



Sustainable Development Goals: HIV and hepatitis monitoring overview

Teymur Noori
European Centre for Disease Prevention and Control (ECDC)
EMCDDA DRID meeting
22-23 October 2020

Outline



- How ECDC is measuring progress toward achieving:
 - hepatitis B and C targets in the EU/EEA
 - HIV targets in Europe and Central Asia
- Conclusions

Sustainable Development Goals

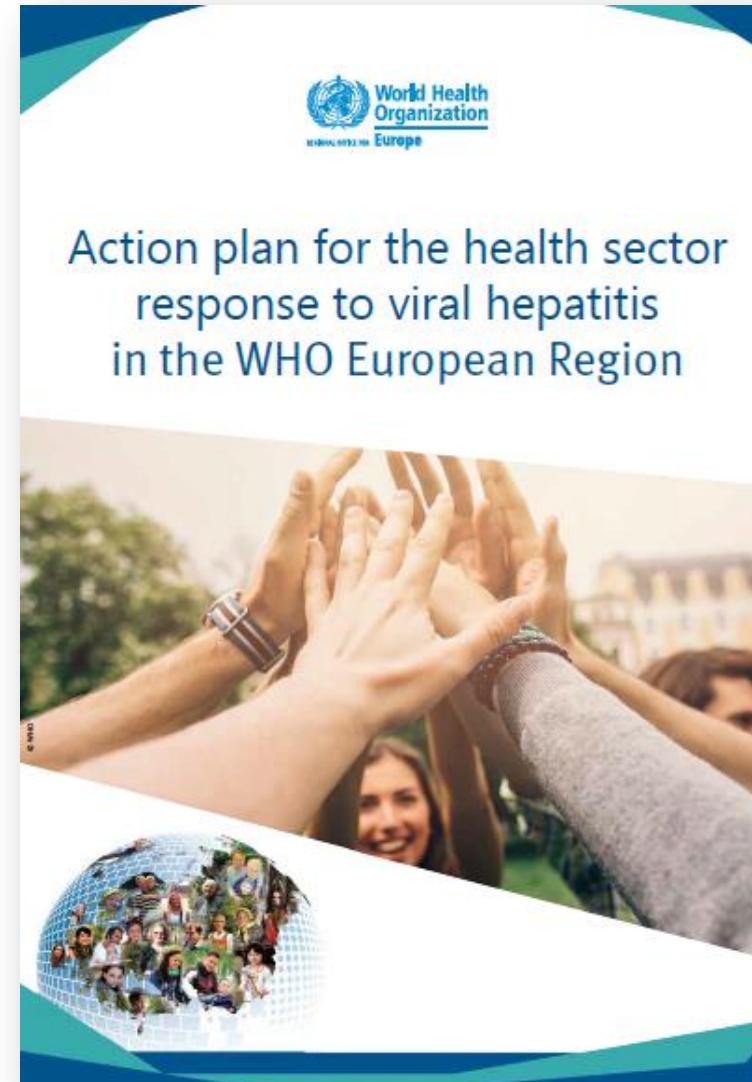
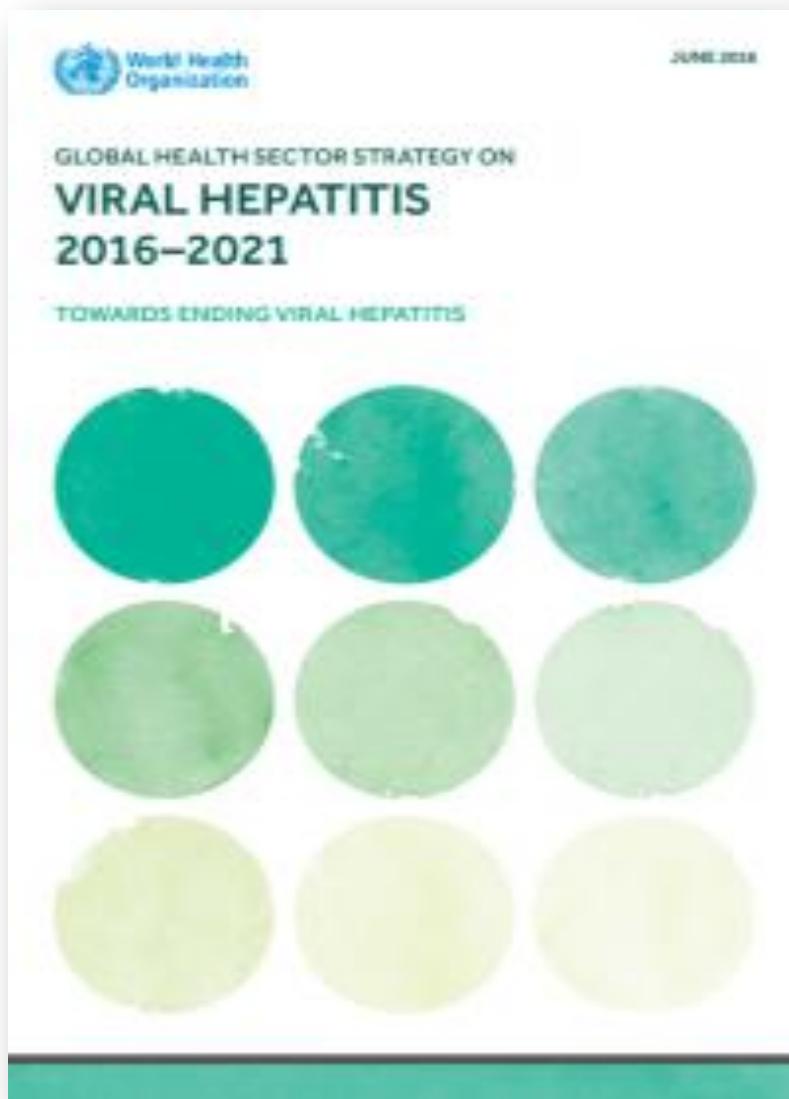


Goal 3. Ensure healthy lives and promote well-being for all at all ages

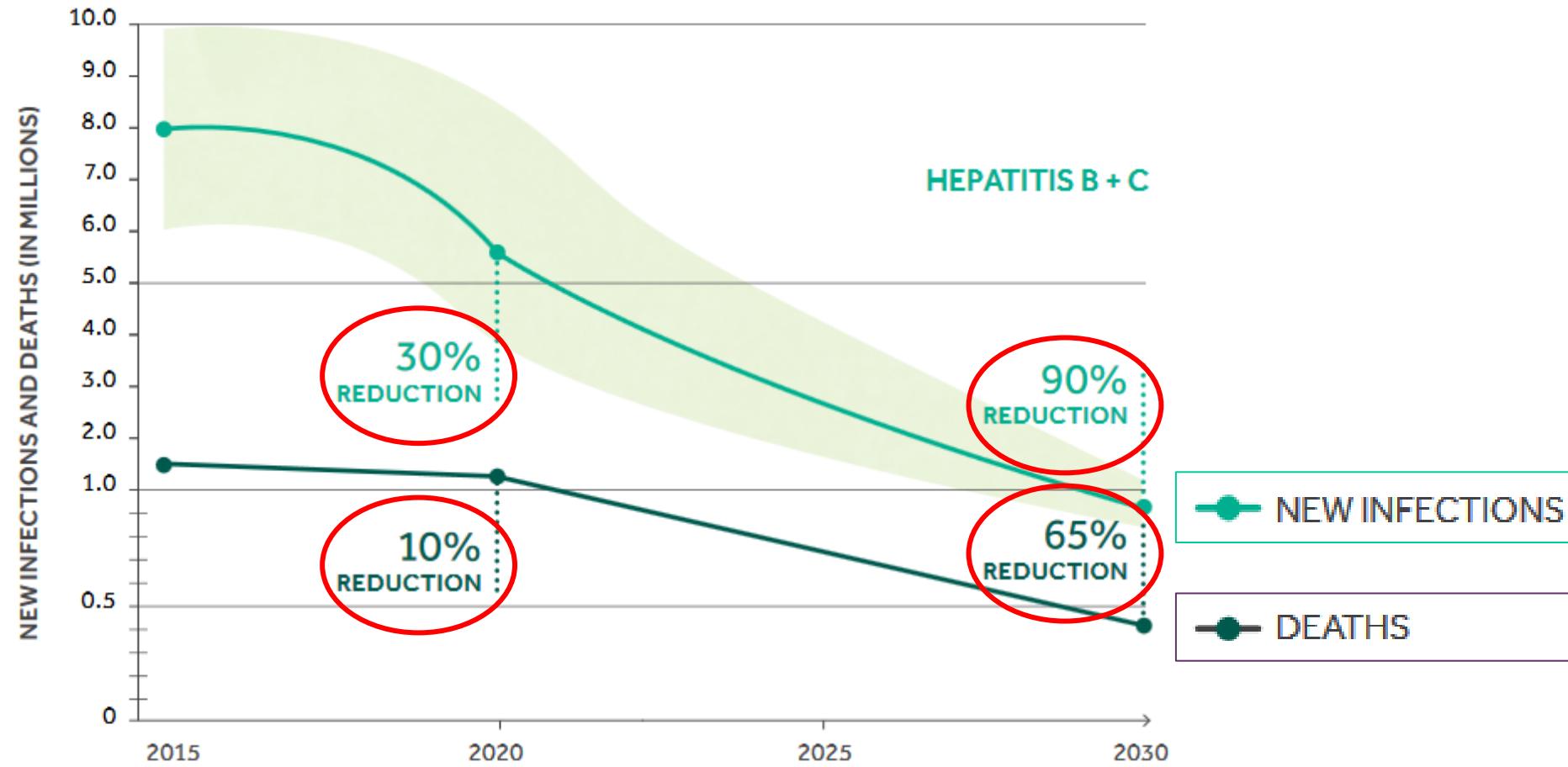
3.3 **By 2030, end** the epidemics of **AIDS**, tuberculosis, malaria and neglected tropical diseases and **combat hepatitis**, water-borne diseases and other communicable diseases.

Hepatitis B and C

WHO strategy, action plan and targets



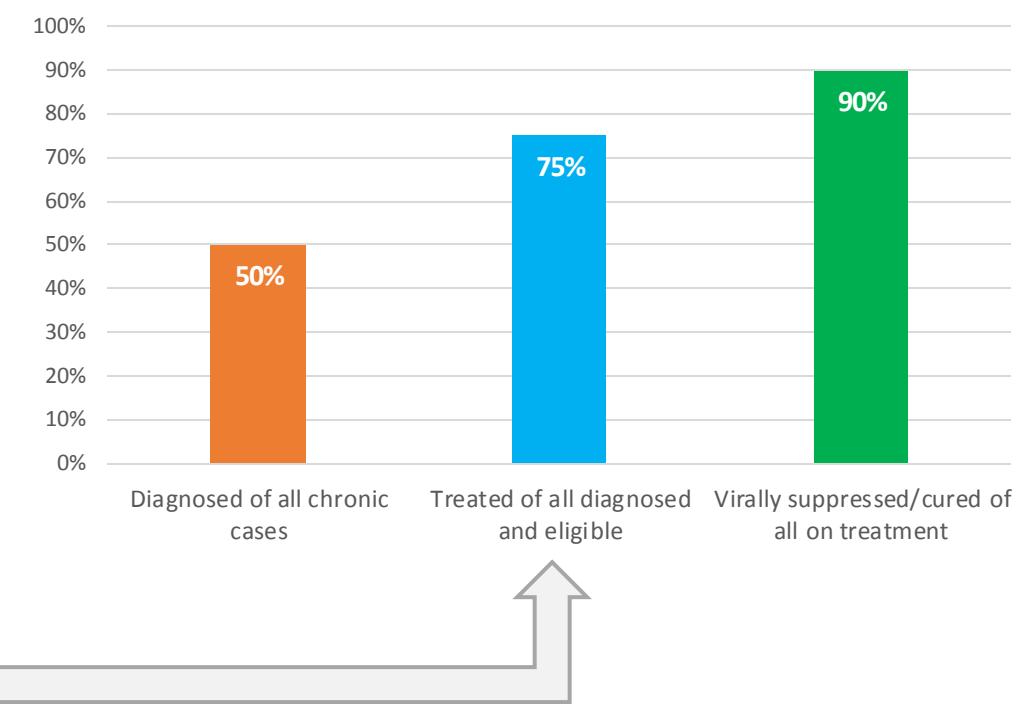
Impact targets that would eliminate HBV and HCV by 2030: incidence and mortality



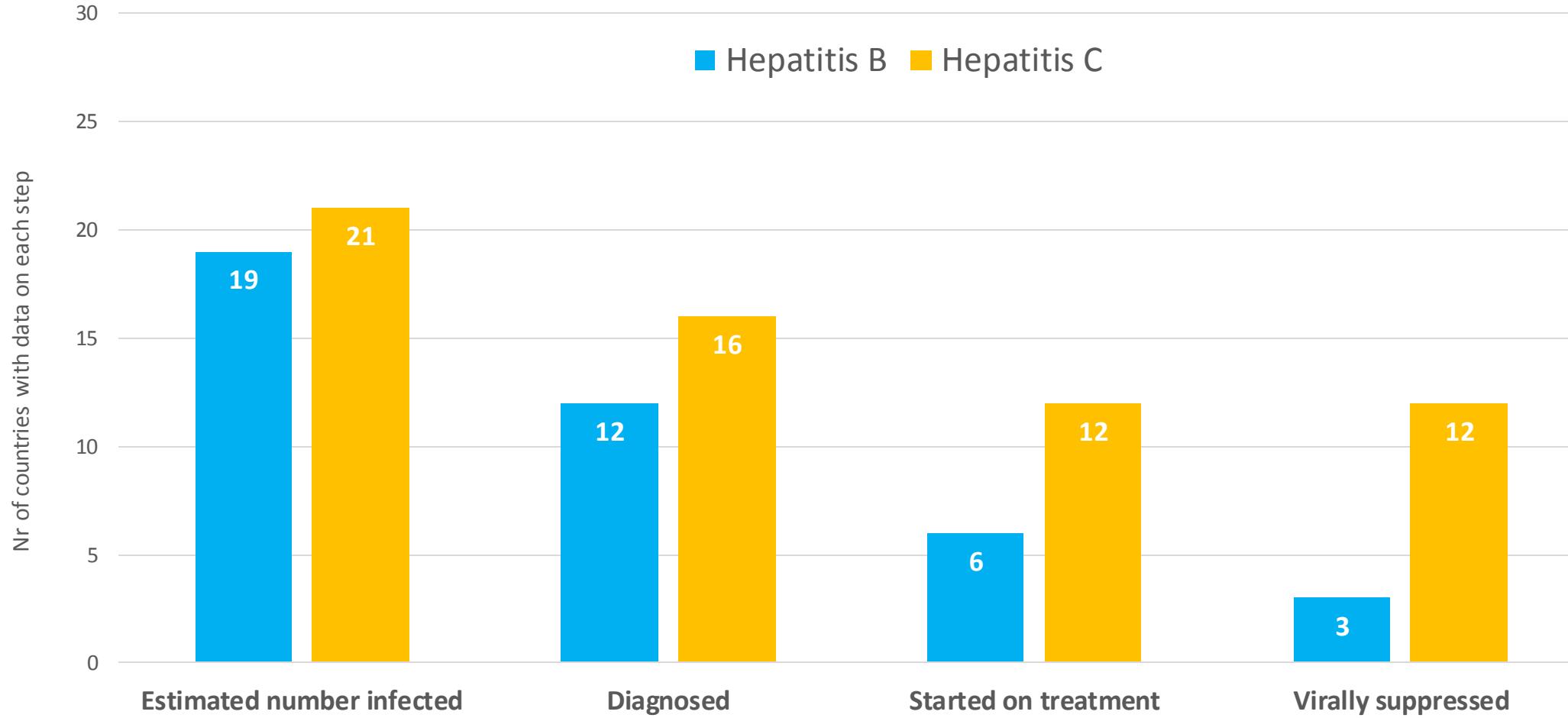
Key SDG indicators for monitoring progress towards viral hepatitis elimination

	Hepatitis B	Hepatitis C
Prevention	HBV childhood vaccination coverage	Coverage of needle and syringe programmes (NSP) and opioid substitution therapy (OST)
Incidence	Number of new HBV infections (acute) per year per 100,000	
Continuum of care	i. Percentage of people living with chronic HBV/HCV infections diagnosed ii. Percentage treatment coverage of people who are eligible for treatment and diagnosed with HBV/HCV infections iii. Percentage of people living with chronic HBV infection on long-term treatment with viral suppression; percentage of people on treatment for chronic HCV with sustained viral response/cured	
Mortality	Death from liver disease attributable to HBV and HCV infection	

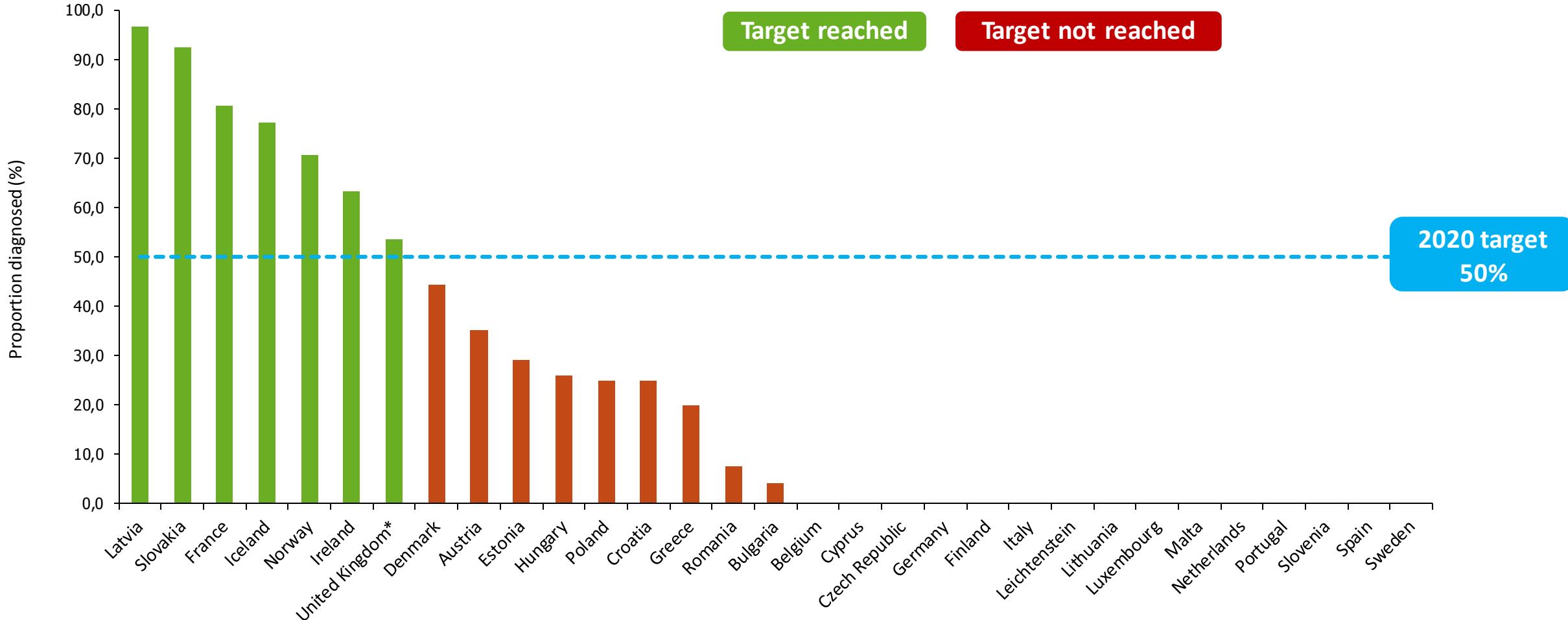
Continuum of care targets for hepatitis B and C



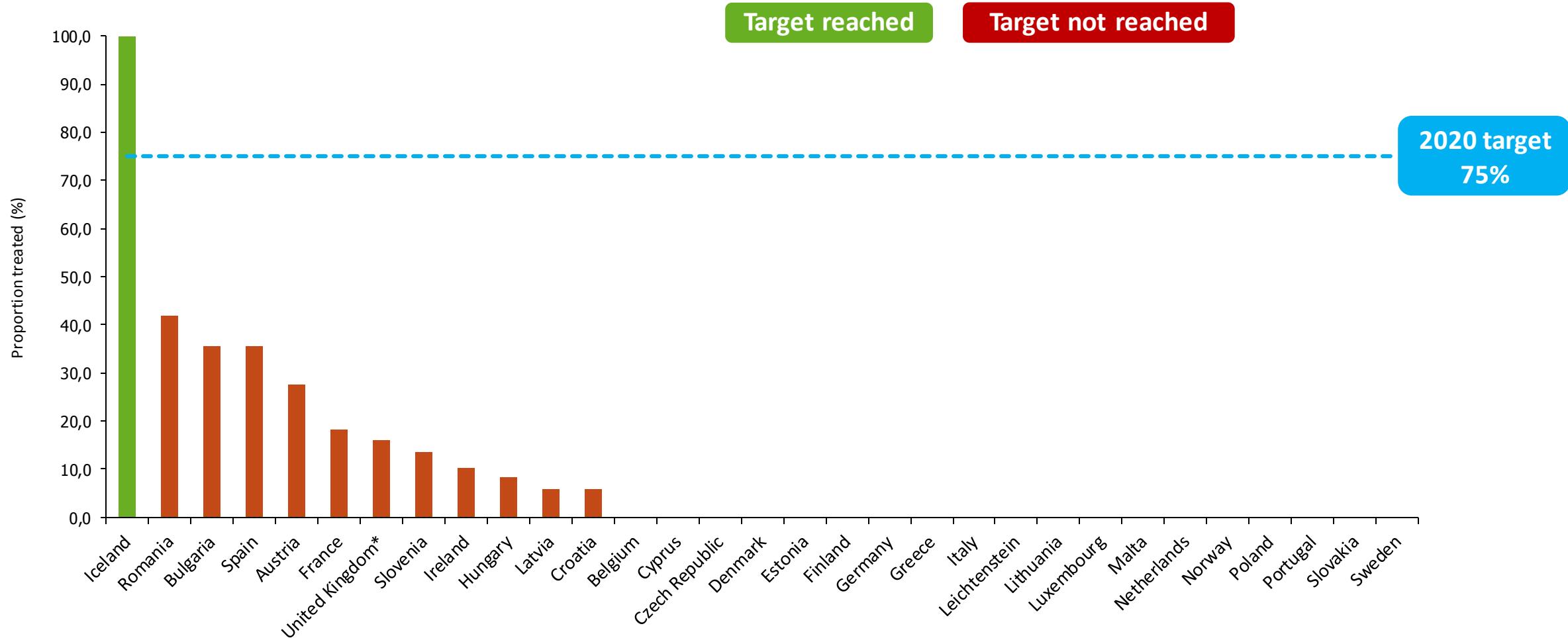
Number of EU/EEA countries reporting data for each stage of the continuum of care for hepatitis B and C



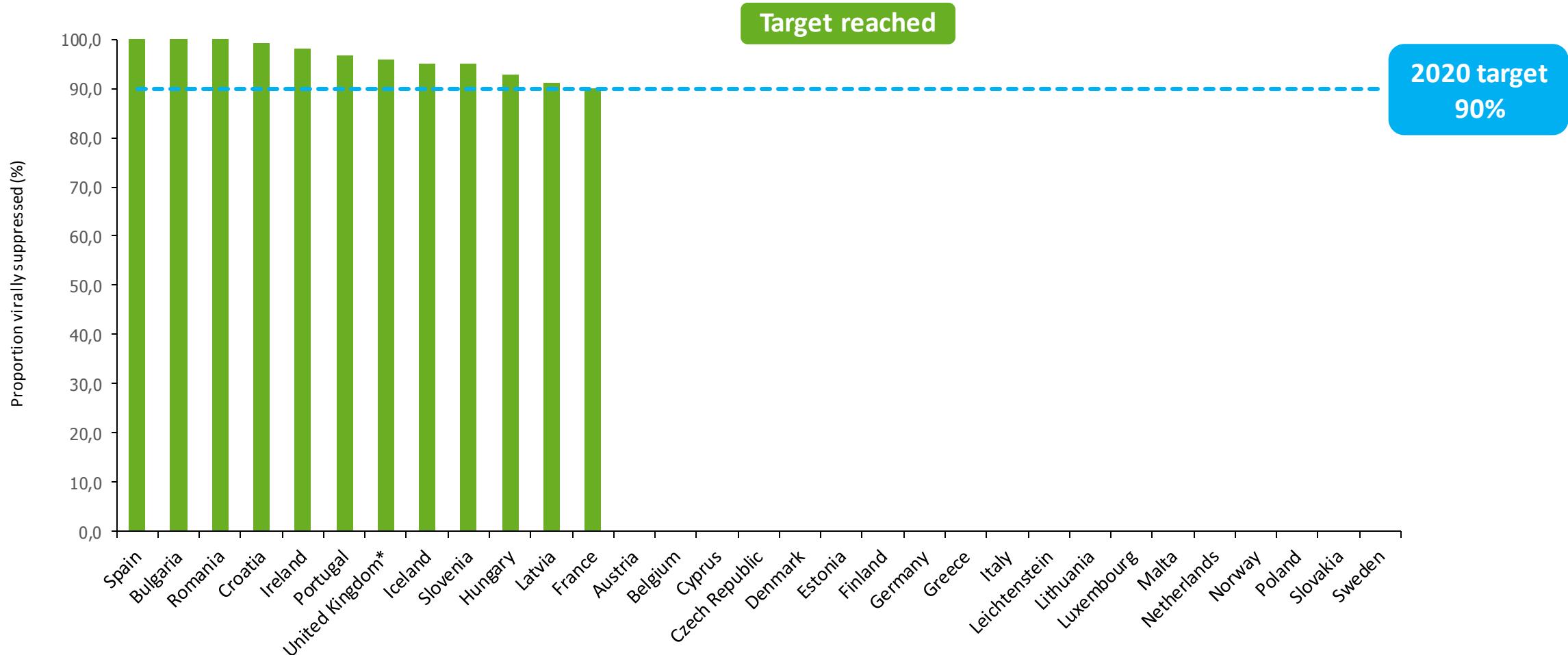
Proportion of people living with HCV who have been diagnosed in the EU/EEA, 2017 (n=16 countries)



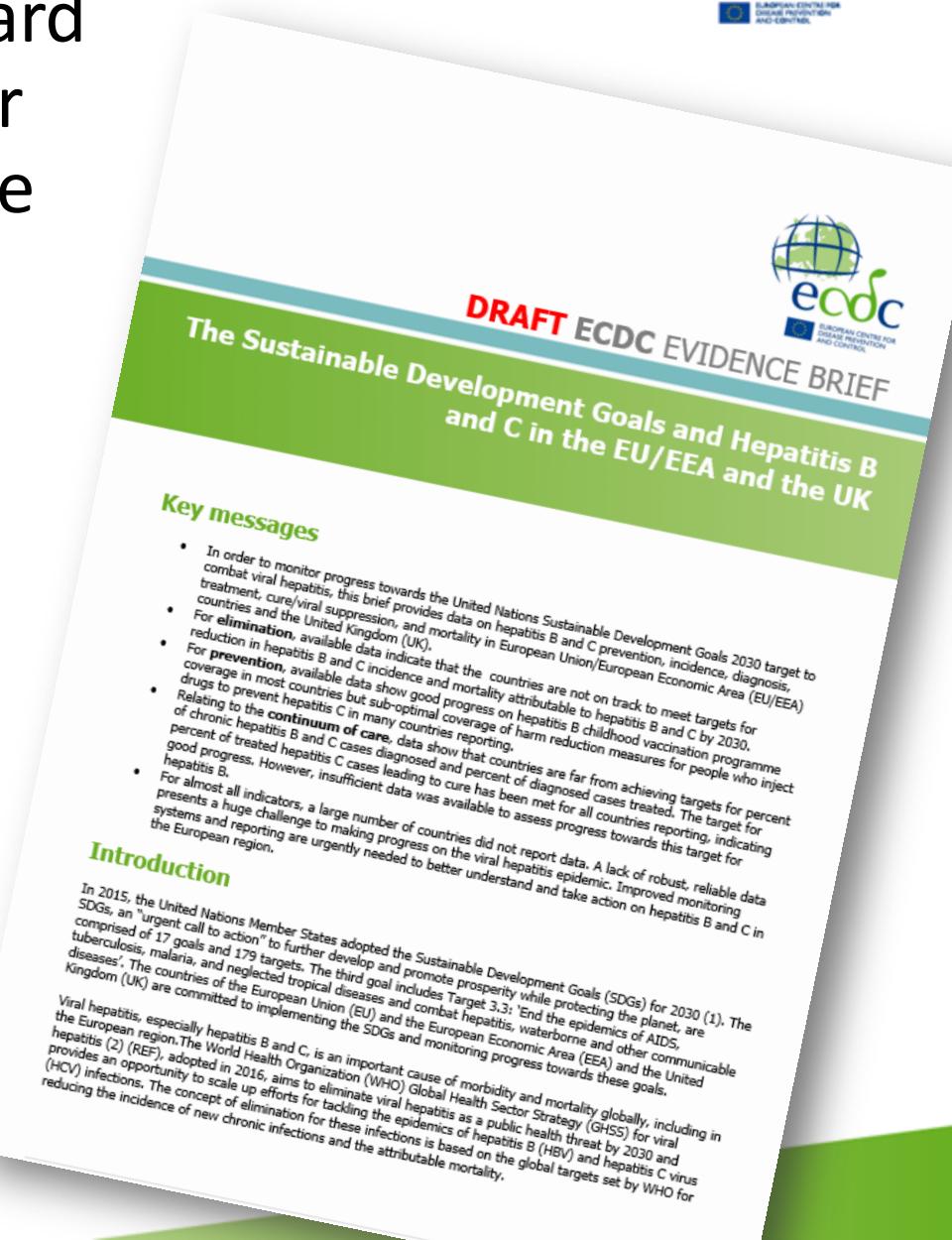
Proportion of people diagnosed with HCV who have started treatment, 2017 (n=12 countries)



Proportion of patients on HCV treatment who have been cured, 2017 (n=12 countries)



Assessing progress toward achieving the SDGs for hepatitis B and C in the EU/EEA/UK



The image shows the cover of a draft evidence brief from the ECDC. The title 'DRAFT ECDC EVIDENCE BRIEF' is at the top, followed by 'The Sustainable Development Goals and Hepatitis B and C in the EU/EEA and the UK'. The ECDC logo is at the top right. The main section is titled 'Key messages' with a bulleted list of nine points. Below it is an 'Introduction' section with a paragraph of text and a smaller bulleted list.

Key messages

- In order to monitor progress towards the United Nations Sustainable Development Goals 2030 target to combat viral hepatitis, this brief provides data on hepatitis B and C prevention, incidence, diagnosis, treatment, cure/viral suppression, and mortality in European Union/European Economic Area (EU/EEA) countries and the United Kingdom (UK).
- For elimination, available data indicate that the countries are not on track to meet targets for reduction in hepatitis B and C incidence and mortality by 2030.
- For prevention, available data show good progress on hepatitis B childhood vaccination programme coverage in most countries but sub-optimal coverage of harm reduction measures for people who inject drugs to prevent hepatitis C in many countries reporting.
- Relating to the continuum of care, data show that countries are far from achieving targets for percent of chronic hepatitis B and C cases diagnosed and percent of diagnosed cases treated. The target for Relating to the continuum of care, data show that countries are far from achieving targets for percent of chronic hepatitis B and C cases diagnosed and percent of diagnosed cases treated. The target for percent of treated hepatitis C cases leading to cure has been met for all countries reporting, indicating good progress. However, insufficient data was available to assess progress towards this target for hepatitis B.
- For almost all indicators, a large number of countries did not report data. A lack of robust, reliable data presents a huge challenge to making progress on the viral hepatitis epidemic. Improved monitoring systems and reporting are urgently needed to better understand and take action on hepatitis B and C in the European region.

Introduction

In 2015, the United Nations Member States adopted the Sustainable Development Goals (SDGs) for 2030 (1). The SDGs, an "urgent call to action" to further develop and promote prosperity while protecting the planet, are comprised of 17 goals and 179 targets. The third goal includes Target 3.3: "End the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases and combat hepatitis, waterborne and other communicable diseases". The countries of the European Union (EU) and the European Economic Area (EEA) and the United Kingdom (UK) are committed to implementing the SDGs and monitoring progress towards these goals.

Viral hepatitis, especially hepatitis B and C, is an important cause of morbidity and mortality globally, including in the European region. The World Health Organization (WHO) Global Health Sector Strategy (GHSS) for viral hepatitis (2) (REF), adopted in 2016, aims to eliminate viral hepatitis as a public health threat by 2030 and provides an opportunity to scale up efforts for tackling the epidemics of hepatitis B (HBV) and hepatitis C virus (HCV) infections. The concept of elimination for these infections is based on the global targets set by WHO for reducing the incidence of new chronic infections and the attributable mortality.

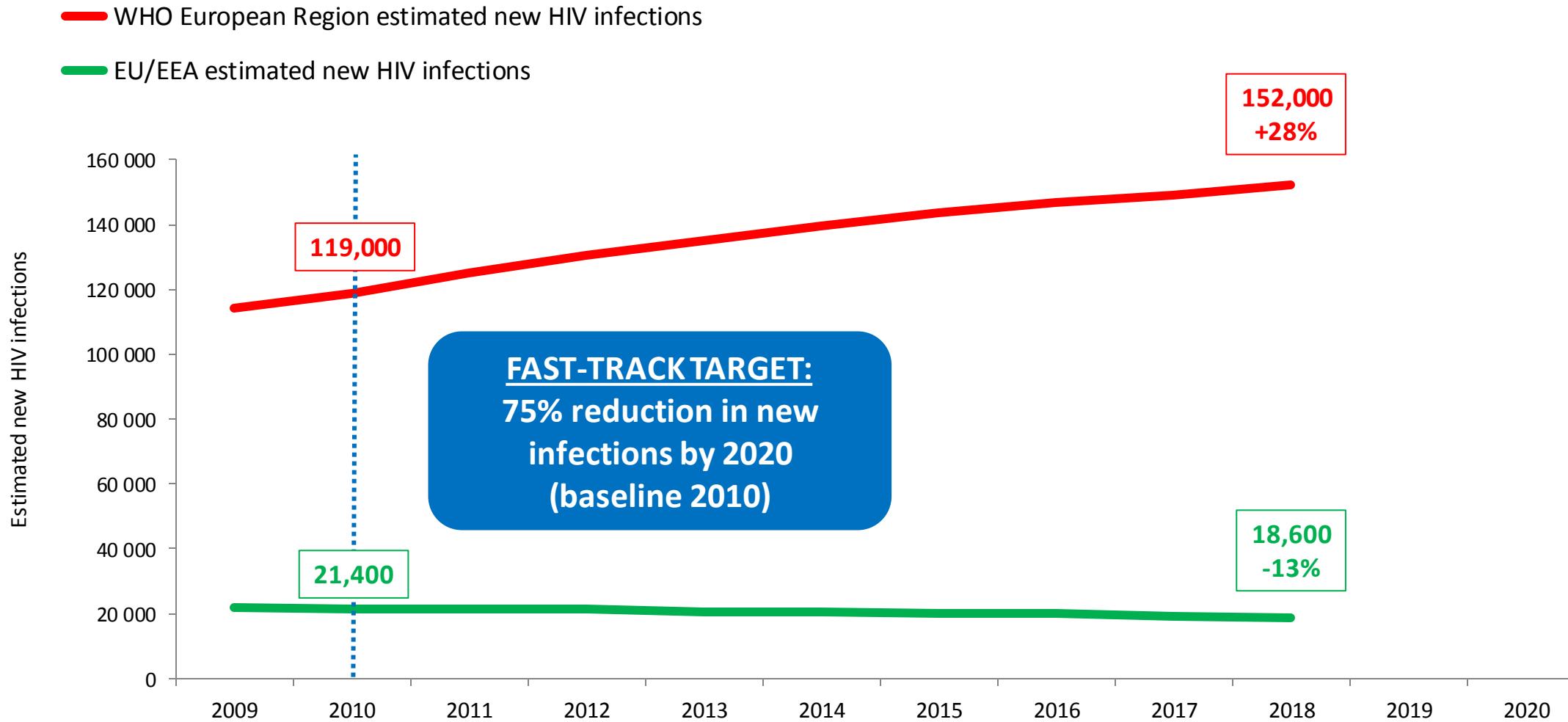
HIV

Global targets for ‘ending the AIDS epidemic’ by 2030

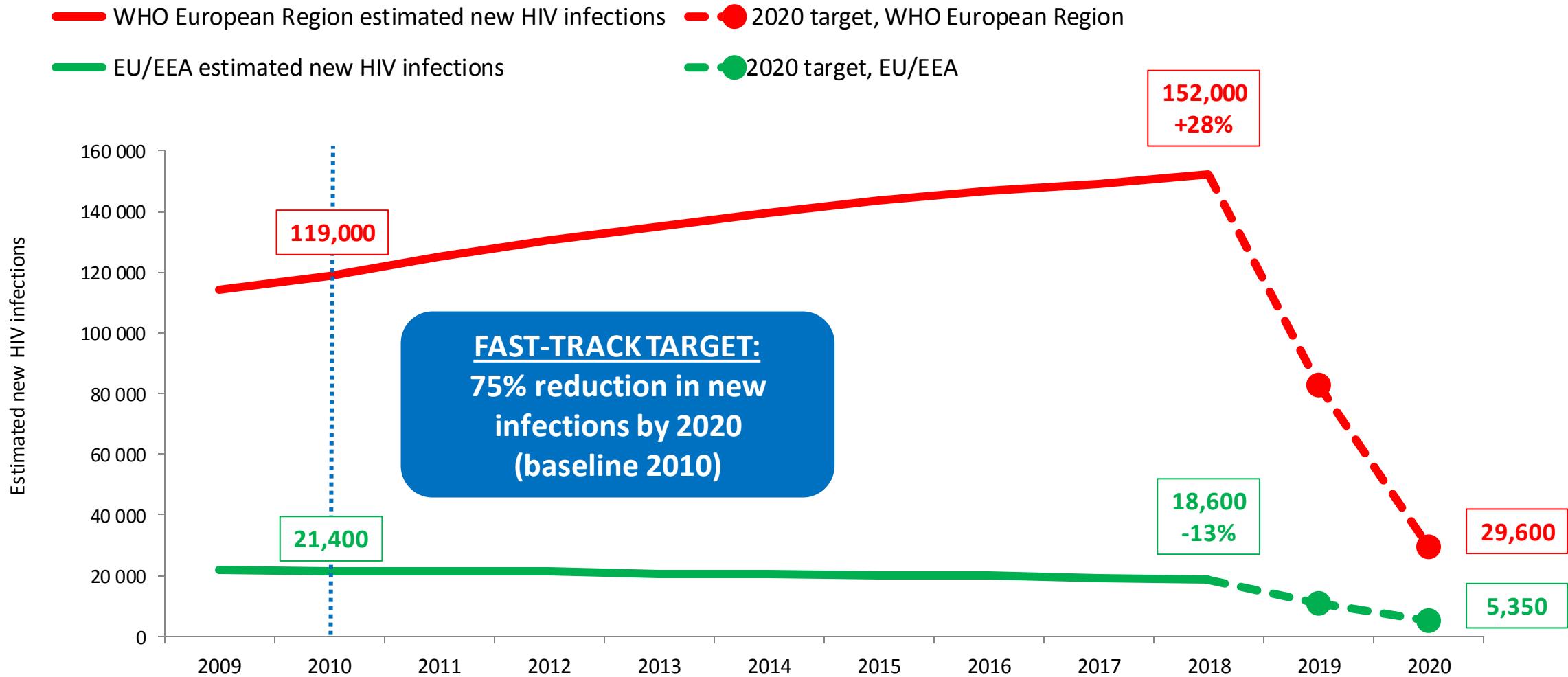


By 2030 (SDG targets)	By 2020 (Fast-track targets)	Specific targets for Europe by 2020
❖ Zero new infections (90% reduction)	❖ To reduce new HIV infections to fewer than 500 000 by 2020	❖ Incidence reduction of 75% (2010 baseline) ❖ PrEP (3 million globally, no regional target)
❖ Zero AIDS deaths (90% reduction)	❖ To reduce AIDS-related death to fewer than 500 000 by 2020	❖ 90-90-90 testing & treatment targets ❖ Mortality (target & measurement challenges)
❖ Zero discrimination	❖ To eliminate HIV-related stigma and discrimination by 2020	❖ Stigma (measurement challenge)

Progress toward meeting the HIV incidence target in Europe

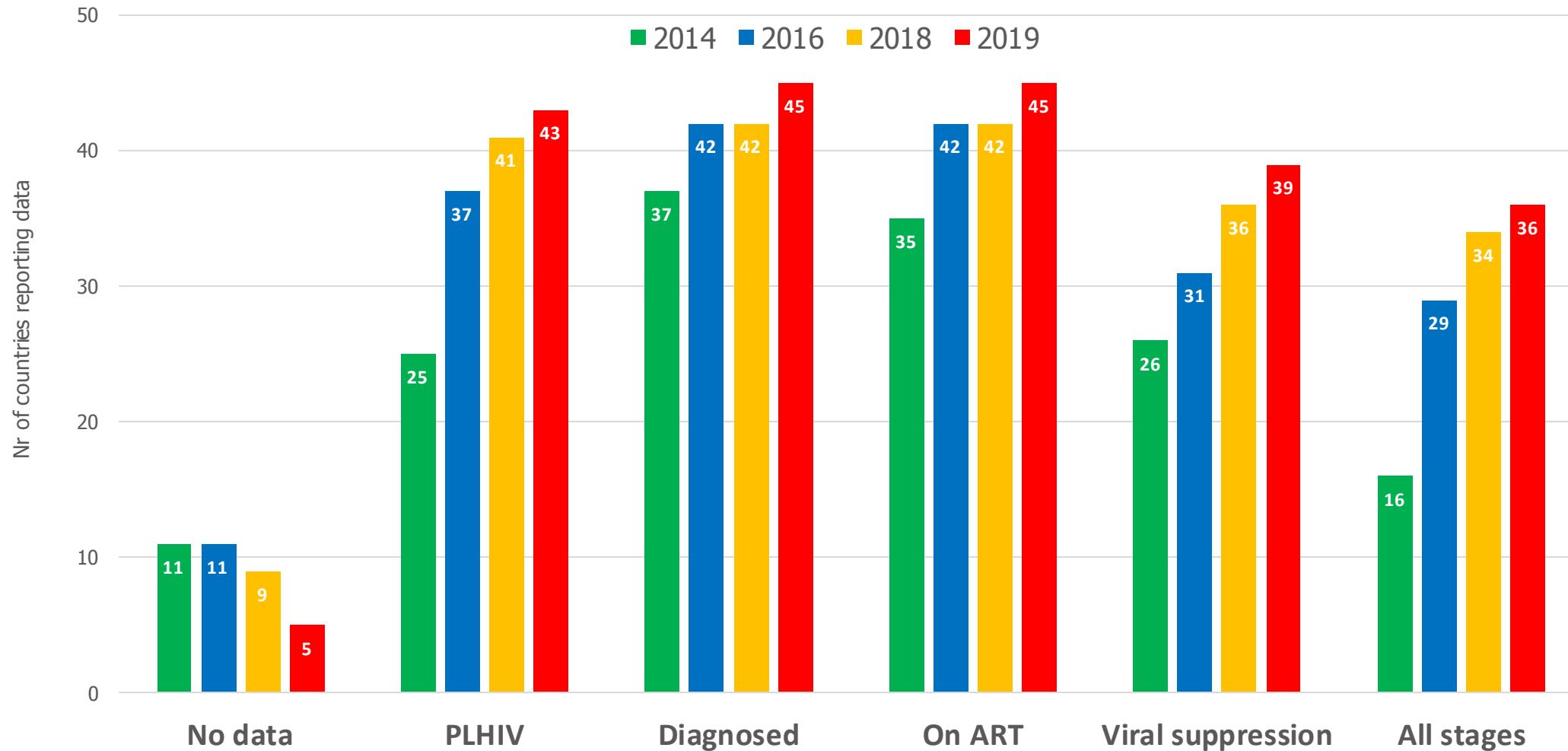


Progress toward meeting the HIV incidence target in Europe

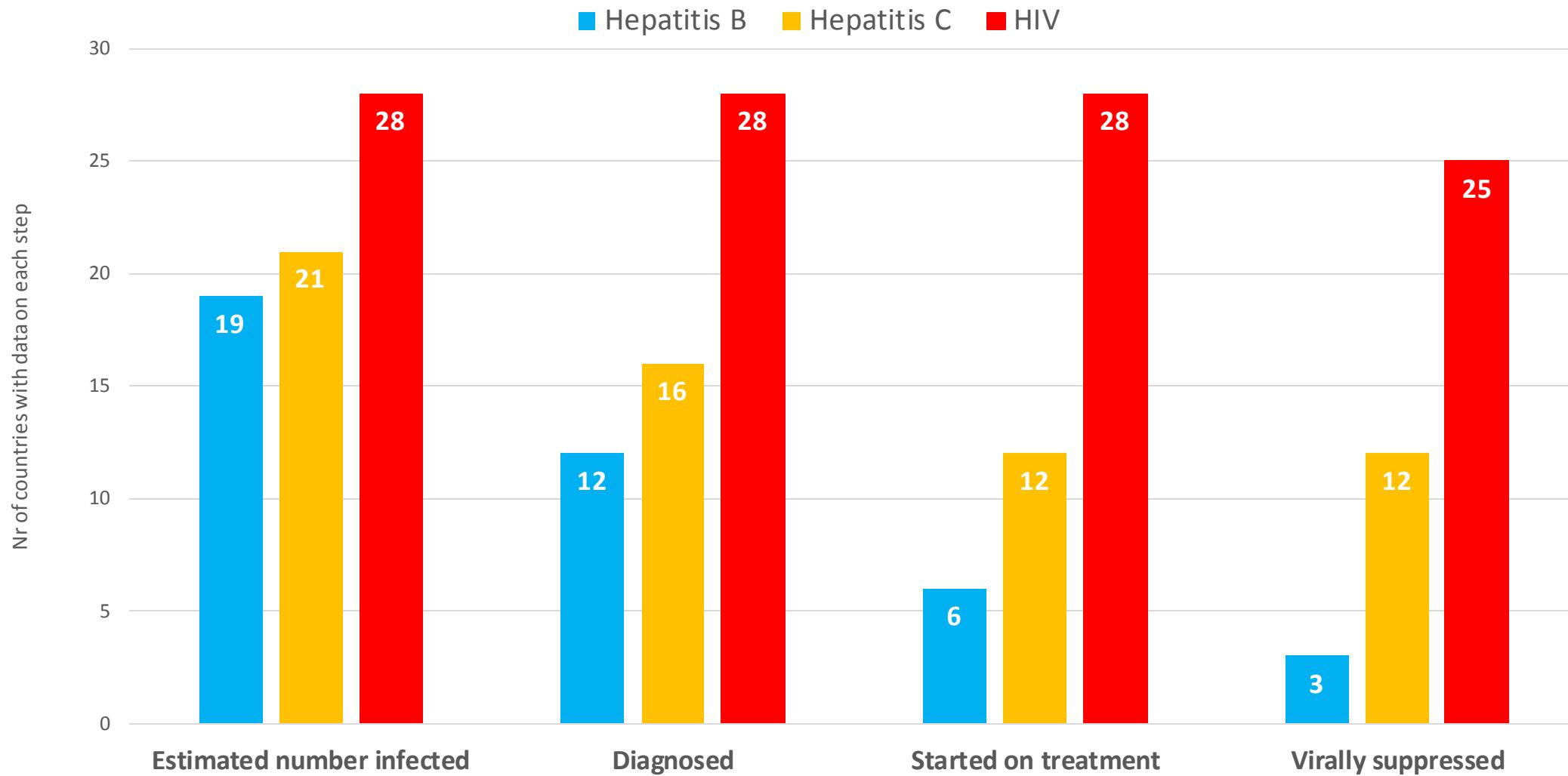


Nr of countries reporting HIV continuum of care data

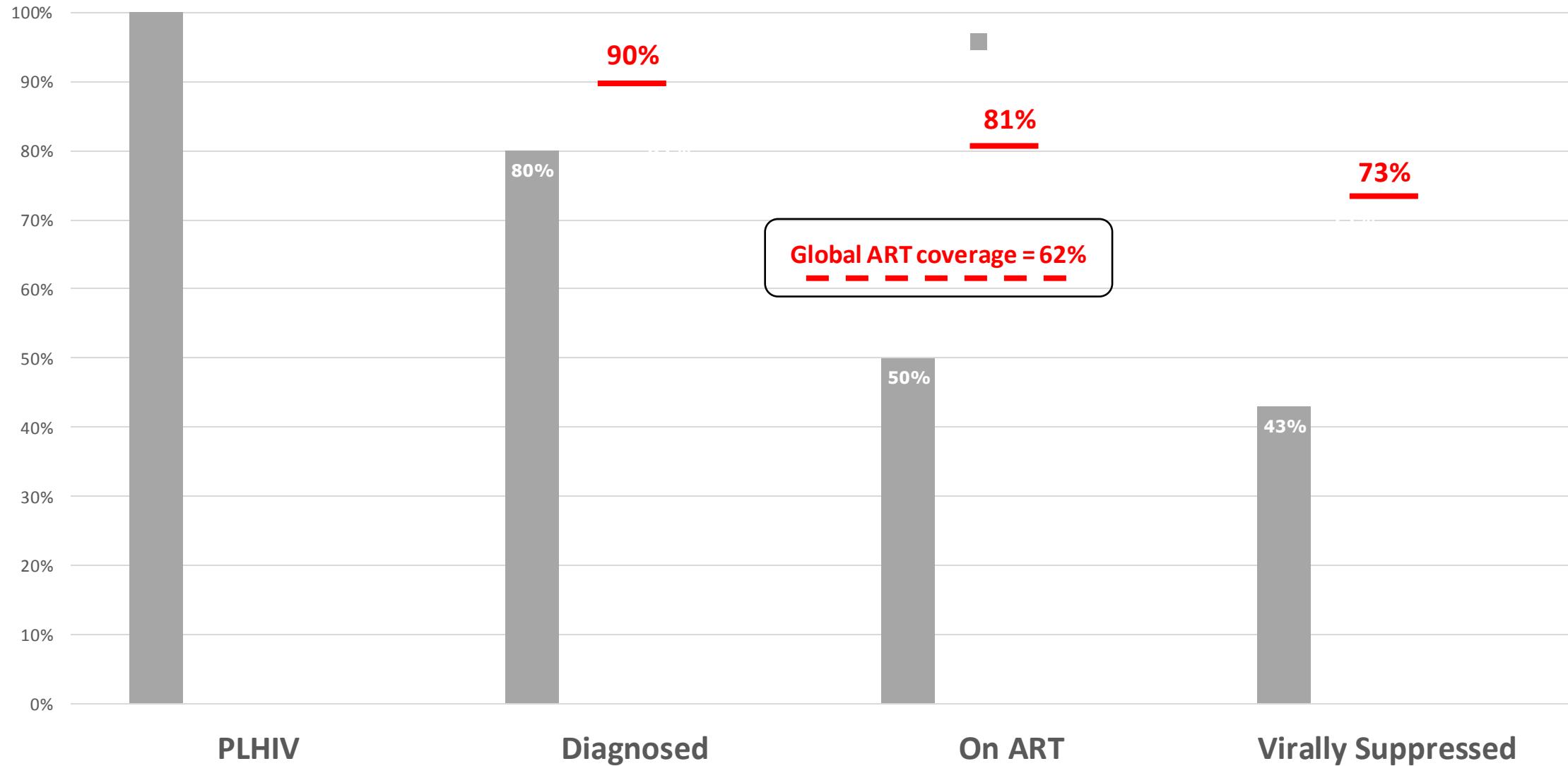
2014 (n=40); 2016 (n=44); 2018 (n=43); 2019 (n=48)



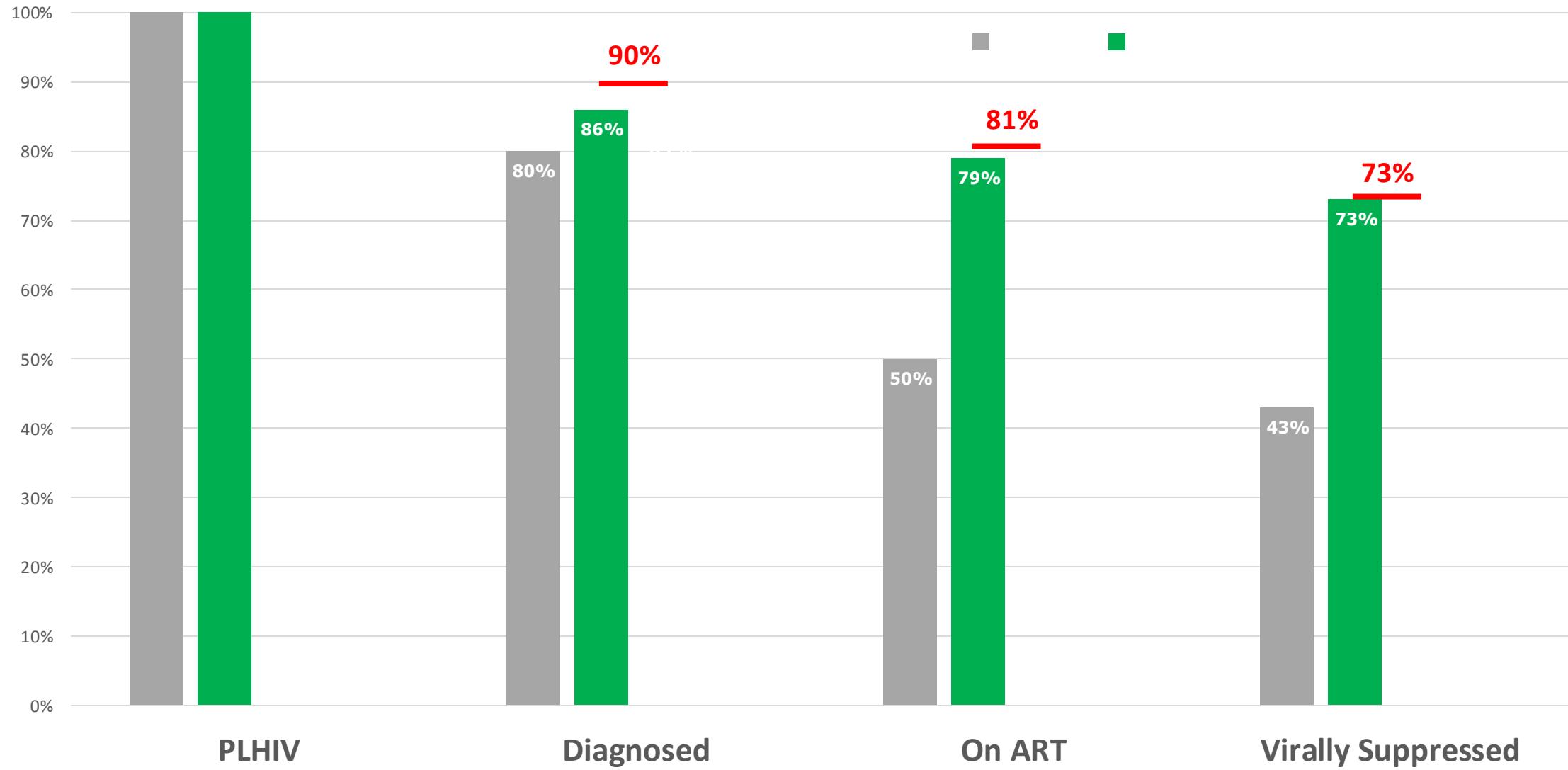
Number of EU/EEA countries reporting data for each stage of the continuum of care for hepatitis B and C and HIV



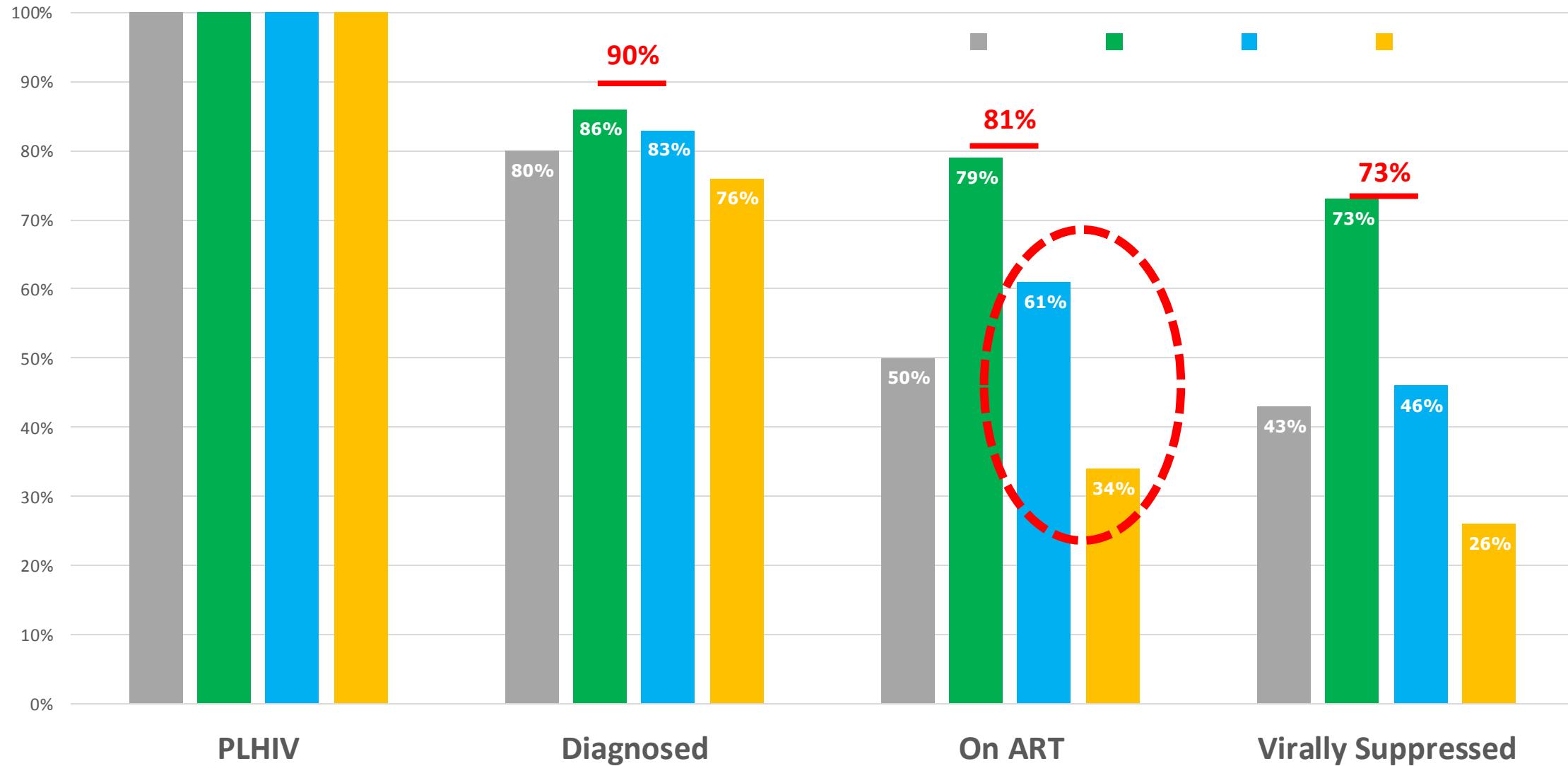
Are we on track to reach the 90-90-90 targets by 2020?



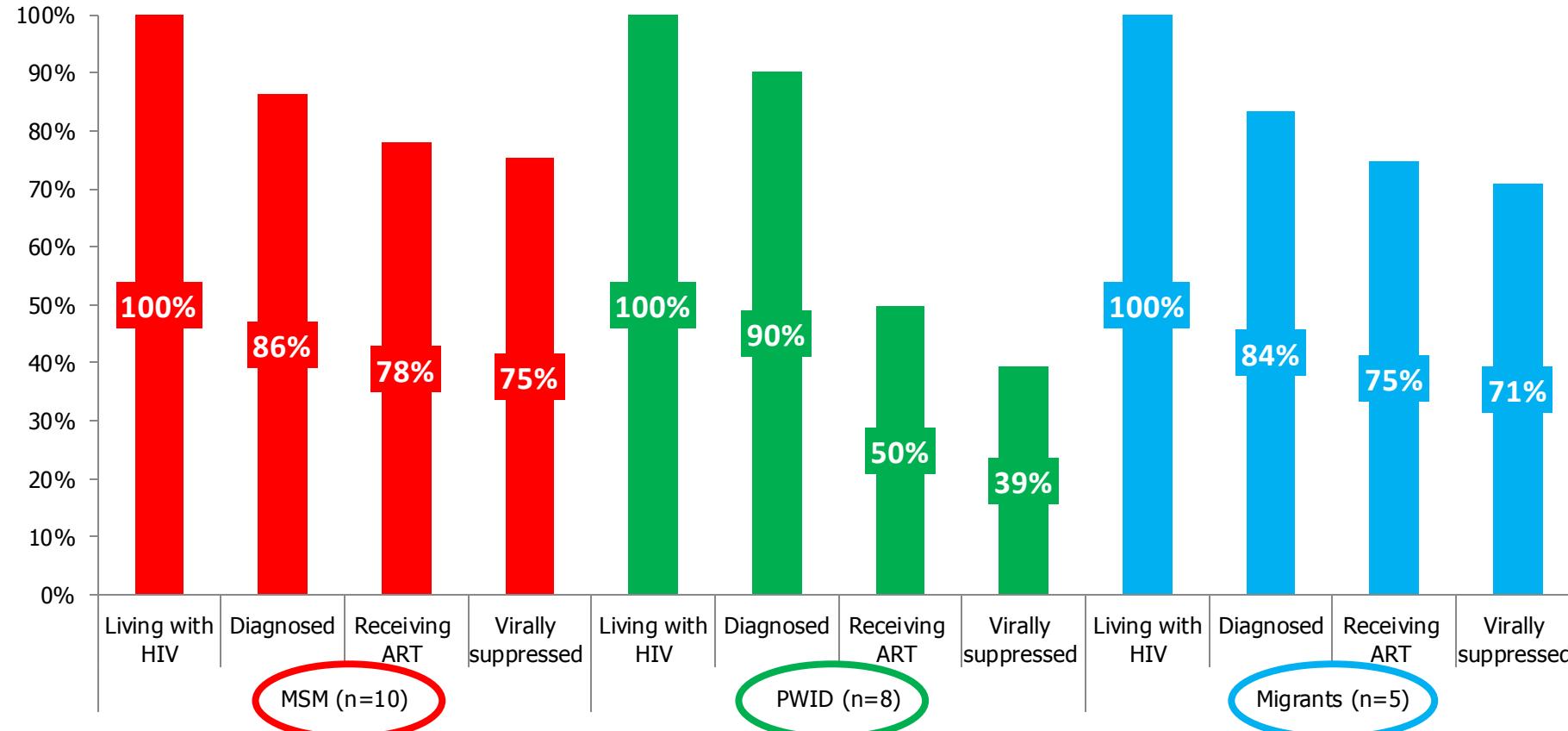
Are we on track to reach the 90-90-90 targets by 2020?



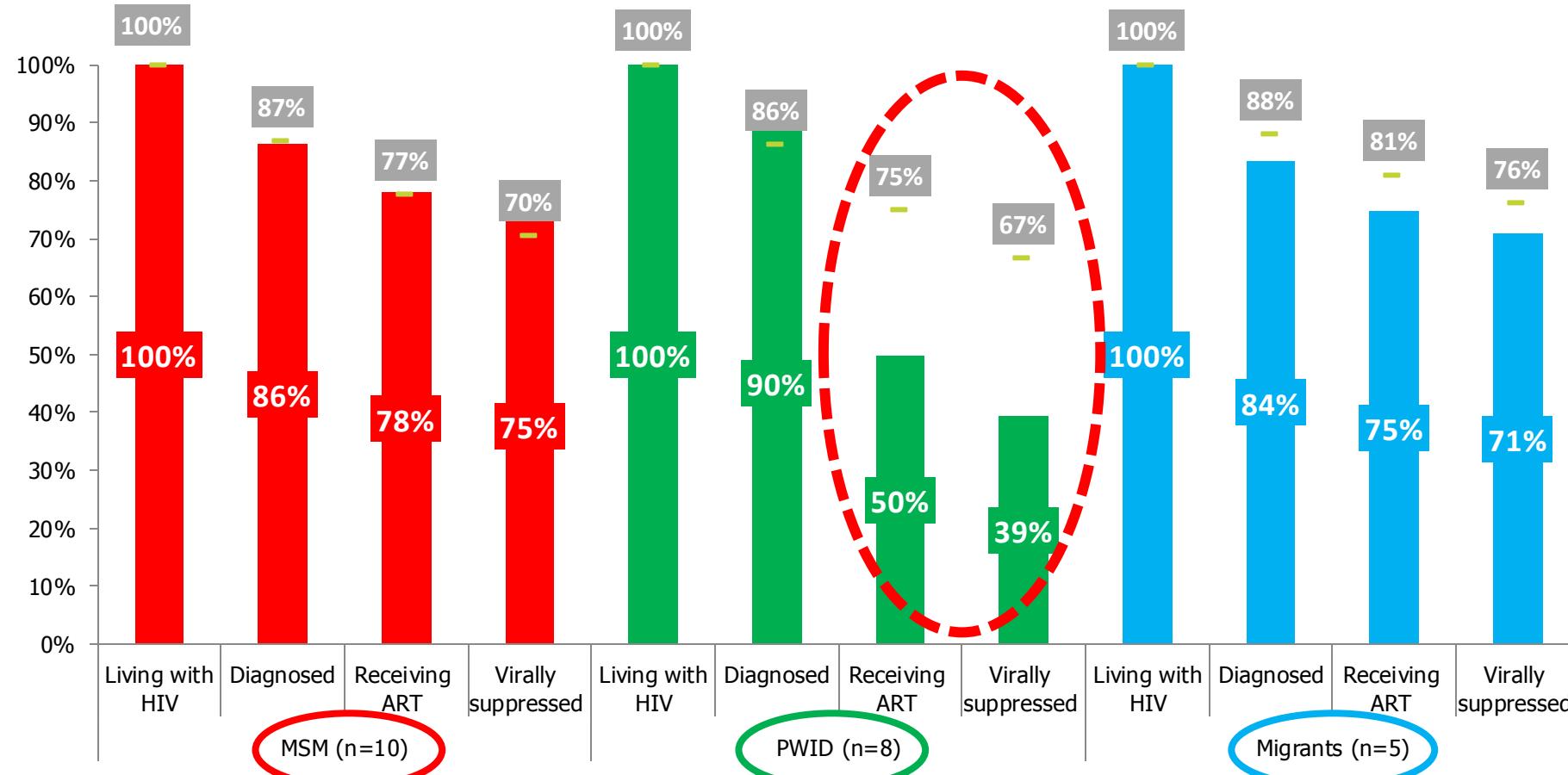
Are we on track to reach the 90-90-90 targets by 2020?



Comparison of the continuum of care for key populations 2018,



Comparison of the continuum of care for key populations 2018, against general population estimates



Conclusions

Hepatitis B and C

Lack of solid epidemiological and modelling estimates:

- To guide effective responses (especially in KPs)
- To measure progress toward SDG targets

Estimates indicate **progress**:

- Hep B vaccination
- Blood safety



Estimates indicate **major challenges**:

- Prevention
- Testing
- Treatment



ECDC has launched first ever monitoring system for hepatitis B and C in 2019

- Next round of reporting in 2021

HIV

Solid epidemiological and modelling estimates:

- To guide effective responses
- To measure progress toward key targets

Overall, our region is **not on track** to meet the target of a 75% reduction in new infections by 2020

While the **Western** part of the region is closing in on reaching the 90-90-90 targets, the **Central** and **Eastern** parts are lagging behind

Priorities:

- Testing
- Linkage to care & treatment
- Prevention (PrEP, OST, NSP)

Acknowledgements

HIV and Hepatitis surveillance focal points

Albania: Marjeta Dervishi; Andorra: Jennifer Fernández Garcia; Armenia: Trdat Grigoryan; Austria: Daniela Schmid, Ziad El-Khatib; Azerbaijan: Farhad Singatulov, Shahin Khasiyev; Belarus: Svetlana Sergeenko, Pavel Yurovski; Belgium: Andre Sasse, Dominique Van Beckhoven; Bosnia and Herzegovina: Dušan Kojić; Bulgaria: Tonka Varleva; Croatia: Tatjana Nemeth Blazic; Cyprus: Linos Hadjihannas, Maria Koliou; Czech Republic: Marek Maly; Denmark: Susan Cowan; Estonia: Kristi Rüütel; Finland: Kirsi Liitsola, Mika Salminen; France: Françoise Cazein, Josiane Pillonel, Florence Lot; Georgia: Otar Chokoshvili, Maia Tsereteli; Germany: Barbara Gunzenheimer-Bartmeyer; Greece: Vasilios Raftopoulos, Stavros Patrinos; Hungary: Maria Dudas; Iceland: Haraldur Briem, Gudrun Sigmundsdóttir; Ireland: Derval Igoe, Kate O'Donnell; Israel: Daniel Chemtob, Yana Rosenthal; Italy: Barbara Suligoi; Kazakhstan: Lolita Ganina, Gulnar Temirkhanov; Kosovo: Luljeta Gashi; Kyrgyzstan: Aigul Solpueva; Latvia: Šarlote Konova; Liechtenstein: Andrea Leibold, Marina Jamnicki; Lithuania: Irma Caplinskienė; Luxembourg: Aurelie Fischer, Jean-Claude Schmit; Malta: Jackie Maistre Melillo, Tanya Melillo; Republic of Moldova: Silvia Stratulat, Stepan Gheorghita; Monaco: Dominique De Furst; Montenegro: Alma Cicic; Netherlands: Eline Op de Coul, Ard van Sighem; North Macedonia: Milena Stefanovic, Zarko Karadzovski, Vladimir Mikic, Rumena Gerdovska; Norway: Hans Blystad; Poland: Magdalena Rosinska; Portugal: Isabel Aldir, Helena Cortes Martins; Romania: Mariana Mardarescu; Russia: San Marino: Andrea Gualtieri, Mauro Fiorini; Serbia: Danijela Simic; Slovakia: Peter Truska; Slovenia: Irena Klavs, Tanja Kustec, Maja Milavec; Spain: Asuncion Diaz; Sweden: Maria Axelsson; Switzerland: Martin Gebhardt; Tajikistan: Kholnazarov Ramsched, Zukhra Nurlaminova; Turkey: Emel Özdemir Şahin; Ukraine: Ihor Kuzin, Violetta Martynovska; and United Kingdom: Valerie Delpech. Austria: Bernhard Benka, Irene Kaszon-Rueckerl, Robert Sauermann, Daniela Schmid. Belgium: Sophie Quoilin. Bulgaria: Marieta Simonova, Mariya Tyufekchieva, Tonka Varleva. Croatia: Tatjana Nemeth Blažić, Adriana Vince. Cyprus: Petros Katsioloudes. Czech Republic: Jitka Castkova, Vratislav Nemecek. Denmark: Susan Cowan. Estonia: Kristi Rüütel, Jevgenia Epštein. Finland: Henrikki Brummer-Korvenkontio, Tuija Leino, Kirsi Liitsola. France: Cecile Brouard, Mathias Bruyand, Stella Laporal. Lionel Lavin. Germany: Sandra Dudareva, Thomas Harder, Christian Kollan, Katrin Kremer, Daniel Schmidt, Ida Sperle-Heupel, Gyde Steffen, Ruth Zimmermann. Greece: Georgia Nikolopoulou, George Papatheodoridis. Hungary: Mihály Makara, Zsuzsanna Molnár. Iceland: Thorolfur Guðnason, Sigurdur Olafsson. Ireland: Linda Cosgrove, Kevin Kelleher, Mary Kelleher, Joanne Moran, Niamh Murphy, Karen Logan, Lois O'Connor, Aisling O'Leary. Italy: Maria Elena Tosti, Francesco Paolo Maraglino, Barbara Suligoi. Latvia: Raina Nikiforova, Ieva Melišus. Liechtenstein: Andrea Leibold. Lithuania: Irma Caplinskienė, Ligita Jančorienė. Luxembourg: Vic Arendt, Carole Devaux, Laurence Guillorit, Patrick Hoffmann. Malta: Jackie Maistre Melillo, Tanya Melillo. Netherlands: Irene Veldhuijen. Norway: Hans Blystad, Hilde Kløvstad, Øivind Nilsen. Poland: Magdalena Rosinska, Małgorzata Stępień. Portugal: Isabel Aldir, Ana Cláudia Cordeiro Fernandes, Rui Tato Marinho. Romania: Adriana Pistol, Corina Silvia Pop, Odette Popovici. Slovakia: Mária Avdičová, Ľubomír Skladaný. Slovenia: Kastelic Andrej, Mitja Čosić, Mojca Gobec, Irena Klavs, Janja Krizman-Miklavcic, Zdenka Kastelic, Sandra Kosmac; ; Tanja Kustec, Ines Kvaternik, Eva Leban, Snezna Levicnik, Mojca Matičić, Mario Poljak, Maja Socan, Marta Vitek. Spain: Raquel Boix Martínez, Asunción Díaz Franco. Sweden: Maria Axelsson, Josefine Lundberg Ederth. United Kingdom: England – Koye Balogun, Ian Hayden, Ross Harris, Helen Harris, Goergina Ireland, Sema Mandal; Scotland - David Goldberg, Sharon Hutchinson, Andrew McAuley, Allan McLeod, Shanley Smith, Lesley Wallace, Alan Yeung; Wales – Noel Craine, Brendan Healy, Amy Plimmer, Jane Salmon, Josie Smith, Drew Turner, Jana Zitha.

HIV and hepatitis advisory group members

Kristi Ruutel (Estonia), Daniela Rojas Castro (France), Gesa Kupfer (Germany), Caroline Hurley (Ireland), Silke David (Netherlands), Arild Johan Myrberg (Norway), Isabel Aldir, Daniel Simoes (Portugal), Sladjana Baros (Serbia), Irene Klavs (Slovenia), Gabrella Hok (Sweden), Valerie Delpech, Alison Brown, Cary James (United Kingdom), Olga Varetska (Ukraine), Jean-Luc Sion (European Commission), Dagmar Hedrich (EMCDDA), Taavi Erkkola, Kim Marsh (UNAIDS), Annemarie Stengaard (WHO Euro), Jordi Casabona (INTEGRATE), Axel J. Schmidt (ESTICOM), Annabelle Gourlay, Kholoud Porter (EuroCoord). Lars Peters, Nina Weis (Denmark), Magdalena Rosinska (Poland), Irene Veldhuijen (Netherlands), Irena Klavs, Mojca Maticic (Slovenia), Maria Axelsson (Sweden), Asunción Diaz (Spain), Kristi Ruutel (Estonia), Thomas Seyler (EMCDDA), Antons Mozalevskis (WHO), Eberhard Schatz (CORRELATION), Greet Hendrickx (VHPD), Maria Buti (EASL), Rachel Halford, Cary James (WHA), Marko Korenjal (ELPA), Daniel Simões (EuroTEST).

HIB and hepatitis response focal points

Alma Cicic, Aleksandra Marjanovic (Montenegro), Silke David (Netherlands), Arild Johan Myrberg (Norway), Anna Marzec- Bogusła (Poland), Roland Bani (Albania), Jennifer Fernández Garcia (Andorra), Samvel Grigoryan, Arshak Papoyan (Armenia), Irene Rueckerl, Bernhard Benka, Robert Zangerle (Austria), Esmira Almammadova, Natig Zulfugarov (Azerbaijan), Inna Karabakh (Belarus), Andre Sasse, Dominique Van Beckhoven (Belgium), Dušan Kojić, Indira Hodžić (Bosnia and Herzegovina), Tonka Varleva (Bulgaria), Jasmina Pavlic (Croatia), Ioannis Demetriades (Cyprus), Veronika Šikolová, Hana Janatova (Czech Republic), Jan Fouchard & Susan Cowan (Denmark), Kristi Rüütel, Lilia Lõhmus, Anna-Liisa Pääskune (Estonia), Henrikki Brummer-Korvenkontio (Finland), Bernard Falu (France), Maia Tsereteli, Otar Chokoshvili, Ana Aslanikashvili (Georgia), Gesa Kupfer, Ulrich Marcus, (Germany), Dimitra Paraskeva, Vasilios Raftopoulos, Stavros Patrinos, (Greece), Maria Dudas, Katalin Szalay (Hungary), Guðrún Sigmundsdóttir, Þórður Guðnason (Iceland), Caroline Hurley, Fiona Lyons, Derval Igoe, Helen Deely, (Ireland), Daniel Chemtob, Yana Rosenthal (Israel), Anna Caraglia, Francesco Maraglino, Barbara Suligoi, Lella Cosmaro, (Italy), Alla Yelizarieva, Aliya Bokazhanova (Kazakhstan), Laura Shehu, Pashk Buzhalo (Kosovo*), Aikul Ismailova, Nazgul Asylaliye (Kyrgyzstan), Šarlote Konova (Latvia), Andrea Leibold, Marina Jamnicki Abegg (Liechtenstein), Irma Caplinskienė (Lithuania), Patrick Hoffmann, Pierre Weicherding (Luxembourg), Milena Stefanovic, Vladimir Mikic (FYROM), Jackie Maistre Melillo (Malta), Julian Oltu, Svetlana Popovici, Tatjana wska, Iwona Wawer, Piotr Wysocki, Magdalena Rosinska (Poland), Isabel Aldir, Teresa Melo (Portugal), Mariana Mardarescu, Adrian Streinu-Cercel (Romania), Danijela Simic, Sladjana Baros (Serbia), Jan Mikas, Peter Truska, Helena Hudecová, (Slovakia), Irena Klavs, Janez Tomazič (Slovenia), Begona Rodriguez Ortiz de Salazar (Spain), Louise Mannheimer, Gabriella Hok, (Sweden), Axel J. Schmidt, Sabine Basler (Switzerland), Zukhra Nurlaminova, Sayfuddin Karimov, Dilshod Sayburhonov (Tajikistan), Emel Özdemir Şahin (Turkey), Valerie Delpech & Alison Brown (United Kingdom), Igor Kuzin (Ukraine) and Zulfiya Abdurakhimova (Uzbekistan). Austria: Bernhard Benka, Irene Kaszon-Rueckerl, Robert Sauermann, Daniela Schmid. Belgium: Sophie Quoilin. Bulgaria: Marieta Simonova, Mariya Tyufekchieva, Tonka Varleva. Croatia: Tatjana Nemeth Blažić, Adriana Vince. Cyprus: Petros Katsioloudes. Czech Republic: Jitka Castkova, Vratislav Nemecek. Denmark: Susan Cowan. Estonia: Kristi Rüütel, Jevgenia Epštein. Finland: Henrikki Brummer-Korvenkontio, Tuija Leino, Kirsi Liitsola. France: Cecile Brouard, Mathias Bruyand, Stella Laporal. Lionel Lavin. Germany: Sandra Dudareva, Thomas Harder, Christian Kollan, Katrin Kremer, Daniel Schmidt, Ida Sperle-Heupel, Gyde Steffen, Ruth Zimmermann. Greece: Georgia Nikolopoulou, George Papatheodoridis. Hungary: Mihály Makara, Zsuzsanna Molnár. Iceland: Thorolfur Guðnason, Sigurdur Olafsson. Ireland: Linda Cosgrove, Kevin Kelleher, Mary Kelleher, Joanne Moran, Niamh Murphy, Karen Logan, Lois O'Connor, Aisling O'Leary. Italy: Maria Elena Tosti, Francesco Paolo Maraglino, Barbara Suligoi. Latvia: Raina Nikiforova, Ieva Melišus. Liechtenstein: Andrea Leibold. Lithuania: Irma Caplinskienė, Ligita Jančorienė. Luxembourg: Vic Arendt, Carole Devaux, Laurence Guillorit, Patrick Hoffmann. Malta: Jackie Maistre Melillo, Tanya Melillo. Netherlands: Irene Veldhuijen. Norway: Hans Blystad, Hilde Kløvstad, Øivind Nilsen. Poland: Magdalena Rosinska, Małgorzata Stępień. Portugal: Isabel Aldir, Ana Cláudia Cordeiro Fernandes, Rui Tato Marinho. Romania: Adriana Pistol, Corina Silvia Pop, Odette Popovici. Slovakia: Mária Avdičová, Ľubomír Skladaný. Slovenia: Kastelic Andrej, Mitja Čosić, Mojca Gobec, Irena Klavs, Janja Krizman-Miklavcic, Zdenka Kastelic, Sandra Kosmac, ; Tanja Kustec, Ines Kvaternik, Eva Leban, Snezna Levicnik, Mojca Matičić, Mario Poljak, Maja Socan, Marta Vitek. Spain: Raquel Boix Martínez, Asunción Díaz Franco. Sweden: Maria Axelsson, Josefine Lundberg Ederth. United Kingdom: England – Koye Balogun, Ian Hayden, Ross Harris, Helen Harris, Goergina Ireland, Sema Mandal; Scotland - David Goldberg, Sharon Hutchinson, Andrew McAuley, Allan McLeod, Shanley Smith, Lesley Wallace, Alan Yeung; Wales – Noel Craine, Brendan Healy, Amy Plimmer, Jane Salmon, Josie Smith, Drew Turner, Jana Zitha.

Thank you

ECDC:

Anastasia Pharris, Erika Duffell, Lina Nerlander, Chantal Quinten

EMCDDA:

Thomas Seyler, Dagmar Heidrich

WHO Regional Office for Europe:

Nicole Seguy, Antons Mozalevskis

UNAIDS:

Kimberly Marsh, Taavi Erkkola, Peter Ghys

ECDC consultant team:

Rosalie Hayes, Katy Sharrock, Cheryl Gower, Alison Brown, Valerie Delpech