

## Indicator 3.3.4

### Indicator Name, Target and Goal

**Indicator 3.3.4** Hepatitis B incidence per 100,000 population

**Target 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

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

### Definition and Rationale

#### ○ Definition

This indicator is defined as the sum of the numbers of **new cases diagnosed with viral hepatitis (excluding hepatitis E and A) and cases with persistent HBV infection (the number of cases under treatment of hepatitis, liver cirrhosis and liver cancer caused by HBV)** per 100,000 population.

We defined cases with persistent HBV infection as hepatitis, liver cirrhosis and liver cancer due to HBV infection with received antiviral treatment and others. Their data were extracted from the National Database (NDB) constructed with medical claims.

#### ○ Concepts

**Hepatitis:** an inflammation of the liver

**Hepatitis virus:** one of the virus leading to the development of hepatitis.

**HBV:** hepatitis B virus

**New cases diagnosed with viral hepatitis (excluding hepatitis E and A)** is defined as acute hepatitis (hepatitis B, C and others). The followings are excluded from viral hepatitis (excluding hepatitis E and A): chronic liver disease, asymptomatic carrier and their acute exacerbation cases.

**NDB** is constructed based on the Law on securing medical care for elderly people in force since April 2008. NDB is the database stored medical claims, specific medical checkup and specific health guidance information. It is used for research and analysis to create, implement and evaluate the medical cost rationalization plans.

**Medical claims:** a statement that the medical institution described the treatment, medication used in order to request health insurance cooperatives

for medical expense

**Liver cirrhosis** is a pathological condition that hepatitis has progressed

**Liver cancer:** cancers that occur in the liver

#### ○ Rationale and Interpretation

- The number of cases with new infection: Monitoring the incidence rate of **viral hepatitis (excluding hepatitis E and A)** provides an indicator of progress toward achieving the target of reducing the number of new cases with **viral hepatitis (excluding hepatitis E and A)**.
- The number of cases with persistent infection: Monitoring the cases with persistent HBV infection provides an indicator of progress toward achieving the target of reducing the number of HBV infected patients.

#### **Data Sources and Collection Method**

- Cases with new infection: the National Epidemiological Surveillance of Infectious Diseases Progress
- Cases with persistent infection: Open data of National database (NDB)

#### **Method of Computation and Other Methodological Considerations**

##### ○ Computation Method

(the number of cases with new infection + the number of cases with persistent infection) x 1 00,000 / estimated population

- The number of cases with new infection: the number of new cases with Viral Hepatitis (excluding hepatitis E and A)
- The number of cases with persistent infection  
The number of cases is calculated using NDB. Medical claims related with liver diseases (hepatitis, liver cirrhosis, liver cancer and/or others) due to HBV are extracted from NDB. To extract only cases with treatment, medical claims without the documented information of the treatment and the prescribed medicine are excluded.

##### ○ Comments and limitations

- About the cases with new infection  
In the National Epidemiological Surveillance of Infectious Diseases

Program, **Viral hepatitis (excluding hepatitis E and A)** includes hepatitis B. Therefore, the number of new cases diagnosed with hepatitis B cannot be calculated.

- About cases with persistent infection

Data of person with public assistance or without public insurance are not included in NDB. Also, cases with HBV persistent infection not consulted at hospital, not received treatment, only received tests are excluded. So, our data is not included all HBV infected persons.

## **Data Disaggregation**

N/A

## **References**

Infectious Diseases Weekly Report (IDWR)

<https://www.niid.go.jp/niid/ja/idwr.html>

Annual Report of the National Epidemiological Surveillance of Infectious Diseases Program

<https://www.niid.go.jp/niid/ja/survei/2270-idwr/nenpou/8563-kako2017.html>

Population Estimates

<https://www.stat.go.jp/data/jinsui/2.html>

Database of grants for the research on hepatitis of the Ministry of Health, Labor and Welfare in Japan

<https://mhlw-grants.niph.go.jp/>

## **Custodian Ministries of Data**

Ministry of Health, Labour and Welfare

## **Custodian Ministries of Related Policies**

Ministry of Health, Labour and Welfare

## **International Organizations**

World Health Organization (WHO)