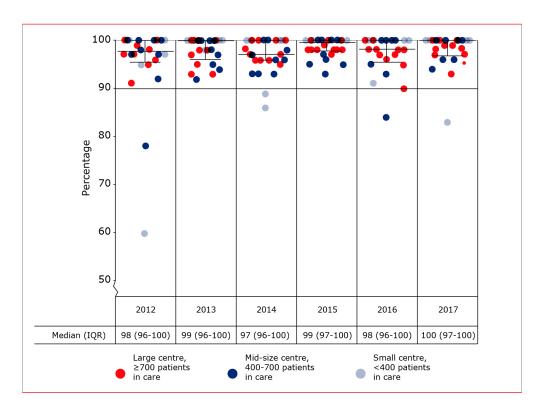






#### Figure 7.4

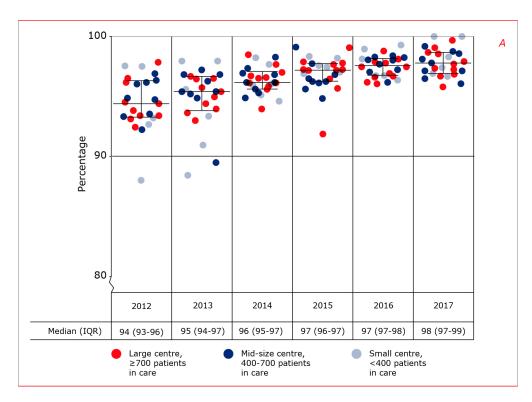
Proportion of treatment-naive patients with a plasma HIV RNA level <400 copies/ml at 6 months (minimum and maximum: 3-9 months) after the start of combination antiretroviral therapy (cART) across all HIV treatment centres.





## Figure 7.5A

(A) The proportion of all HIV-positive patients in care who had been on combination antiretroviral therapy (cART) for at least 6 months and who had an HIV RNA level <100 copies/ml. This indicator was calculated for each calendar year during the period 2012-2017 and is presented as the proportion across all HIV treatment centres.

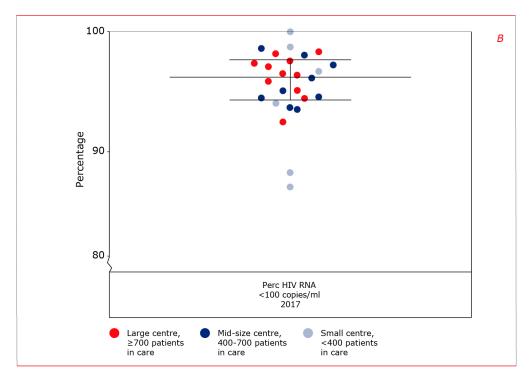




Legend: IQR=interquartile range.

# Figure 7.5B

(B) The proportion of HIV-positive patients in care who entered care between 2012-2016 and who were still in care in 2017 with an HIV RNA level <100 copies/ml.

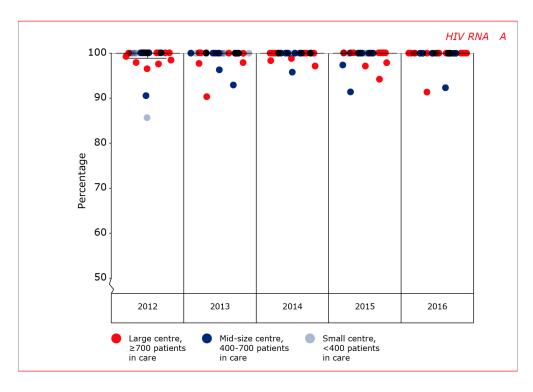


Legend: IQR=interquartile range.



## Figure 7.6A

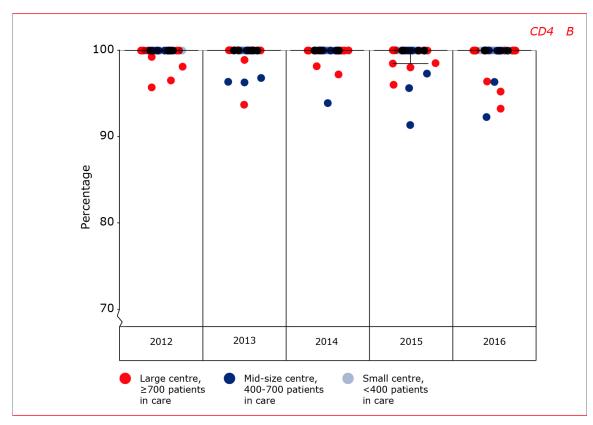
Proportion of patients who newly entered care in Dutch HIV treatment centres in 2012-2016, with assessment within six months of **(A) HIV RNA**, (B) plasma CD4 cell count, (C) total cholesterol in patients aged <50 years at entry in care, (D) total cholesterol in patients aged  $\ge$ 50 years at entry in care, (E) hepatitis C, and (F) hepatitis B.





# Figure 7.6B

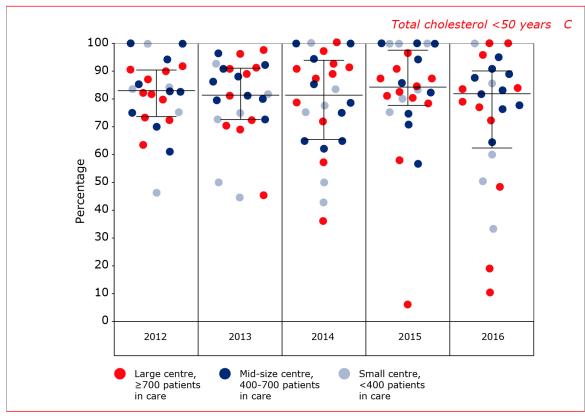
Proportion of patients who newly entered care in Dutch HIV treatment centres in 2012-2016, with assessment within six months of (A) HIV RNA, (B) plasma CD4 cell count, (C) total cholesterol in patients aged <50 years at entry in care, (D) total cholesterol in patients aged  $\ge$ 50 years at entry in care, (E) hepatitis C, and (F) hepatitis B.





#### Figure 7.6C

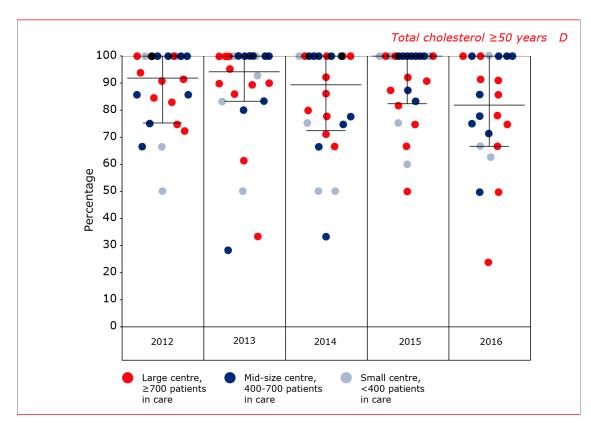
Proportions of patients who newly entered care in Dutch HIV treatment centres in 2012-2015, with assessment within six months of (A) HIV RNA, (B) plasma CD4 cell count, (C) total cholesterol in patients aged <50 years at entry in care, (D) total cholesterol in patients aged  $\geq$ 50 years at entry in care, (E) hepatitis C, and (F) hepatitis B.





## Figure 7.6D

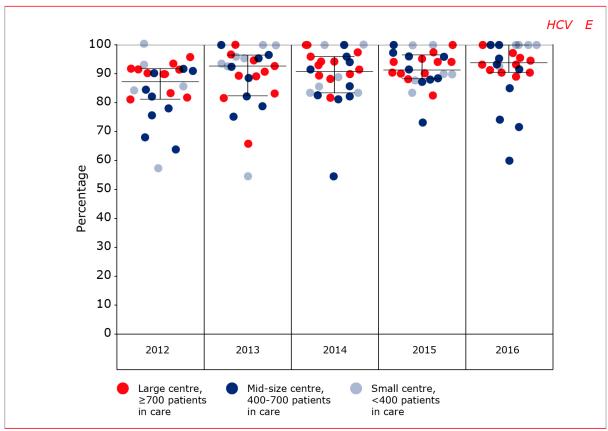
Proportions of patients who newly entered care in Dutch HIV treatment centres in 2012-2015, with assessment within six months of (A) HIV RNA, (B) plasma CD4 cell count, (C) total cholesterol in patients aged <50 years at entry in care, (D) total cholesterol in patients aged  $\geq$ 50 years at entry in care, (E) hepatitis C, and (F) hepatitis B.





## Figure 7.6E

Proportions of patients who newly entered care in Dutch HIV treatment centres in 2012-2015, with assessment within six months of (A) HIV RNA, (B) plasma CD4 cell count, (C) total cholesterol in patients aged <50 years at entry in care, (D) total cholesterol in patients aged  $\ge$ 50 years at entry in care, (E) hepatitis C, and (F) hepatitis B.

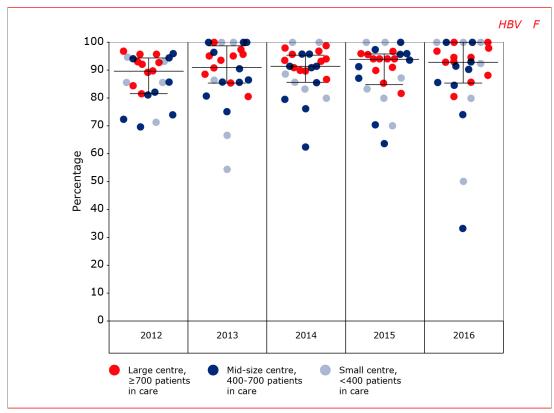




Legend: HCV=hepatitis C.

## Figure 7.6F

Proportions of patients who newly entered care in Dutch HIV treatment centres in 2012-2015, with assessment within six months of (A) HIV RNA, (B) plasma CD4 cell count, (C) total cholesterol in patients aged <50 years at entry in care, (D) total cholesterol in patients aged  $\geq$ 50 years at entry in care, (E) hepatitis C, and (F) hepatitis B.

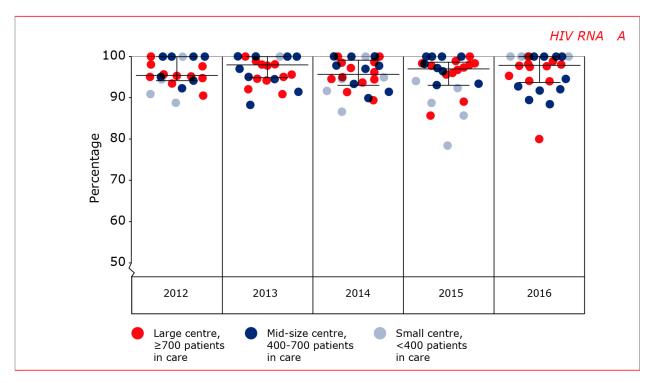




Legend: HBV=hepatitis B.

## Figure 7.7A

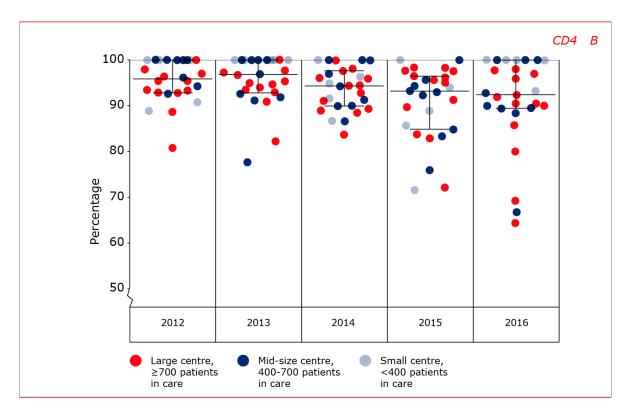
Proportions of patients in HIV treatment centres in the Netherlands who initiated combination antiretroviral therapy (cART) in 2012-2016, with assessment of **(A) HIV RNA**, (B) plasma CD4 cell count, (C) total cholesterol in patients aged <50 years at entry in care, and (D) total cholesterol in patients aged  $\ge$ 50 years at entry in care within 13 months after start of cART.





## Figure 7.7 B

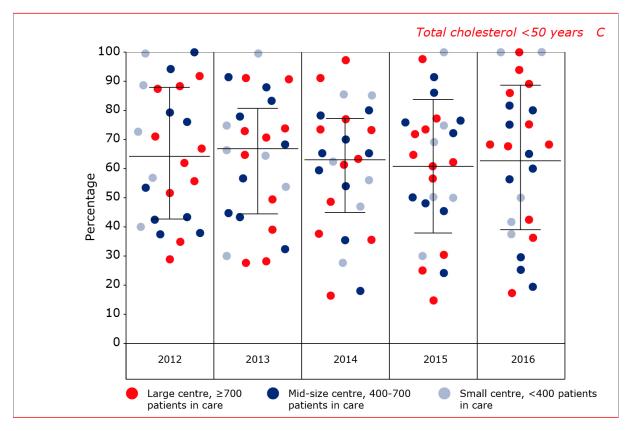
Proportions of patients in HIV treatment centres in the Netherlands who initiated combination antiretroviral therapy (cART) in 2012-2016, with assessment of (A) HIV RNA, **(B) plasma CD4 cell count**, (C) total cholesterol in patients aged <50 years at entry in care, and (D) total cholesterol in patients aged  $\ge$ 50 years at entry in care within 13 months after start of cART.





## Figure 7.7 C

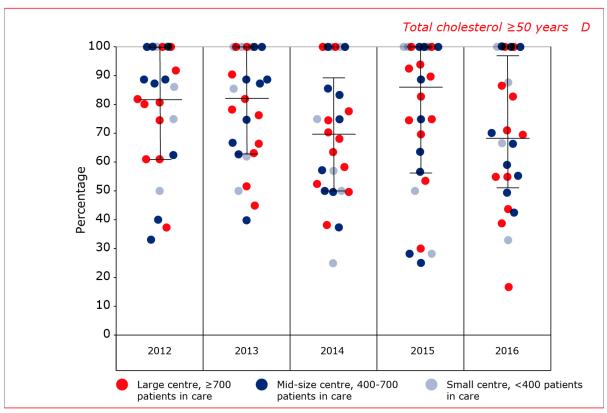
Proportions of patients in HIV treatment centres in the Netherlands who initiated combination antiretroviral therapy (cART) in 2012-2016, with assessment of (A) HIV RNA, (B) plasma CD4 cell count, (C) total cholesterol in patients aged <50 years at entry in care, and (D) total cholesterol in patients aged  $\geq$ 50 years at entry in care within 13 months after start of cART.





## Figure 7.7 D

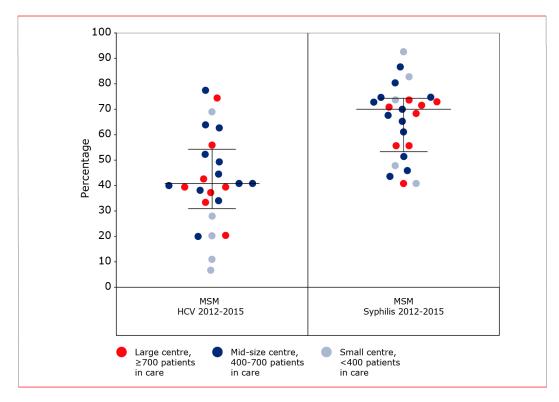
Proportions of patients in HIV treatment centres in the Netherlands who initiated combination antiretroviral therapy (cART) in 2012-2016, with assessment of (A) HIV RNA, (B) plasma CD4 cell count, (C) total cholesterol in patients aged <50 years at entry in care, and **(D) total** cholesterol in patients aged  $\ge$ 50 years at entry in care within 13 months after start of cART.





#### Figure 7.8

Rates of repeat screening for hepatitis C virus (HCV) among men who have sex with men (MSM) who were HCV-negative at entry into care and for syphilis among all MSM who entered care in one of the HIV treatment centres in 2012 and 2015.

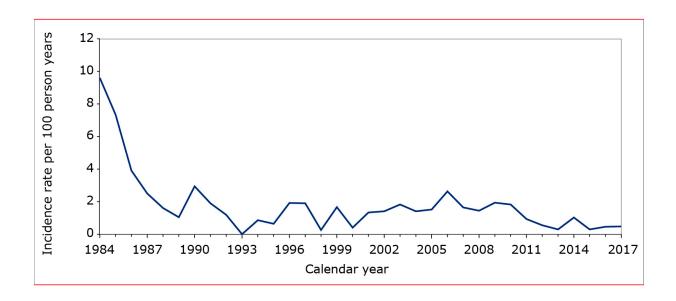


MSM=men who have sex with men; HCV=hepatitis C; IQR=interquartile range.



# Figure 8.1

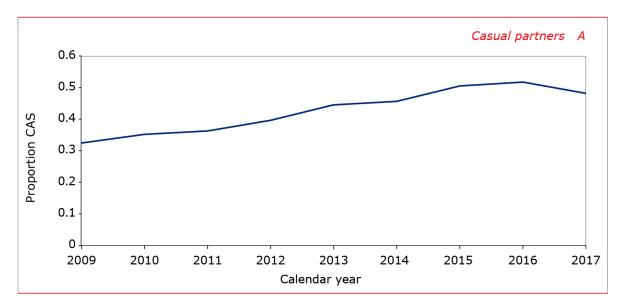
HIV incidence per calendar year in the Amsterdam Cohort Studies (ACS) among men who have sex with men (MSM), 1984-2017.





#### Figure 8.2

Trend in condomless anal sex(CAS) with (A) casual and (B) steady partners in the among HIV-negative men who have sex with men (MSM) in the Amsterdam Cohort Studies (ACS), 2009-2017

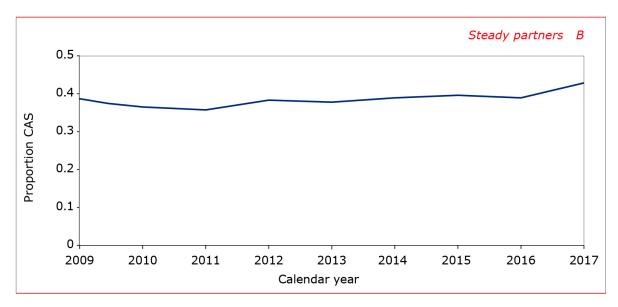


Legend: CAS=condomless anal intercourse.



#### Figure 8.2

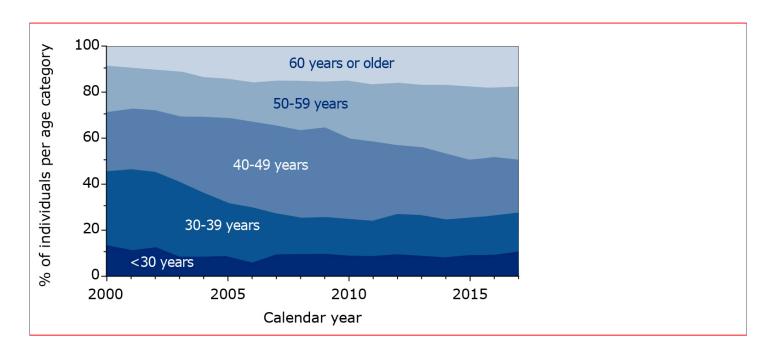
Trend in condomless anal sex(CAS) with (A) casual and (B) steady partners in the among HIV-negative men who have sex with men (MSM) in the Amsterdam Cohort Studies (ACS), 2009-2017



Legend: CAS=condomless anal intercourse.

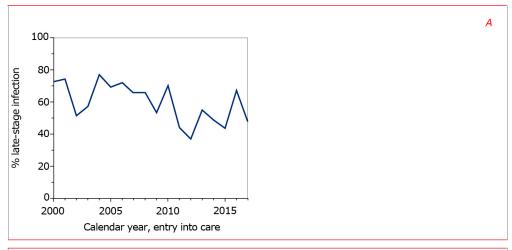


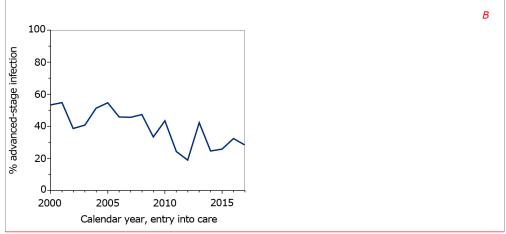
Increasing age of the HIV-1-positive population in clinical care in Curação over calendar time.





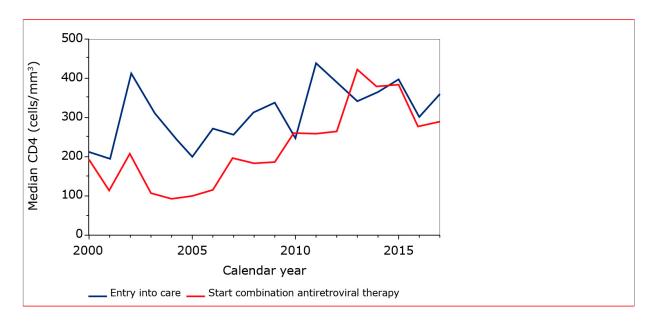
Proportion of people classified as presenting with (A) late-stage or (B) advanced-stage HIV infection at the time of entry into care.





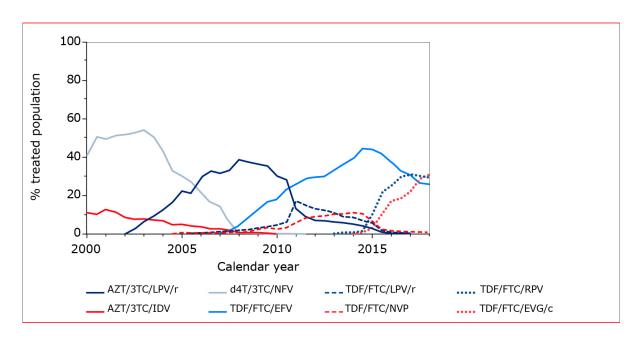


Changes over calendar time in median CD4 counts at entry into care and at the start of combination antiretroviral therapy (cART).





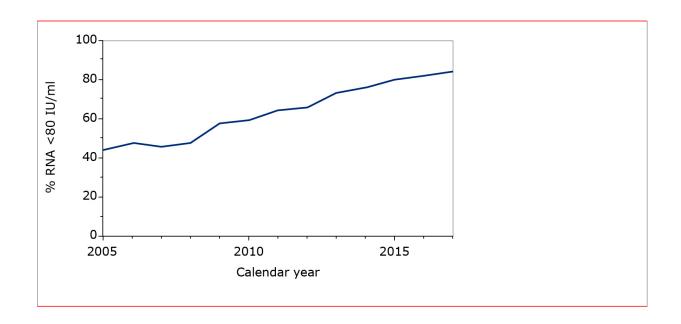
Percentage of individuals treated with combination antiretroviral therapy (cART) by specific regimens over calendar time.



Legend: AZT=zidovudine; 3TC=lamivudine; LPV/r=ritonavir-boosted lopinavir; d4T=stavudine; NFV=nelfinavir; TDF=tenofovir disoproxil fumarate; FTC=emtricitabine; RPV=rilpivirine; IDV=indinavir; EFV=efavirenz; NVP=nevirapine; EVG/c=cobicistat-boosted elvitegravir.



Proportion of people in care with HIV RNA <80 IU/ml at their last viral load measurement in each calendar year.





Continuum of HIV care for the total estimated HIV-1-positive population estimated to be living with HIV in Curação by the end of 2017.

