

Training workshop on screening, diagnosis and treatment of hepatitis B and C

Session 17

WHO Monitoring and Evaluation Framework for Viral Hepatitis



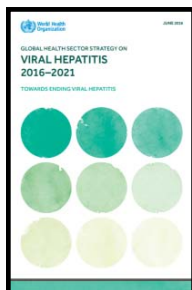
To be adapted following national data reporting formats and M&E systems, where available

Learning objectives

At the end of this session, learners would understand:

- the public health response to viral hepatitis
- the Global Health Sector Strategy on Viral Hepatitis and its service and impact targets for the year 2030
- various aspects of WHO's Monitoring and Evaluation Framework for Viral Hepatitis, and reporting towards the WHO Global Reporting System for Hepatitis (GRSH)

THE GLOBAL HEALTH SECTOR STRATEGY ON VIRAL HEPATITIS



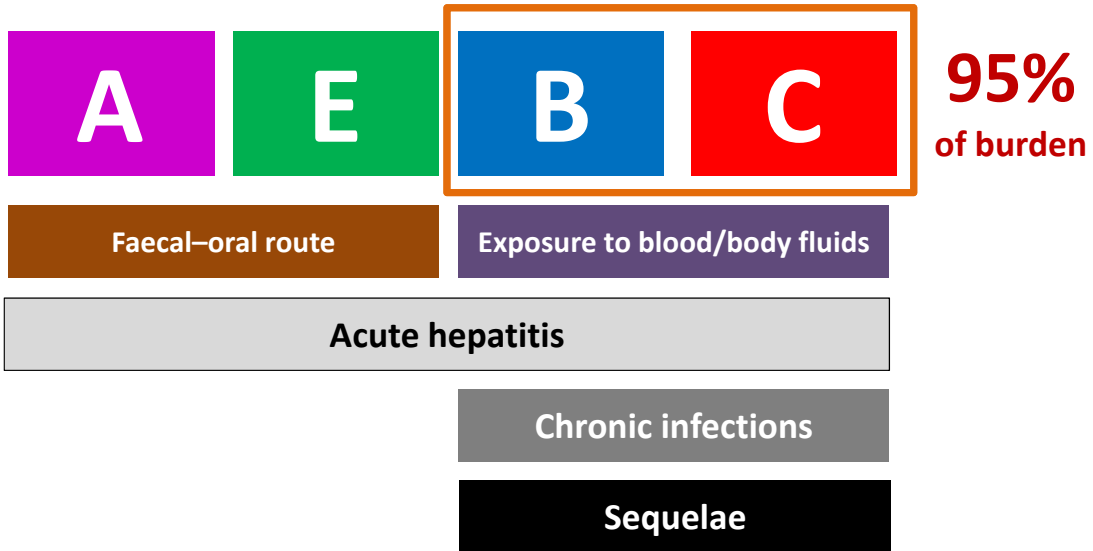
5 STRATEGIC DIRECTIONS

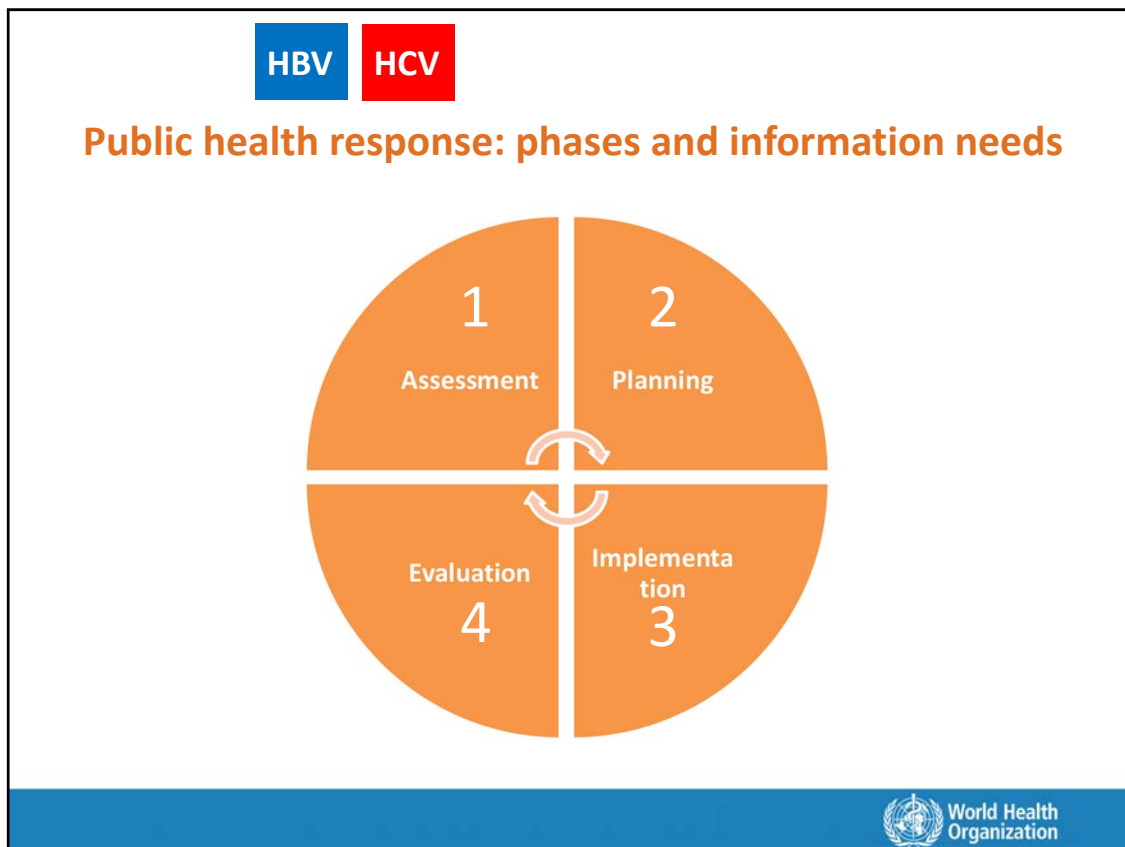
1. **Information for focused action**
2. Interventions for impact
3. Delivering for equity
4. Financing for sustainability
5. Innovation for acceleration

7th

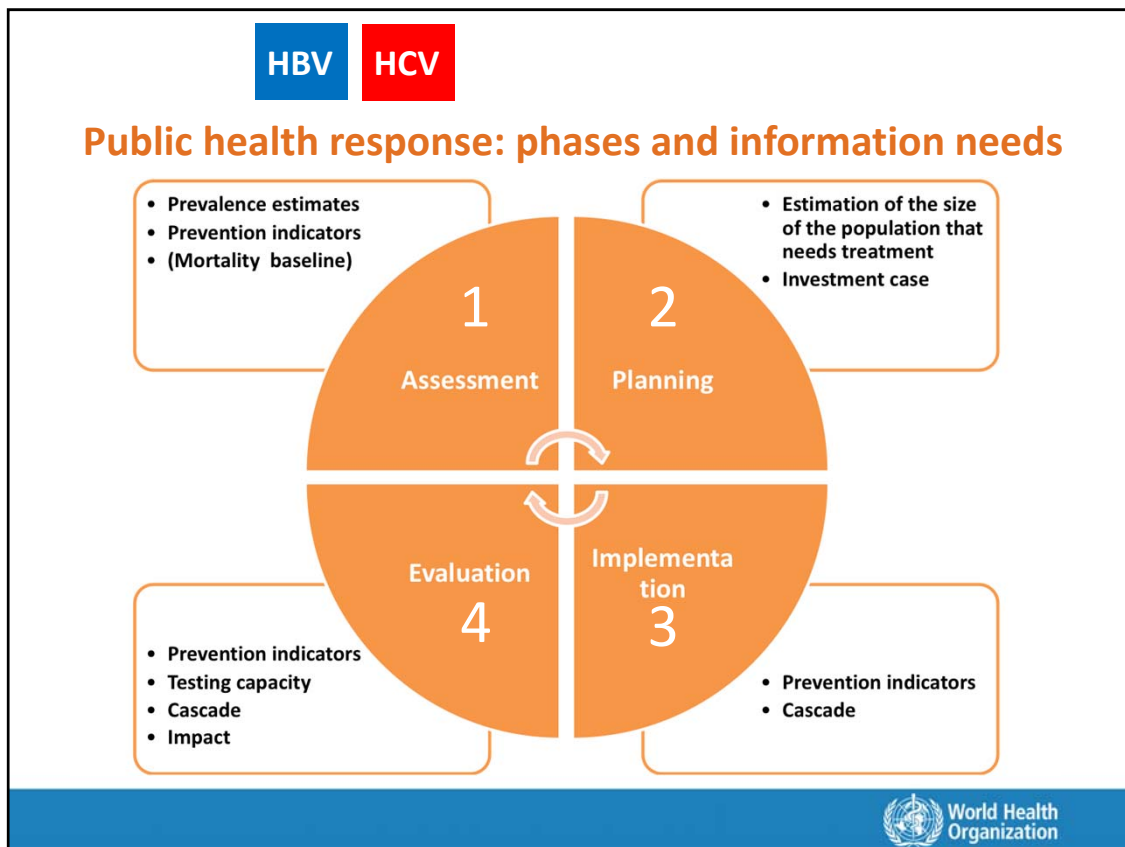
**leading cause of
death globally
(2013)**

Four main hepatitis viruses






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<div> <div>HBV</div> <div>HCV</div> </div>		
GLOBAL HEALTH SECTOR STRATEGY ON HEPATITIS – TARGETS		
Targets	Interventions	2030 target
1. Service coverage	1. Three doses of hepatitis B vaccine	90%
	2. HBV PMTCT	90%
	3. Blood and injection safety	100% screened donations
		90% reuse-prevention devices
	4. Harm reduction	300 injection sets/PWID/year
	5. Treatment	90% diagnosed
		80% eligible treated
2. Impact	A. Incidence	90% reduction
	B. Mortality	65% reduction
<small>PMTCT: prevention of mother-to-child transmission PWID: person who injects drugs</small>		
 World Health Organization		

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First, information from surveillance for acute hepatitis can be used to evaluate programmes to prevent new infections, which includes vaccination, food and water safety, blood safety, condom distribution, harm reduction and infection control.

Second, information from surveillance for chronic hepatitis can be used to evaluate programmes for testing and treatment.

Third, information from surveillance of sequelae can be used to evaluate the ultimate impact a programme on mortality.

STRATEGIC INFORMATION FOR HEPATITIS ELIMINATION

A | THE FRAMEWORK

B | WHAT IS NEEDED AT EACH STAGE

C | DATA SYSTEMS NEEDED



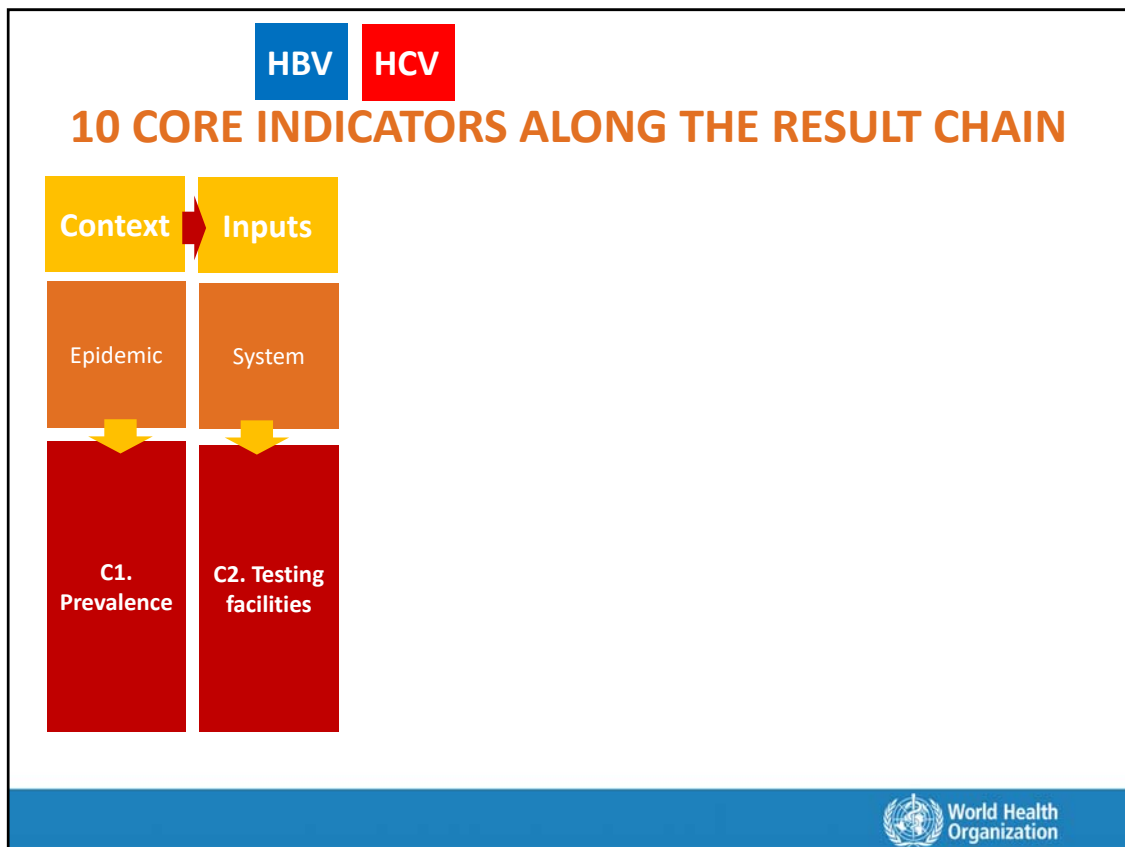
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This slide shows the 10 core indicators for viral hepatitis along the **result chain**.

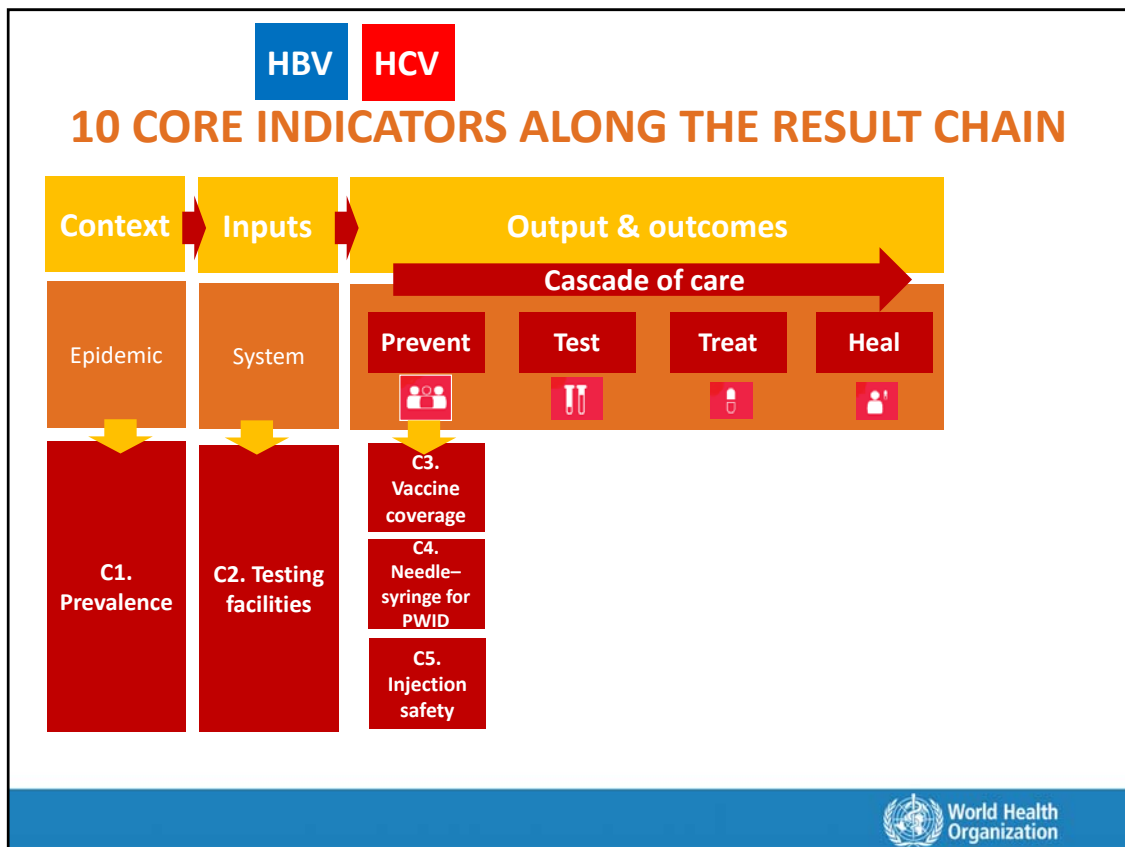
At the top of the slide, in light orange, you can see the **progression from context, to input, to output and outcome, and finally impact**.

The **context and needs** will inform about epidemic patterns, stigma and population in need. The key indicators (C1) are the prevalence of HBV and HCV infection.

The **input** will inform about policy, laws, health systems, input and financing. The key indicator (C2) is about the infrastructure for testing.

Then, we enter the **cascade of prevention and care**, including prevention, testing, care and treatment and cure / viral suppression. Prevention indicators measure vaccination (C3), needle and syringe distribution (C4) and injection safety (C5). Then, the cascade of testing, care and treatment is reflected by C6 (proportion of persons diagnosed), C7 (initiation [HCV] or coverage [HBV] of treatment) and C8 (cure [HCV] or viral suppression [HBV]).

The result based framework finishes with impact indicators, including (a) incidence of HBV and HCV infection (C9) and (b) mortality (C10).



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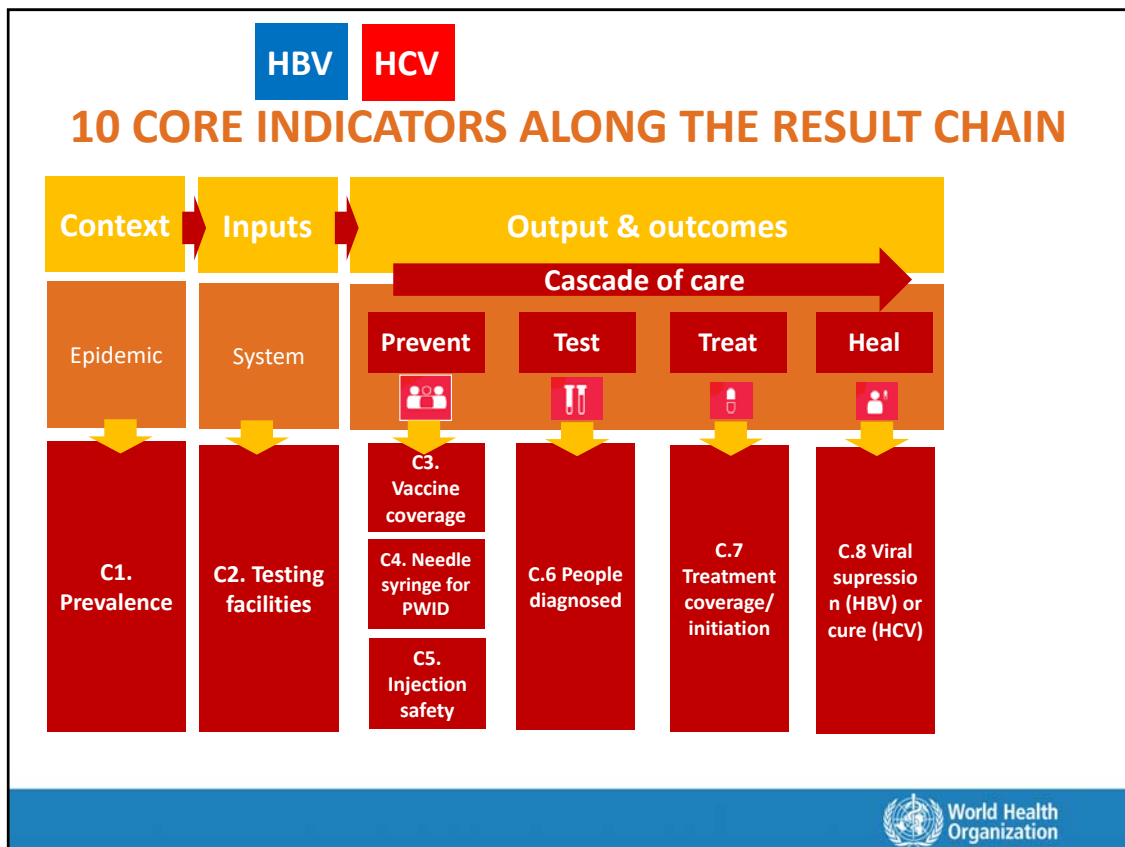
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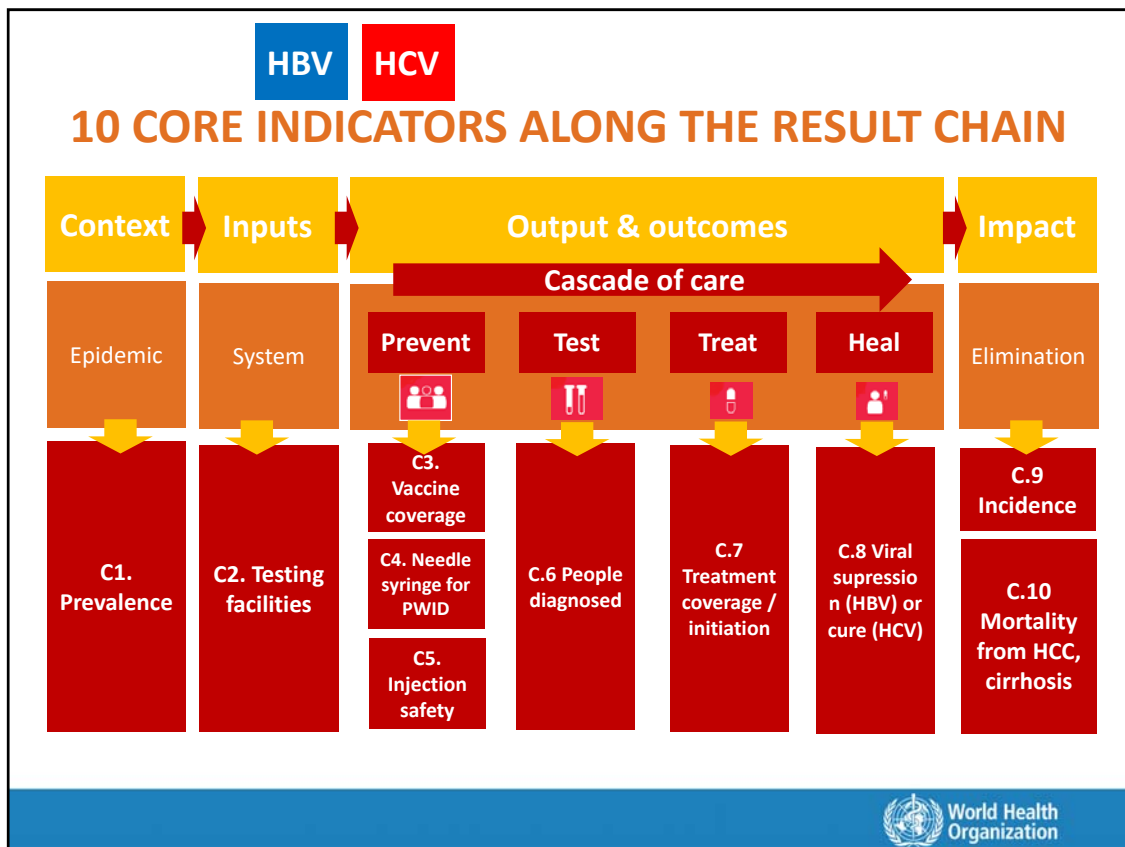
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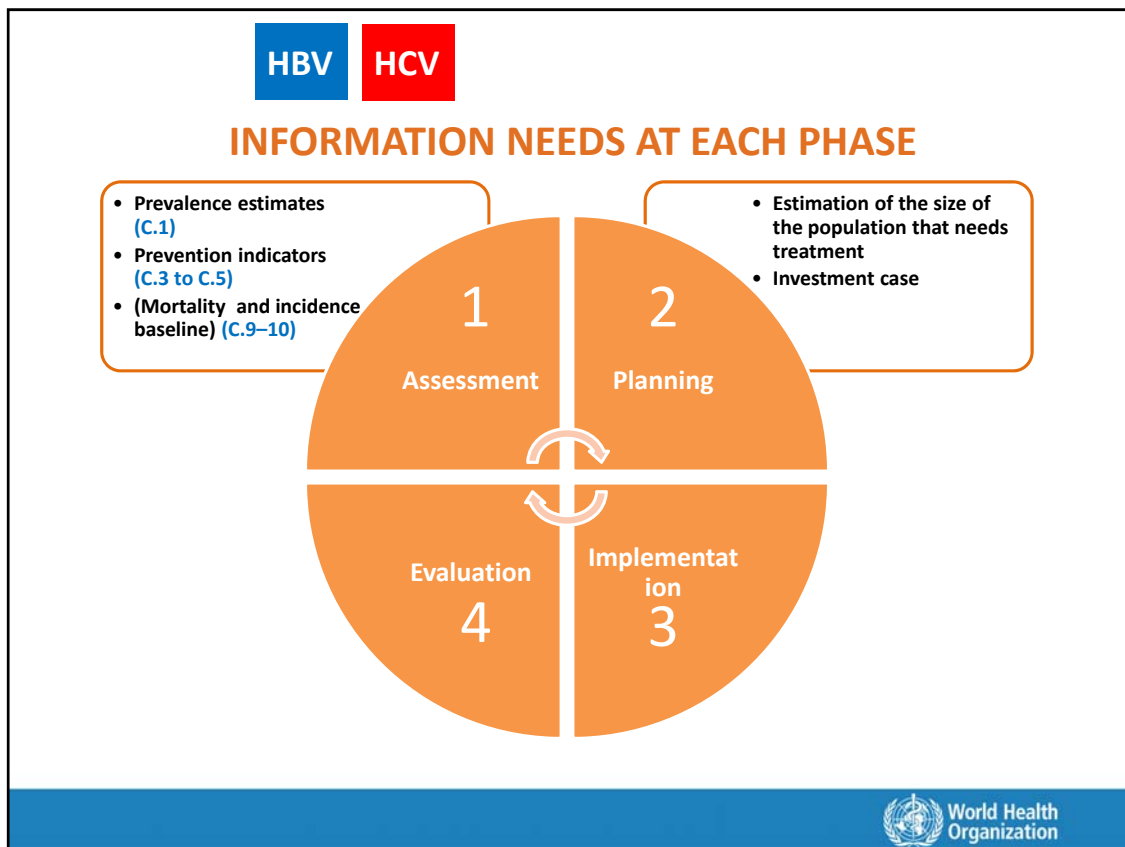
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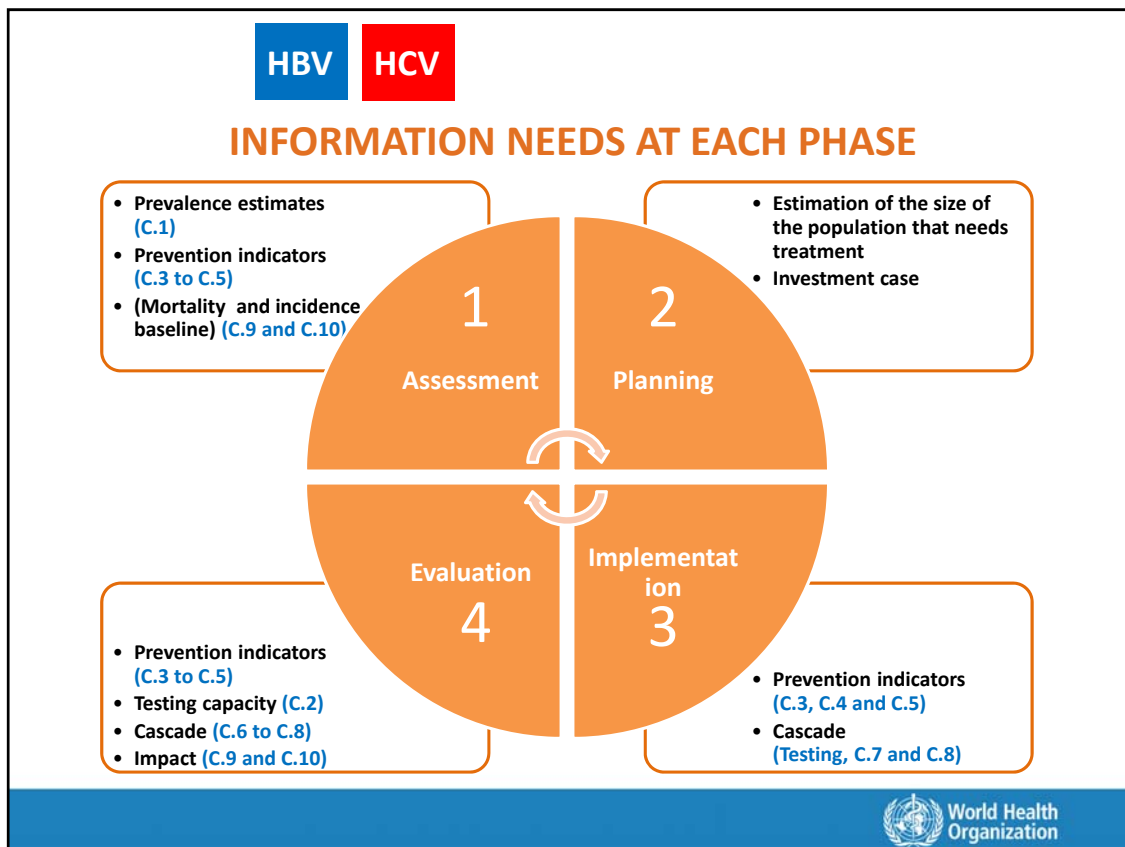
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HAV

HEV

HBV

HCV


DATA SYSTEMS NEEDED

A|HEPATITIS SURVEILLANCE

1. Acute hepatitis, which reflects new infections
2. Chronic infections
3. Sequelae

B|PROGRAMME DATA

- Prevention indicators
- Patient registries for the cascade of care and cure

 World Health Organization

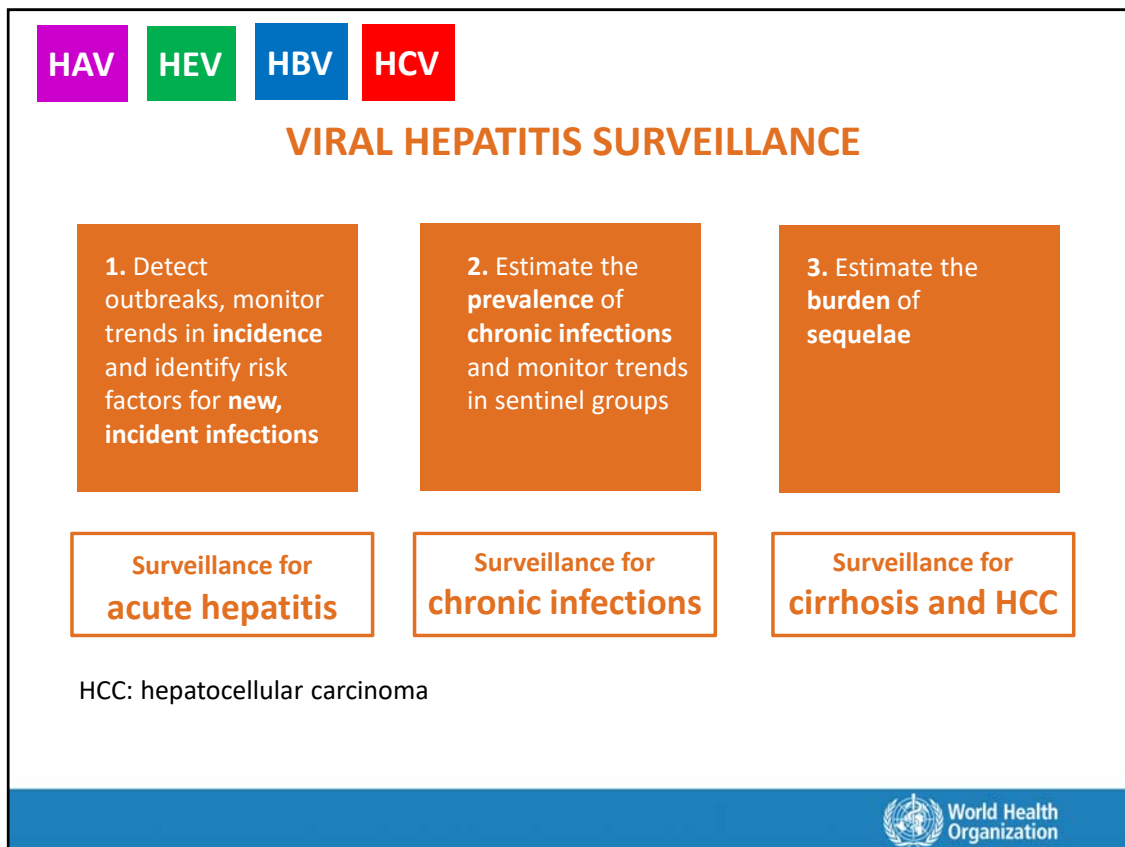
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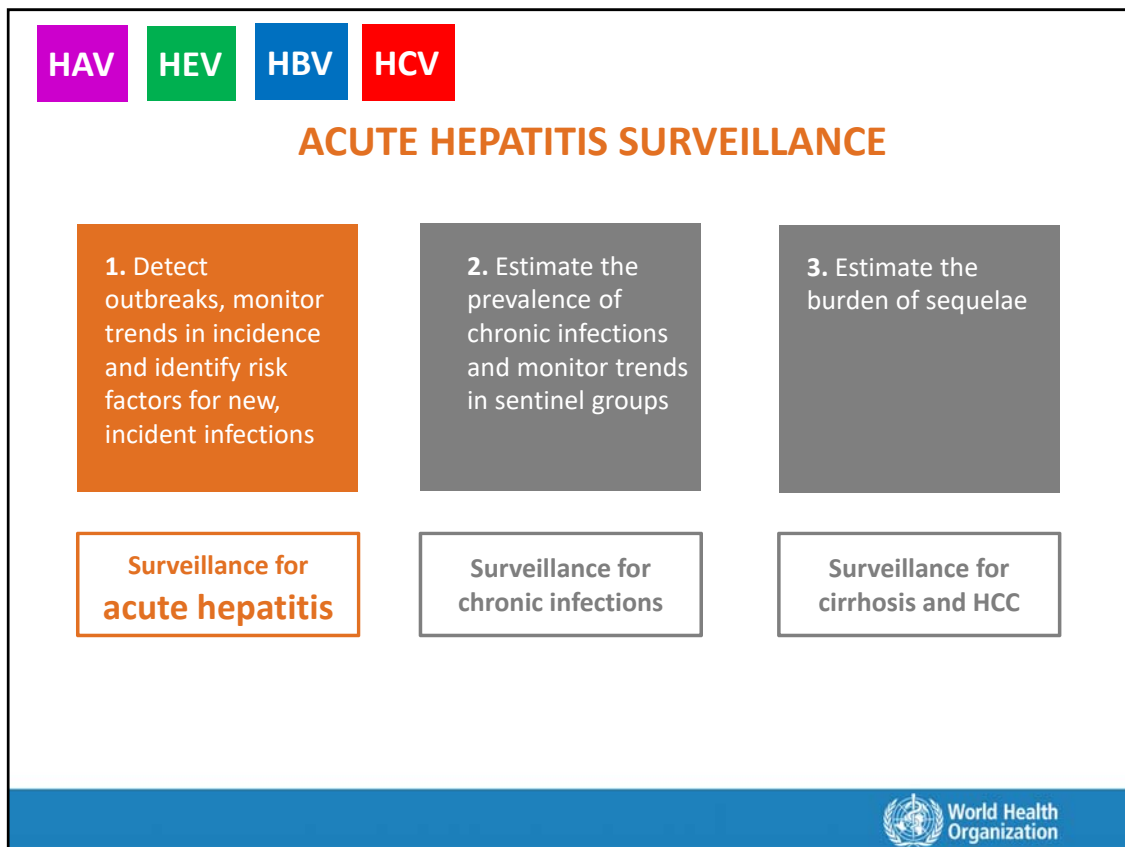
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The first purpose is to detect out outbreaks, monitor trends in in incidence and identify risk factors for new, incident infections. **This will be done with surveillance for acute hepatitis.**

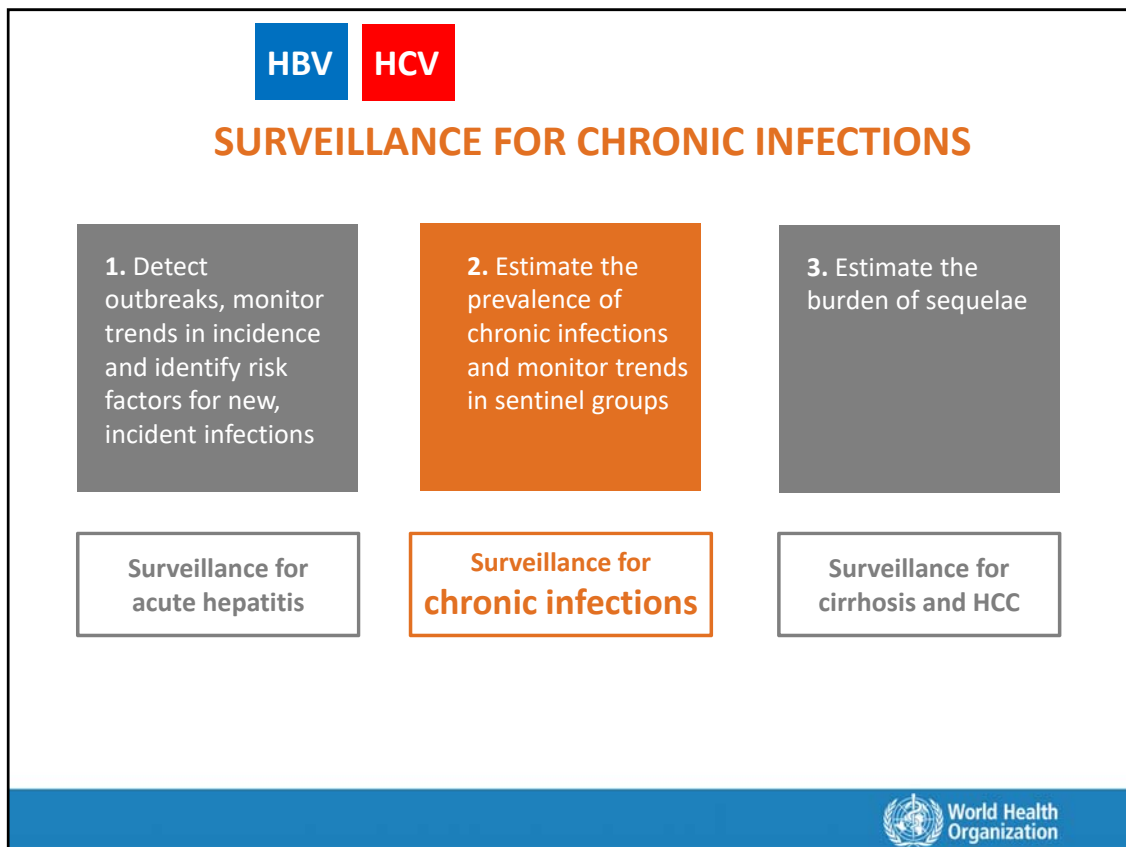
HAV	HEV	HBV	HCV
SURVEILLANCE FOR ACUTE HEPATITIS			
	Syndromic surveillance	Enhanced case reporting	
Case definitions	Clinical – no in vitro diagnosis	Type-specific – IgM in vitro diagnosis	
Data collection	Basic demographics	Risk factors	
Objectives	Detect outbreaks	Describe trends Identify risk factors	
Scale	Nationwide	Mostly sentinel	
Implementer	Communicable disease surveillance	Centres of excellence	

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The second purpose is to estimate the prevalence of chronic infections and monitor trends in sentinel groups. **This will be done with surveillance of chronic infections .**

HBV**HCV**

SURVEILLANCE FOR CHRONIC INFECTIONS

A| DATA MINING

- Search for existing information (grey literature)

B| BIOMARKER SURVEYS

- Reference method
 - General population
 - High-risk groups

C| REPORTING OF CHRONIC CASES

- Only estimates the number of cases diagnosed
- Best directed to patients' registries
- Not to be mixed up with acute hepatitis surveillance



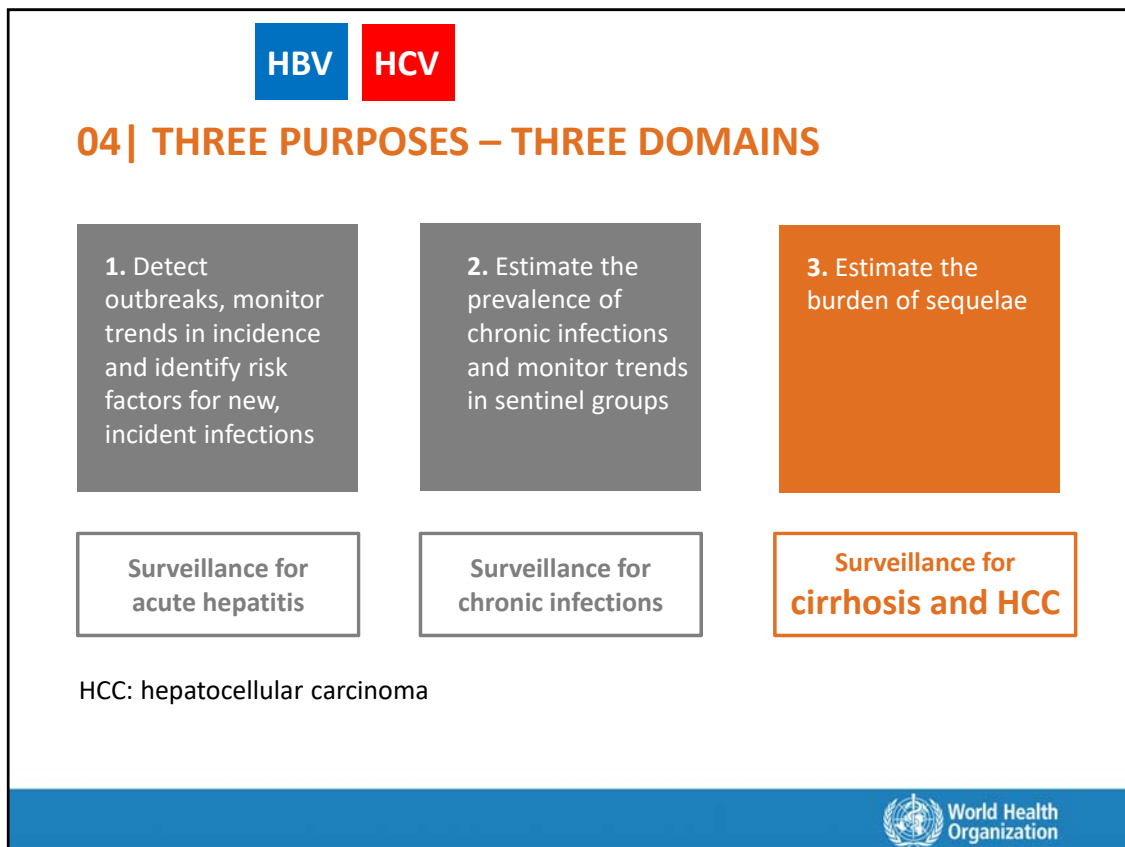
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HBV**HCV**

ESTIMATING MORTALITY

1. **Assess the quality** of the vital registration system.
2. **Group deaths directly associated** with HBV or HCV infection (ICD-10 codes).
3. Estimate cirrhosis and HCC deaths (**mortality envelope**).
4. Estimate the HBV/HCV-**attributable fraction** of HCC and cirrhosis:
 - centre(s) of excellence
 - prevalence of HBV and HCV infections in patients with sequelae.
5. **Apply** attributable fractions to the HCC and cirrhosis envelope.
6. **Compile data and break down** by acute/chronic and by virus.

HCC: hepatocellular carcinoma



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HAV**HEV****HBV****HCV**

DATA SYSTEMS NEEDED

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2. Chronic infections
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B | PROGRAMME DATA

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HBV**HCV**

PROGRAMME DATA

A | PREVENTION

1. Immunization coverage: HEP3 and timely birth dose
2. Blood safety: proportion of donations screened with quality assurance
3. Harm reduction: syringe/needle sets per PWID
4. Injection safety: health-care injection safety
 - Surveys

B | CARE AND TREATMENT

- Patient registries
 - Patients' cards
 - Databases



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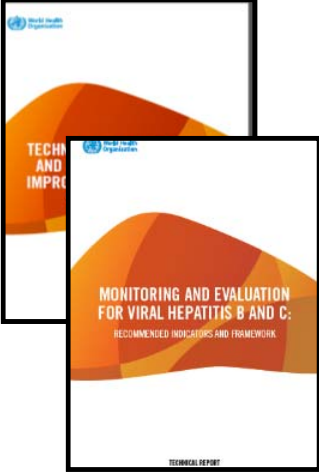
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WHO GUIDANCE FOR HEPATITIS STRATEGIC INFORMATION

- ✓ Surveillance for acute hepatitis
- ✓ Surveillance for chronic infections
- ✓ Surveillance for sequelae
- ✓ Prevention indicators
- ✓ Patients' registries



WHO Global Reporting System for Hepatitis (GRSH)
<https://extranet.who.int/dhis2/dhis-web-commons/security/login.action>



World Health Organization

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WHO launched the Global Reporting System for Hepatitis (GRSH) for national reporting which supports reporting back towards SDGs on hepatitis elimination.

SUMMARY

- Strategic information is essential to start and maintain a public health programme.
- Several components
 - Infection and disease indicators
 - incidence of acute infection
 - prevalence of chronic infection
 - burden of sequelae
 - Programme indicators
 - prevention indicators
 - Patients' registries
- How can a country develop its monitoring and evaluation (M&E) system?
 - Start gradually and build up
 - Keep feasibility in mind



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Thank you

HBV

HCV

TYPE OF INDICATORS

10

CORE indicators
C.1–C.10

27

ADDITIONAL indicators
A.1–A.27

10

ADDITIONAL
indicators for
hepatitis
(A.1–A.10)

17

ADDITIONAL
indicators from
other programmes
(A.11–A.27)



World Health
Organization

HBV

HCV

10 ADDITIONAL INDICATORS FOR HEPATITIS (A.1–A.10)

1. Hepatitis D coinfection among people living with HBV infection
2. Experience with discrimination
3. Availability of essential medicines and commodities
4. National system for viral hepatitis surveillance
5. Hepatitis B testing
6. Hepatitis C testing
7. HCV genotyping
8. Viral hepatitis B and C care coverage
9. Equitable access to hepatitis treatment
10. Documentation of treatment effectiveness

HBV

HCV

17 ADDITIONAL INDICATORS FROM OTHER PROGRAMMES

A.11–A.14: HIV/STI

A.15–A.16: Immunization

A.17–A.18: Blood safety

A.19–A.23: Injection safety and infection control

A.24–A.25: Harm reduction, HIV

A.26–A.27: Noncommunicable diseases, cancer