World Health Organization

Drug user health and viral Hepatitis

Niklas Luhmann

WHO/ Geneva

ISSUP Live Webinar July 2022

World Health Organization

Health Topics | Countries | Newsroom | Emergencies | Data | About WHO

Home / Newsroom / Events / Detail / Webinar: WHO Global Talk Show on World Hepatitis Day 2022

Webinar: WHO Global Talk Show on World Hepatitis Day 2022

About WHO

World Health Organization

Epidemiology

Burden of chronic hepatitis C viraemic infection by WHO Region, 2019

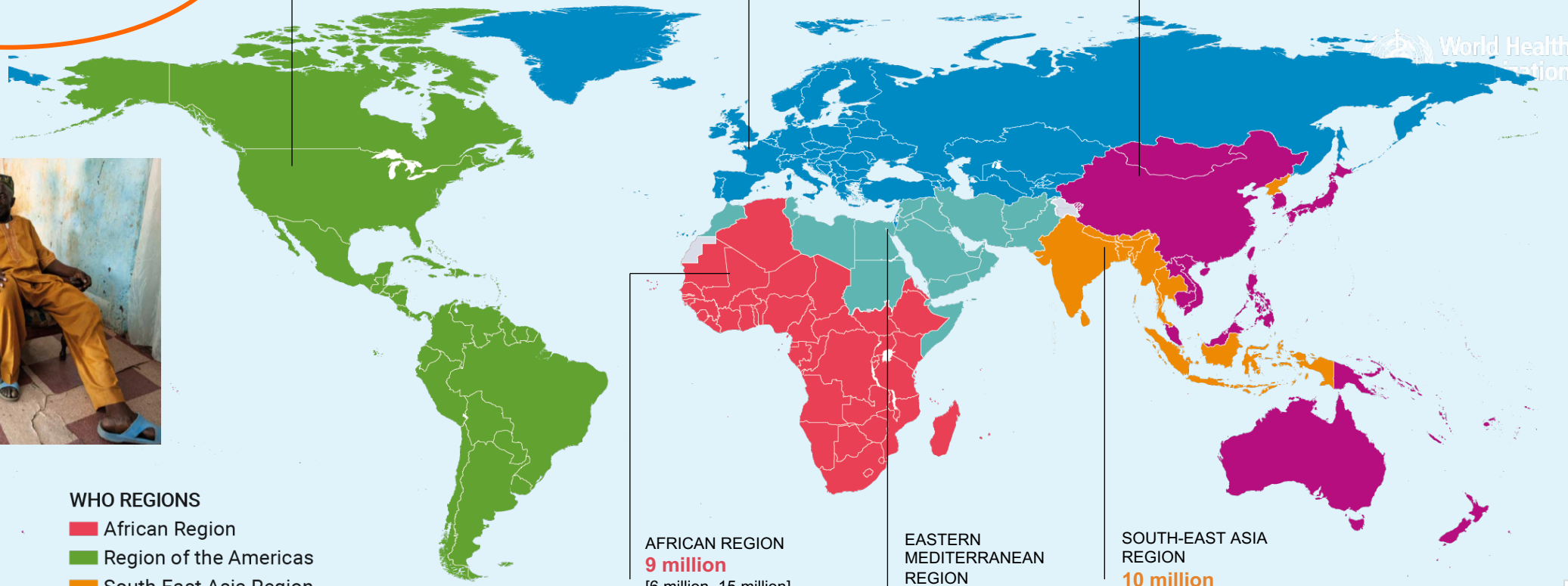
World Health Organization

GLOBAL
58 million
[46 million–76 million]

REGION OF THE AMERICAS
5 million
[4 million–5 million]

EUROPEAN REGION
12 million
[10 million–14 million]

WESTERN PACIFIC REGION
10 million
[8 million–14 million]



AFRICAN REGION
9 million
[6 million–15 million]

EASTERN MEDITERRANEAN REGION
12 million
[10 million–13 million]

SOUTH-EAST ASIA REGION
10 million
[8 million–19 million]

WHO REGIONS
- African Region
- Region of the Americas
- South-East Asia Region
- European Region
- Eastern Mediterranean Region
- Western Pacific Region
- Not applicable

New data on Hepatitis B and C burden, incidence and mortality by WHO region (2021 WHO Global progress report)

World Health Organization

Global Burden

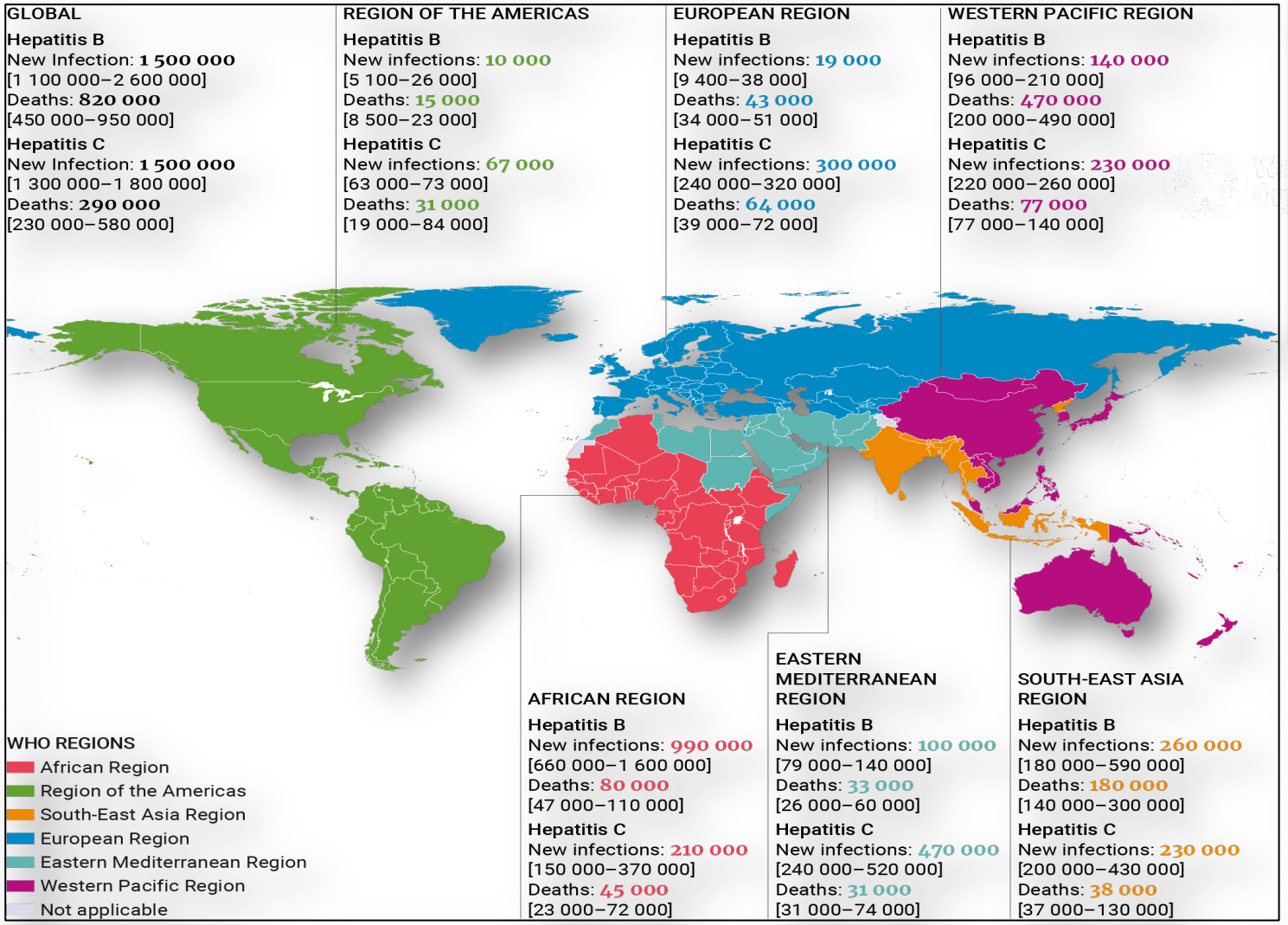
Hepatitis B - 296 m

Hepatitis C - 58 m

Viral Hepatitis

New data on incidence, prevalence

- 3.0 million new HCV & HBV infections
- 1.1 million HCV & HBV deaths with initial signs of HCV declines (290,000 deaths)
- Achieved <5 yr HepB prevalence SDG 2020 targets and GHSS goals



Why is HCV in PWID and people in prisons highly relevant and core to elimination globally?

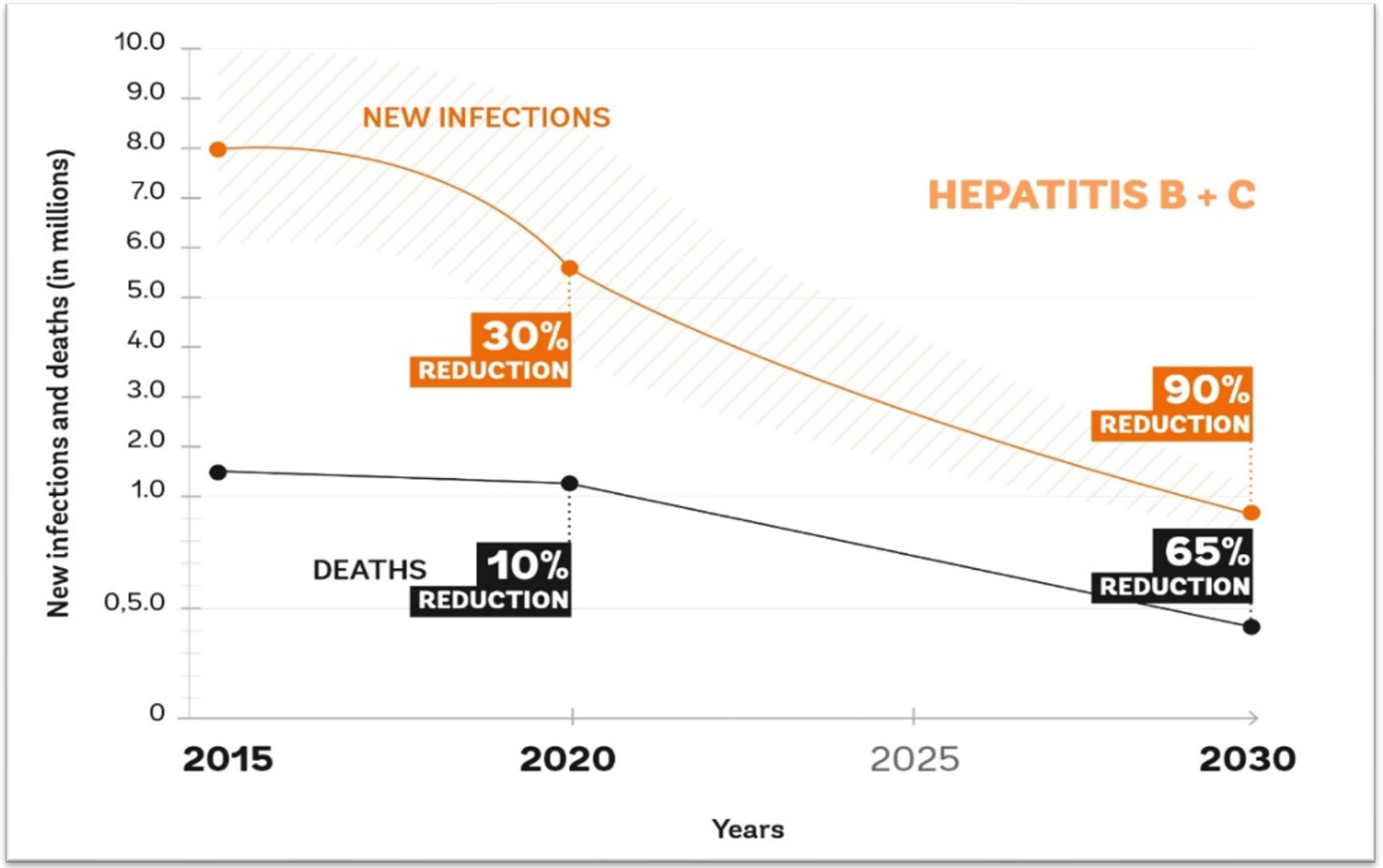
World Health Organization

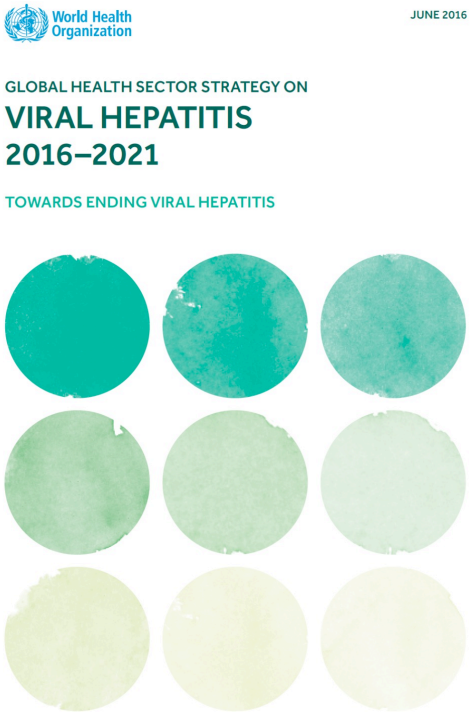
- Globally, 11.3 Million current PWID [1,2] *(World Drug Report, 2019)*
- 39.4% viremic HCV infections among PWID [1,2] *(Grebely et al., Addiction, 2019)*
- HCV affects 2–15% of people living with HIV, accounting for 2.75 million - of whom 1.3 millions are PWID (WHO)
- 23% - 39% of new HCV infections *(Degenhardt L et al. Lancet Global Health. 2017 and Trickey et al. Lancet Gastro Hep, 2019)*
- 1 in 3 HCV deaths are attributable to injecting drug use globally *(Degenhardt L et al. Lancet Global Health. 2017)*
- One in four detainees are HCV positive (Larney et al. Hepatology. 2013)

World Health Organization

Response and progress

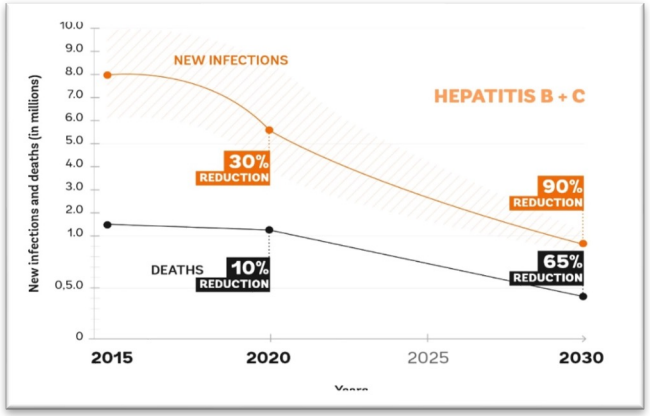
Global agenda: elimination of viral hepatitis as a public health threat by 2030

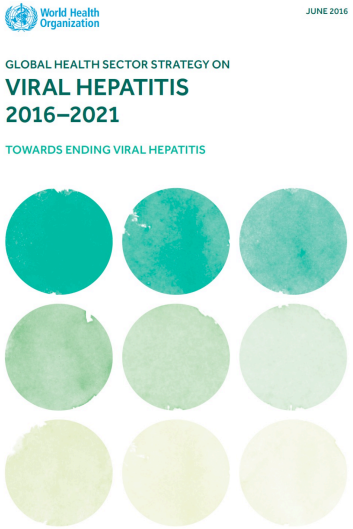


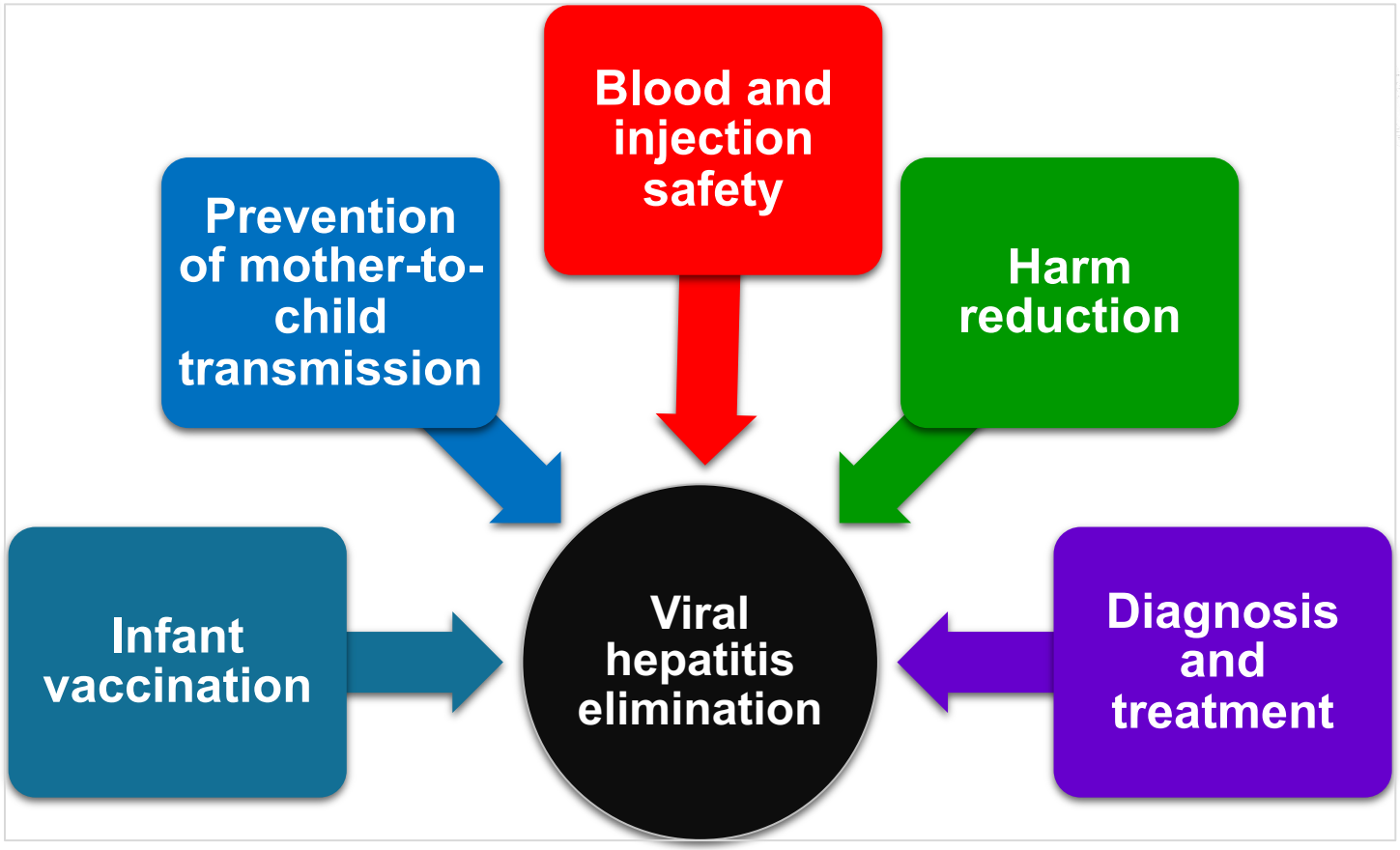


https://www.who.int/publications/i/item/9789240028395

Global agenda: elimination of viral hepatitis as a public health threat by 2030



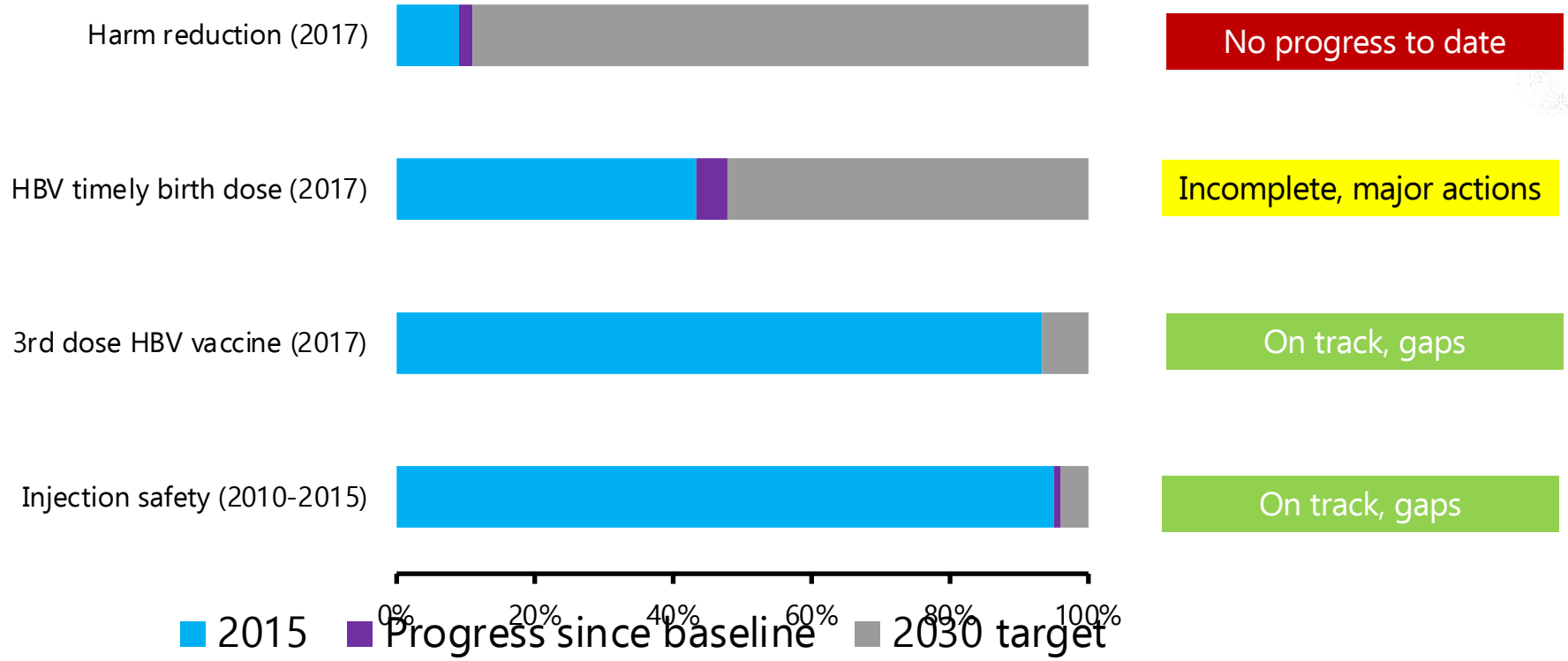




https://www.who.int/publications/i/item/9789240028395

Where are we now?

Coverage of interventions as proportion of 2030 target at baseline



No progress to date	Incomplete, minor actions taken	Incomplete, but major actions	On track, gaps	On track, only minor gaps

Source: WHO / UNICEF, Demographic and Health Surveys, and Lancet publication

Harm Reduction

<1% of PWID live in countries with sufficient harm reduction coverage

Of 179 countries with injecting drug use:

- 93 (52%) with needle and syringe distribution (33 needles and syringes per person per year in 2017)
- 87 (49%) with opioid substitution therapy (Global OST coverage at 16%)

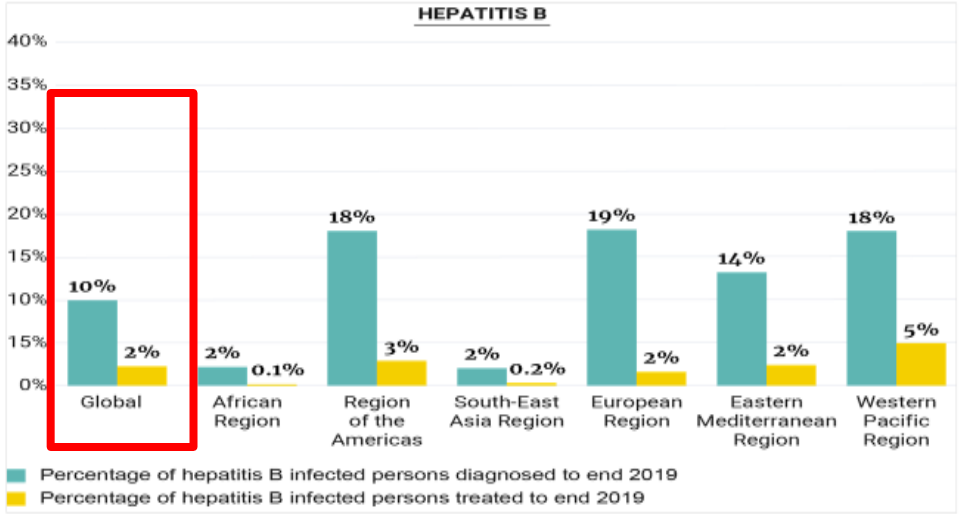
Figure 4: **Combination coverage of needle and syringe programmes and opioid substitution therapy for people who inject drugs**
Includes only countries with a non-zero estimate of both NSP and OST coverage. Circle area indicates national estimate of population size of PWID. PWID=people who inject drugs. NSP=needle and syringe programmes. OST=opioid substitution therapy.

Larney et al, 2017 The Lancet

Cascade of care - major gaps in path towards public health elimination

World Health Organization

10% of estimated 296 million people with chronic HBV infection were diagnosed in 2019 with variation by regions

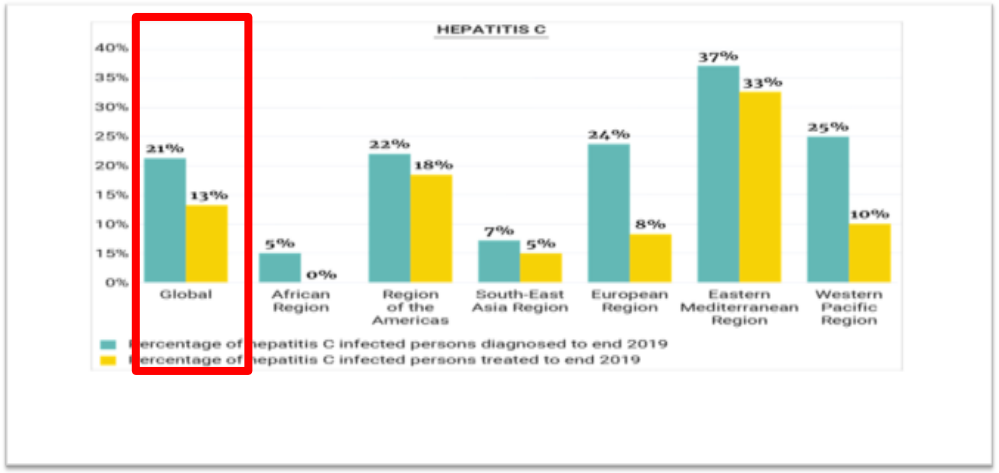


Data shows major gaps in path towards universal health access and public health elimination

World Health Organization

Progress report on HIV, viral hepatitis and sexually transmitted infections 2021: accountability for the global health sector strategies, 2016–2021: actions for impact. Geneva: World Health Organization; 2021

21% of estimated 58 million people with chronic HCV infection were diagnosed in 2019 with variation by regions



Data shows major gaps in path towards universal health access and public health elimination

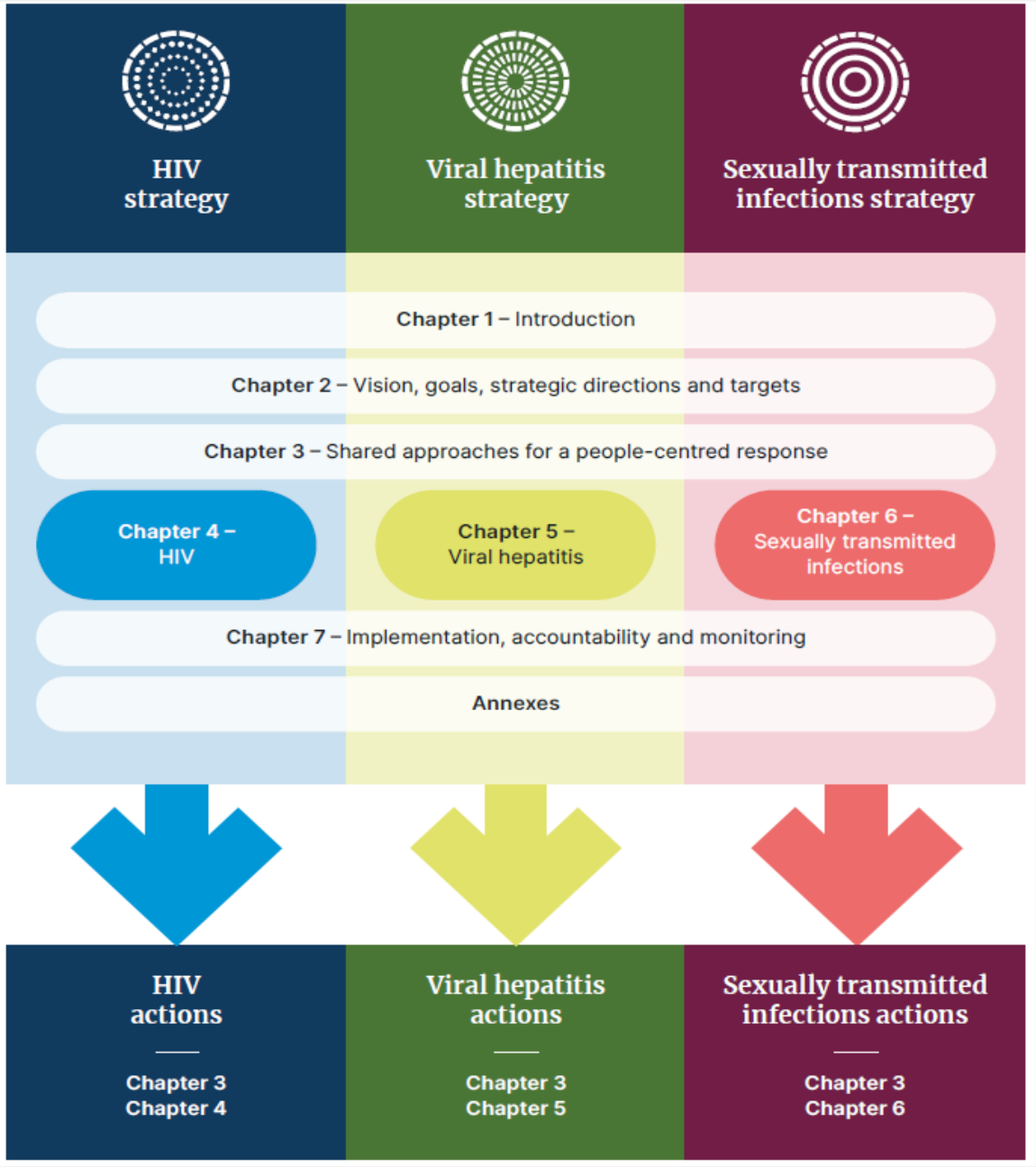
World Health Organization

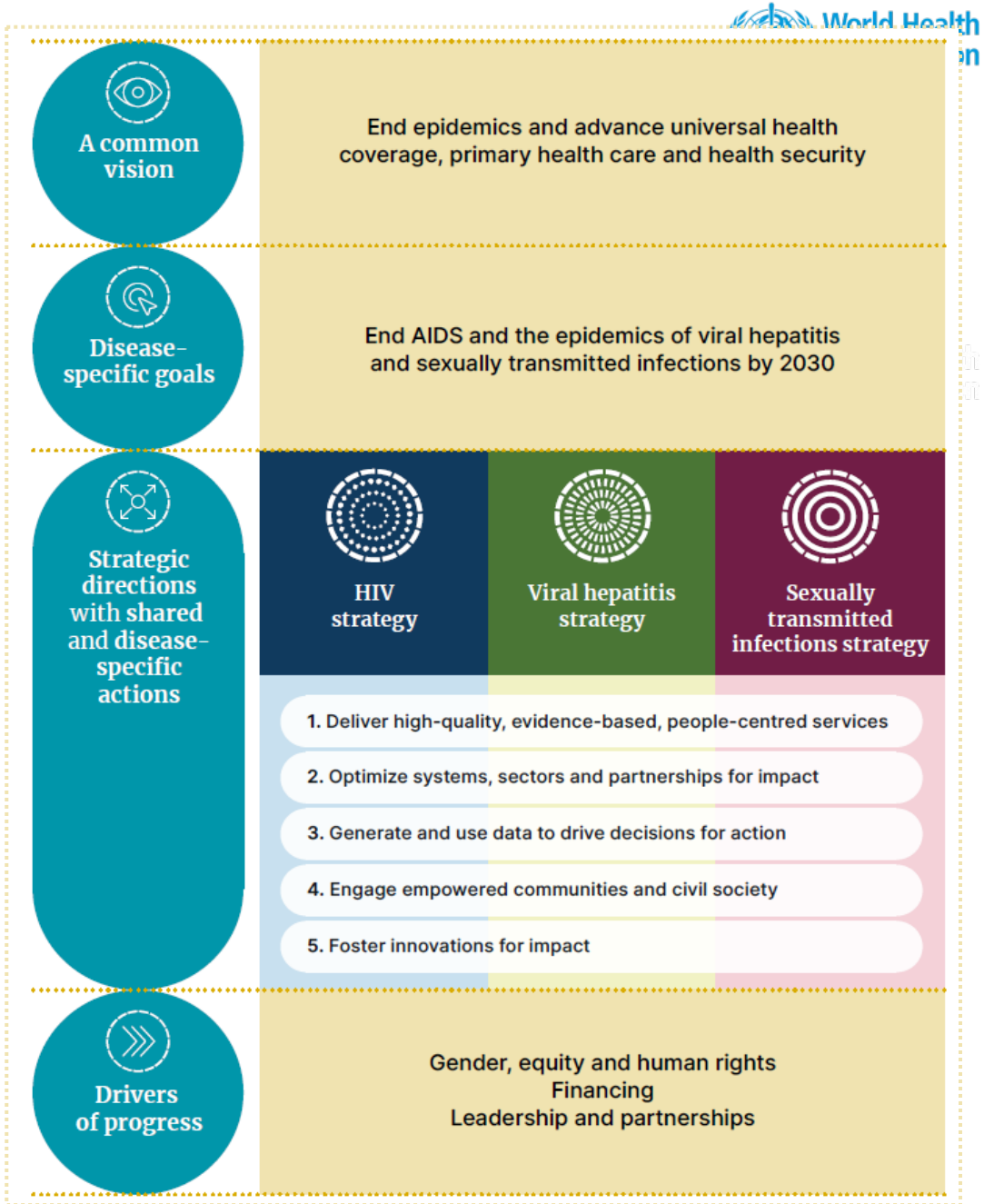
Progress report on HIV, viral hepatitis and sexually transmitted infections 2021: accountability for the global health sector strategies, 2016–2021: actions for impact. Geneva: World Health Organization; 2021

Global Health Sector Strategies on, respectively, HIV, Viral Hepatitis and Sexually Transmitted Infections, 2022-2030

Closing the gap to 2030

Structure and Strategic Framework





Integration and shared approaches

Integration entry points	Examples of integration opportunities across HIV, viral hepatitis and STIs
Common modes of transmission, incl. sexual transmission, vertical transmission, injecting drug use	e.g. common approaches to shared prevention interventions such as harm reduction, "triple elimination", linkages with sexual and reproductive health, etc.
Comorbidities among HIV, viral hepatitis and STIs	e.g. integrating services such as screening priority populations for HIV and STIs in the same visit
Other disease interactions e.g. TB/HIV, NCDs, mental health	e.g. promoting linkages with other disease programmes such as with TB, cancer, NCDs, mental health, promoting disability-inclusive programming, etc
Common populations affected by multiple diseases e.g. underserved/poor, young people, key populations	e.g. providing comprehensive services at the same encounter or location such as pregnant women accessing testing for HIV, hepatitis B virus and syphilis at the same antenatal visit
Common service delivery platforms and providers	e.g. strengthening linkages or fully integrated service delivery such as antenatal care for pregnant women, targeted community outreach to sex workers, coordinated delivery of self-tests for HIV and self-sampling for certain STIs, etc.
Common health system resources	e.g. joint approaches to strengthen health workforce, coordinated or integrated use of equipment such as multiplex diagnostic tools, shared investments in HMIS, etc
Joint approaches to address **social determinants**	e.g. joint efforts to address stigma and discrimination in the health sector, legal review and reform, etc.

World Health Organization

Technical and normative products

Global goods from WHO for viral hepatitis

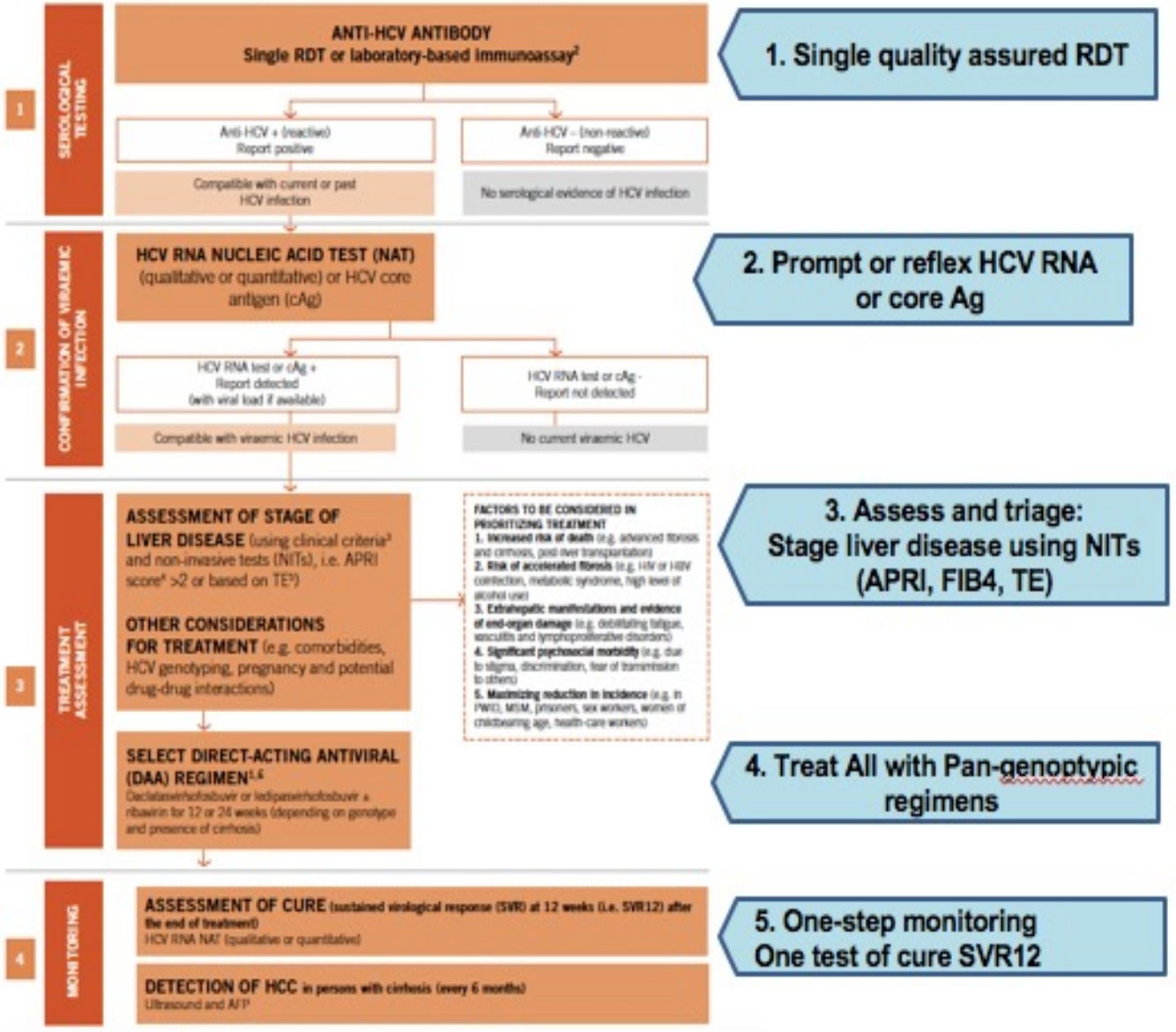
World Health Organization

- ✓Strategy formulated
- ✓National plan manual
- ✓Baseline estimated
- ✓Guidelines produced
- ✓Cost effectiveness calculators
- ✓Injection safety campaign
- ✓PWID and prisons policy brief
- ✓HBV PMTCT guidelines 2020
- ✓HCV self-testing guidance 2021
- ✓WHO Guidance on HCV simplified service delivery, diagnostic innovations and treatment of adolescents and children

Simplified and standardized HCV testing and management algorithm

World Health Organization

FIG.3. Summary algorithm for diagnosis, treatment and monitoring[1] of chronic HCV infection



Five key steps

World Health Organization

2017 WHO Guidelines on hepatitis B and C testing

Updated WHO HCV guidelines (2018)

- **Simplified criteria (Who to treat?): HCV treatment for all** infected people above 12 years of age (pregnant women excepted)

- **Simplified preferred regimens (What to use?): Pan-genotypic regimens** (avoid genotyping). **Treatment in children and adolescents:**

>18 years

Without cirrhosis

- **Sofosbuvir/Velpatasvir for 12 weeks or**
- **Sofosbuvir/Daclatasvir for 12 weeks or**
- **Glecaprevir/Pibrentasvir for 8 weeks[2]**

With compensated cirrhosis

- **Sofosbuvir/Velpatasvir for 12 weeks or**
- **Glecaprevir/Pibrentasvir for 12 weeks[2] or**
- **Sofosbuvir/Daclatasvir for 24 weeks**

RECOMMENDATIONS

2022 Treatment Recommendations in Adolescents and Children

World Health Organization

Treatment of HCV in adolescents (12—17 years), older children (6—11 years) and younger children (3—5 years)

Whom to treat? New recommendations for adolescents and children

We recommend the use of pangenotypic DAA regimens for all adults, adolescents and children ages 3 years and above with chronic hepatitis C infection, regardless of stage of disease:

Adolescents (12–17 years[1]): *strong recommendation; moderate/low certainty of evidence*
Older children (6–11 years): *strong recommendation; moderate/very low certainty of evidence*
Younger children (3–5 years): *conditional recommendation; very low certainty of evidence*

[1] For consistency, we use the same age groupings as those used in the trials for regulatory submissions.

What DAA regimens to use? New recommendations for adolescents and children

We recommend the use of the following pangenotypic DAA regimens in adults (18 years and above), adolescents (12–17 years), older children (6–11 years) (all strong recommendations) and younger children (3–5 years) (conditional recommendation):

- **SOF/DCV[1]** for 12 weeks[2]: *certainty of evidence: high (adults), high (adolescents and older children); very low (younger children)*
- **SOF/VEL** for 12 weeks: *certainty of evidence: high (adults), low (adolescents and older children); very low (younger children)*
- **G/P** for eight weeks: certainty of evidence: *high (adults), moderate (adolescents and older children); very low (young children).*

[1] Most widely use regimen in adults due to availability of quality-assured, low-cost generics
[2] In those without cirrhosis. Treatment for 24 weeks in those who are treatment-experienced or with compensated cirrhosis.

RECOMMENDATIONS

Decentralization, Integration and Task-shifting

Moving treatment and care out of speciality clinics

Decentralization:
We recommend delivery of HCV **testing** and **treatment** at peripheral health or community-based facilities, and ideally at the same site, to increase access to diagnosis, care and treatment.
These **facilities** may include primary care, harm reduction sites, prisons and HIV/ART clinics as well as community-based organizations and outreach services.

Integration:
We recommend integration of HCV **testing** and **treatment** with existing care services at peripheral health facilities.
These **services** may include primary care, harm reduction (needle and syringe programme (NSP)/opioid agonist maintenance therapy (OAMT) sites), prison and HIV/ART services.

Strong recommendation/ moderate certainty of evidence (PWID/prisoner) low (general population, PLHIV)

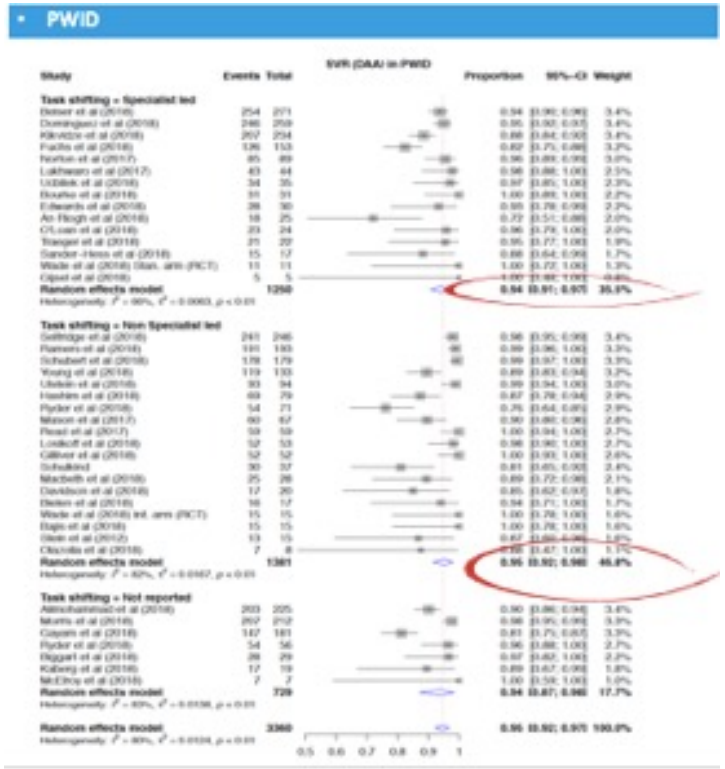
Task-sharing: We recommend delivery of HCV **testing, care and treatment** by trained non-specialist doctors and nurses to expand access to diagnosis, care and treatment.

Strong recommendation/ moderate certainty of evidence

Moving treatment out of speciality clinics
Task-shifting + De-centralised testing and treatment at same site = "one-stop shop"

New WHO Evidence: Full decentralization of testing and treatment increased uptake of testing, linkage and treatment, and achieved comparable SVR12

- Task-shifting of treatment to trained non-specialists achieves similar SVR12 compared to specialist care.



THE LANCET
Global Health
Available online 24 February 2021
In Press, Corrected Proof

Decentralisation, integration, and task-shifting in hepatitis C virus infection testing and treatment: a global systematic review and meta-analysis

Ena Oru, Adam Trickey, Rohan Shirali, Steve Kanters, Philippa Easterbrook

Summary

Background Increasing access to hepatitis C virus (HCV) care and treatment will require simplified service delivery models. We aimed to evaluate the effects of decentralisation and integration of testing, care, and treatment with harm-reduction and other services, and task-shifting to non-specialists on outcomes across the HCV care continuum.

Methods For this systematic review and meta-analysis, we searched PubMed, Embase, WHO Global Index Medicus, and conference abstracts for studies published between Jan 1, 2008, and Feb 20, 2018, that evaluated uptake of HCV testing, linkage to care, treatment, cure assessment, and sustained virological response at 12 weeks (SVR12) in people who inject drugs, people in prisons, people living with HIV, and the general population. Randomised controlled

RECOMMENDATIONS

2022 Recommendations on HCV diagnostics

World Health Organization

HCV point-of-care (POC) viral load RNA testing:

- Point-of-care (POC) HCV RNA viral load assay can be an alternative approach to laboratory-based HCV RNA NAT assays to **diagnose HCV viraemic infection**.

- Point-of-care (POC) HCV RNA assays with comparable limit of detection to laboratory-based assays can be used as an alternative approach as **test of cure**.

Conditional/moderate

Simplified same day “test and treat” Model for hard-to-reach populations

World Health Organization

Finger Prick

Anti-HCV POCT

5-20 min

POC HCV RNA

60 min

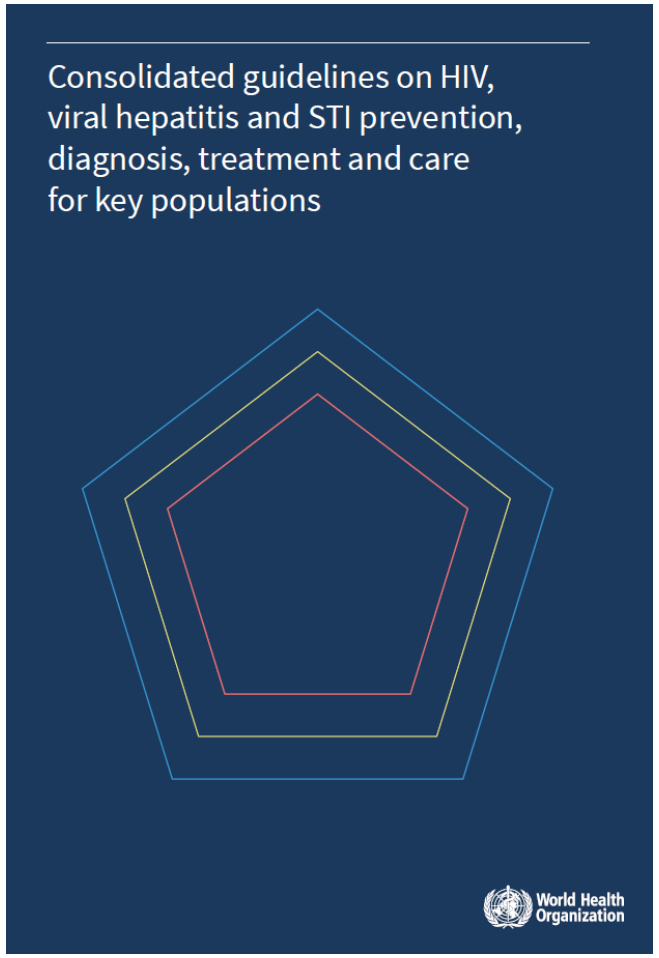
Exclude cirrhosis

Linkage to DAA treatment

Diagnosed and on treatment in < 2 hours!

We have the tools…we don’t have the access

Key populations definition



Men who have sex with men

People who inject drugs

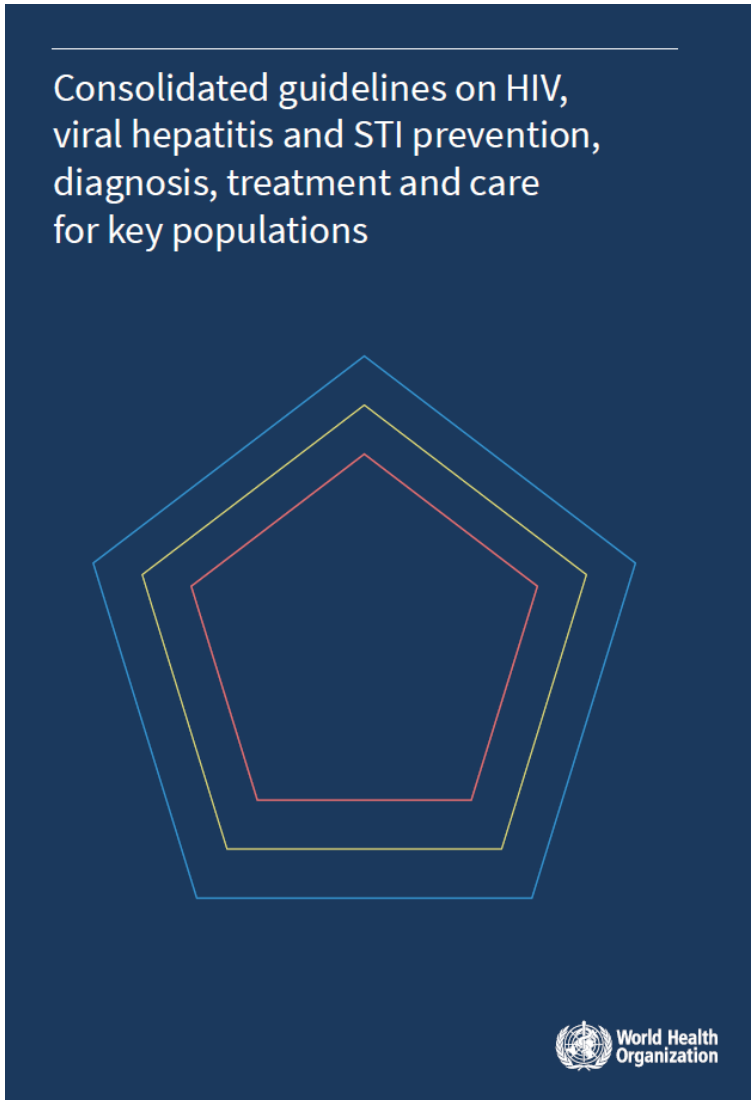
Sex workers

Transgender people

Prisoners

- Risk behaviours
- Disproportionately affected by disease
- Isolated from services
- Criminalised and other legal barriers
- Experience stigma and discrimination
- Experience violence
- High rates of incarceration and detention

NEW INTEGRATED WHO GUIDANCE
Updated WHO key populations guidance 2022



- **Focus on**
  - **person-centred approaches** across HIV, VH, STIs, and TB (equal focus)
    - **Defining essential, core health interventions to allow better prioritisation**
  - **highlighting critical enablers** to address structural barriers

- **New recommendations will include**
  - Behavioral interventions and chemsex
  - **Service delivery (online, peer led services) for HIV and VH and STIs**
  - **Testing/screening and treatment of recent HCV infection**

Essential for impact: enabling interventions

World Health Organization

- Removing punitive laws, policies and practices
- Reducing stigma and discrimination
- Community empowerment
- Addressing violence

HCV treatment among PWID: main barriers

System level

- exclusion of PWID in treatment guidelines and national plans
- treatment conducted in tertiary centers; not adapted care facilities for PWID
- lack of Harm Reduction platforms

Provider level

- concerns about adherence issues
- concerns about reinfection
- concerns about adverse events and drug-drug interactions during treatment
- reluctance to treat active drug users

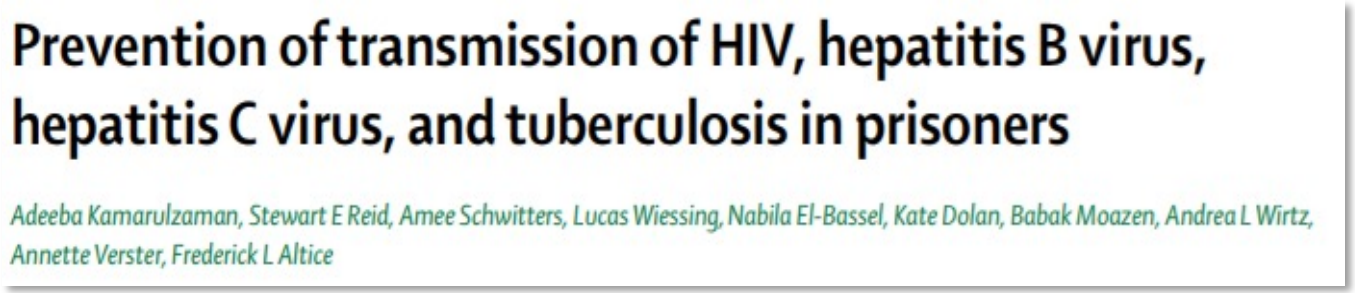
Criminalization of drug use

(Marieta Simonova, EASL 2016)
(Wolfe et al. IJDP 2015)

Not to forget prisons!

World Health Organization

30 million people in prison/year


Prevention of transmission of HIV, hepatitis B virus, hepatitis C virus, and tuberculosis in prisoners

Adeeba Kamarulzaman, Stewart E Reid, Amee Schwitters, Lucas Wiessing, Nabila El-Bassel, Kate Dolan, Babak Moazen, Andrea L Wirtz, Annette Verster, Frederick L Altice

Drug use

- **PWID over-represented**
- **Some people start using/engage in more risky injecting practice**

Tattooing

HBV and HCV (and HIV and TB) prevalence higher than general population

Inequity in access to prevention and treatment

- Limited availability harm reduction
- Continuity of care between community and prison

World Health Organization

- PWID and people in prisons are disproportionally affected
- WHO provides an updated and integrated strategic vision and updated guidance for viral hepatitis prevention, testing and treatment
- Need for enhanced global coverage of harm reduction services
- Need for ensuring access to affordable HIV and HCV testing, diagnosis and treatment FOR ALL POPULATIONS - close to communities and as integrated programs
  - Need for advancing peer-based models of care
- Important to consider underlying and tackling social determinants of health inequalities
  - Addressing punitive drug policies