PLAIN LANGUAGE SUMMARY

SEXUALLY TRANSMITTED AND BLOOD-BORNE INFECTIONS IN FIRST NATIONS, INUIT, AND MÉTIS POPULATIONS: *Summarizing rates and trends*

Sexually transmitted and blood-born infections (STBBIs) are a significant public health concern in Canada. Some STBBIs are primarily transmitted through the exchange of sexual fluids during sexual contact and are thus referred to as sexually transmitted infections (STIs). However, STBBIs can also be transmitted through other means, including skin-to-skin genital contact or contact with blood and other bodily fluids. The most notable STBBIs include Chlamydia (including lymphogranuloma venereum [LGV]), gonorrhea, syphilis (all three of which are STIs), as well as human immunodeficiency virus (HIV) and both hepatitis B (HBV) and hepatitis C (HCV) viruses. The Government of Canada as well as provincial/territorial governments have identified these infections as priorities for monitoring and control, thus deeming them nationally notifiable STBBIs. The Public Health Agency of Canada (PHAC) routinely collects surveillance data on these infections to inform public health strategies and monitor Canada's progress in meeting global STBBI elimination targets. Other STBBIs include hepatitis A (HAV), human papillomavirus (HPV), and herpes simplex viruses (HSV-1 and HSV-2).[1]

Indigenous[2] people experience disproportionately high rates of STBBIs due to complex structural and systemic factors that create barriers to receiving adequate care and support. These factors are primarily driven by colonialism and its continued effects across generations. Yet, Indigenous identifiers are often excluded or used inconsistently in the surveillance of nationally notifiable infections across provincial/territorial jurisdictions, resulting in scant data on the prevalence of STBBIs among Indigenous populations. This makes it challenging to develop effective STBBI prevention programs and strategies in Indigenous communities.

---

[1] HAV is nationally notifiable, while HPV and herpes simplex viruses are not.

[2] In this fact sheet, the term "Indigenous" is used as an umbrella term referring to First Nations (status and non-status) people, Inuit, and Métis people, collectively. Wherever possible, the terms "First Nations", "Inuit", and/or "Métis" are used to reference and distinguish specific Indigenous populations.

National Collaborating Centre for Indigenous Health
Centre de collaboration nationale de la santé autochtone

National Collaborating Centre for Infectious Diseases
Centre de collaboration nationale des maladies infectieuses

This plain language summary provides an overview of the rates and trends of nationally notifiable STBBIs most common in First Nations, Inuit, and Métis populations. It is one of several knowledge[3] products jointly produced by the National Collaborating Centre for Indigenous Health (NCCIH) and the National Collaborating Centre for Infectious Diseases (NCCID) on STBBI prevalence and the accessibility, availability, and delivery of STBBI services among Indigenous Peoples in Canada. The information presented in this summary is derived from the background paper, *Sexually transmitted and blood-borne infections in Indigenous populations*, which provides a literature review of STBBIs among First Nations, Inuit, and Métis populations in Canada and ways of reducing STBBI transmission in Indigenous communities. More information and access to STBBI knowledge products can be found on the NCCIH and NCCID websites.

Chlamydia

There is a paucity of national-level surveillance data on the prevalence of Chlamydia among Indigenous populations in Canada. The PHAC last reported, in 2013, that the rate of Chlamydia was almost seven times higher among Indigenous adults compared to non-Indigenous adults. Regional surveillance data also showed high rates of Chlamydia among First Nations and Inuit populations. For example, high rates of Chlamydia were found among First Nations populations in Saskatchewan and Alberta. In 2007, 2012, and 2016, reported rates of Chlamydia, respectively, were 7.2, 6.8, and 5.2 times higher among First Nations populations in Saskatchewan than the corresponding rates for Canada. In Alberta, Chlamydia was the most commonly reported sexually transmitted infection (STI) among First Nations populations over the 2007-2011 period, with rates increasing by 50% over this period.

Although recent Inuit-specific data are not available, evidence from predominantly Inuit regions showed similarly high rates of Chlamydia infection. Over the 2010-2015 period, the rate of laboratory-confirmed cases of Chlamydia in Nunavut was 3,791.2 per 100,000 population, compared to a national average of 325.0 per 100,000 population. Likewise, the incidence rate of Chlamydia infection in the Nunavik region of Quebec rose by more than 44% over the 2013-2017 period and was 18 times higher than in the rest of Quebec in 2017. In contrast, rates of Chlamydia among First Nations populations in the Atlantic provinces over the 2011-2015 period more closely mirrored that of the general population. Data pertaining to Métis peoples are unavailable.

---

[3] Although HAV can be transmitted from one person to another through sexual activity, it is excluded from discussion here because it is primarily transmitted by ingesting contaminated food and drinking water.

© Credit: iStockPhoto.com, ID 499278830

Gonorrhea

Data on the prevalence of gonorrhea among Indigenous populations are also limited. No national-level Indigenous data appear to exist; however, regional data showed high rates of gonorrhea among First Nations populations in Saskatchewan, with rates increasing from 540.3 per 100,000 population in 2007 to 638.7 per 100,000 population in 2012, then decreasing to 445.7 per 100,000 population in 2016. These rates, respectively, were 15, 17, and 6.8 times higher than the corresponding provincial rates. The rates of gonorrhea also appeared to be high in predominantly Inuit regions. In 2018, the reported rate of gonorrhea was 1,911.1 per 100,000 population in Nunavut, compared to 95.8 per 100,000 population for Canada. Likewise, in 2017, the incidence rate of gonorrhea was 28 times higher in the Inuit region of Nunavik compared to the provincial rate of Quebec. Data pertaining to Métis peoples are unavailable.

Syphilis

Past studies have shown that Indigenous people may be disproportionately affected by syphilis due to risk factors such as involvement in sex work and illicit drug use. Nevertheless, syphilis rates have varied widely in Indigenous populations across Canada. Among First Nations in Saskatchewan, the rate of syphilis increased from a low of 0.0 per 100,000 in 2007, to 7.2 per 100,000 in 2012, and slightly decreased to 6.7 per 100,000 population in 2016. These rates were lower than the corresponding rates for the general Canadian population over this period. In Alberta, 50% of infectious syphilis cases reported over the 2018-2019 period were among self-identified Indigenous people. In British Columbia, the proportion of infectious syphilis cases among individuals who self-identified as Indigenous decreased annually from 8.8% in 2008 to 2.3% in 2017. However, national rates of syphilis generally have been rising across Canada and there is some emerging evidence from Saskatchewan, where there has been a 900% increase in the number of syphilis cases reported since 2019, that suggests rates may also be increasing alarmingly fast among some First Nations.

Rates of infectious syphilis are high in northern regions of the country. In 2017, Nunavut had the highest rate in Canada, with 234 cases of syphilis per 100,000 population, compared to only 11.2 per 100,000 population for Canada. Similarly high rates of infectious syphilis were also found in the Inuit region of Nunavik. Data pertaining to Métis peoples are unavailable.

HIV/AIDS

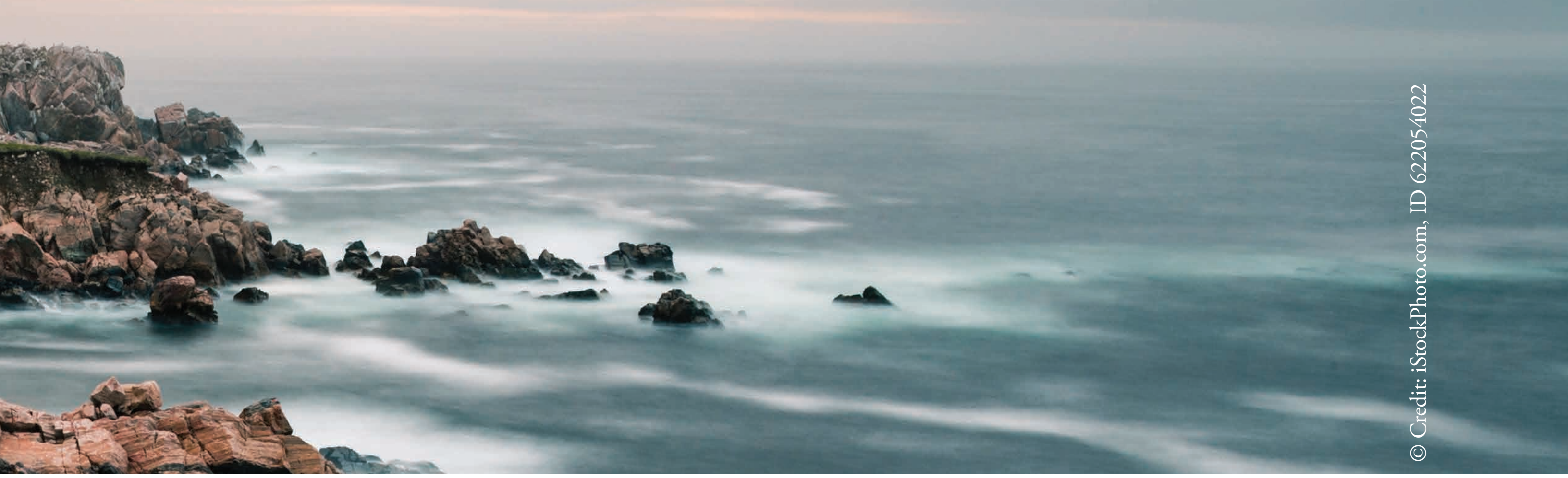
A diverse body of literature details the rates and trends of HIV in Indigenous populations; however, information about the prevalence of acquired immunodeficiency syndrome (AIDS)[4] in Indigenous populations is limited, primarily due to a tendency to report on HIV and AIDS collectively.[5]

The literature reveals that First Nations, Inuit, and Métis populations are disproportionately impacted by HIV. In 2020, Indigenous people comprised 18.2% of all new HIV infections in Canada, representing an increase of 3.5% since 2018, while the incidence rate of HIV was almost four times greater than the general population. Regional data also showed high rates of HIV among Indigenous populations. For example, in 2018, 50% of new HIV cases reported in Manitoba were among self-identified

---

[4] AIDS is the advanced stage of HIV infection that can occur when HIV is left untreated. During this stage of HIV, the body's immune system is so badly weakened that life expectancy without medication is only about one to three years.

[5] The collective reporting of HIV and AIDS may be attributed to the fact that because HIV is now well treated, few people progress to AIDS.



© Credit: iStockPhoto.com, ID 622054022

Indigenous people. This rate represented a substantial increase in new HIV diagnoses among Indigenous populations reported in the province since 2006. First Nations people in Alberta and Saskatchewan also accounted for a disproportionately high percentage of new HIV diagnoses. In contrast, no new HIV cases were reported in Nunavut over the 2007-2014 period. Data pertaining to Métis peoples are unavailable.

UNAIDS, a joint United Nations programme on HIV/AIDS, established a framework in 2014 for eliminating AIDS globally, with targets set at 90-90-90.[6] In 2023, these targets were revised to 95-95-95. Canada has routinely reported on its progress in meeting these targets and is close to achieving the 90-90-90 targets; however, more work is needed to achieve the 95-95-95 targets. Data on how well the country is meeting these targets with respect to First Nations, Inuit, and Métis populations are sparse. Regional data showed that the targets have been more difficult to meet for First Nations populations in Saskatchewan and Alberta but less difficult for Indigenous people in federal corrections facilities, suggesting that targets may be better met in an institutional setting where food, shelter, and potentially STBBI services and harm reduction programs may be more accessible.

The difficulties in achieving UNAIDs targets in relation to Indigenous populations may be attributed to barriers that hinder Indigenous people's access to care and/or their willingness and capacity to adhere to treatment. This includes injection drug use, which is considered the primary exposure pathway for HIV among Indigenous populations, and culturally unsafe services or treatment. Recent studies showing that Indigenous people may be at increased risk of not achieving an undetectable viral load and of experiencing a viral rebound[7] lend some support to this finding.[8] Although recent data on the prevalence of AIDS among Indigenous populations are not available, given the challenges Canada faces in meeting its global targets, it is likely that Indigenous people will be over-represented in AIDS cases.

---

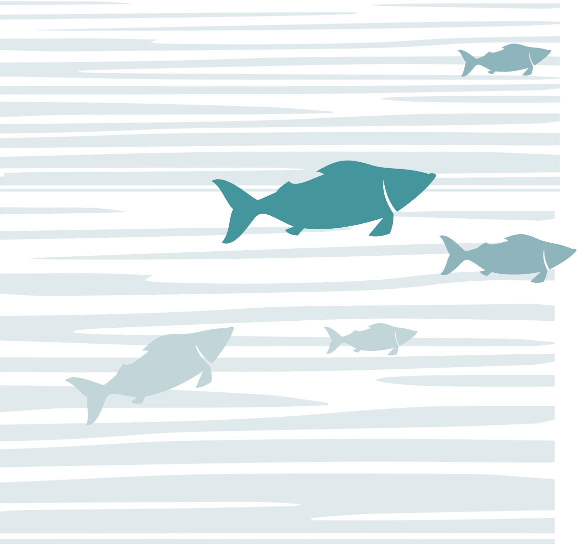
[6] These targets refer to the proportion of the population who are aware of their HIV status, the proportion of diagnosed people who are receiving antiretroviral treatment, and the proportion of people on treatment who have achieved viral suppression by the target date. In 2014, these targets were set at 90-90-90 to be achieved by 2020; the recently released 95-95-95 targets were slated to be achieved by 2030.

[7] When medication is taken as prescribed, the presence of the virus in the body can be reduced to levels considered undetectable (undetectable viral load). At this level, HIV is no longer highly infectious and cannot be spread to others. However, if medication is interrupted, the presence of the virus (viral load) increases, increasing the infectiousness of HIV.

[8] See for example, Hosein (2017). Exploring viral suppression rates among some Indigenous people who started ART. *CATIE News*, January 12; Kerkerian et al. (2018). Attrition across the HIV cascade of care among a diverse cohort of women living with HIV in Canada. *Journal of Acquired Immune Deficiency Syndrome, 79*(2), 226-236; and Palmer et al. (2018). Viral suppression and viral rebound among young adults living with HIV in Canada. *Medicine, 97*(22), e10562.

Hepatitis B virus (HBV)

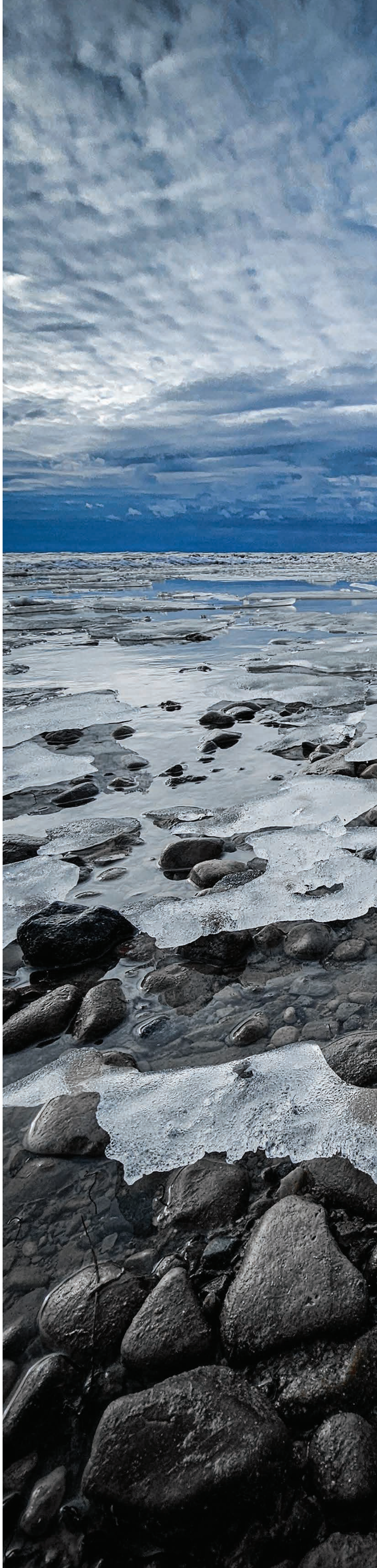
Data on the prevalence of HBV in Indigenous communities are exceptionally limited, with no new data for First Nations or Métis populations over the past 10 years. In 2019, the rate of chronic HBV in Nunavut was 10.4 per 100,000 population, which was less than the national rate of 13.1 per 100,000 population. Prior to the introduction of a childhood vaccination program, HBV was considered endemic in Nunavut; however, HBV exposure was reduced dramatically among individuals born after the program was implemented. Indigenous populations are at increased risk of HIV-HBV co-infection because they are acquired in similar ways.



Hepatitis C (HCV)

Rates of HCV have fluctuated widely among Indigenous populations and have routinely been 2-6 times greater than the national average. In 2016, the rate of newly diagnosed HCV was three times higher among First Nations living on reserve compared to the general population in Canada. Prevalence of HCV has been particularly high among Indigenous men and women who are incarcerated. Regional data, while limited, suggests that HCV may be disproportionately higher among First Nations populations in Alberta and Saskatchewan than in the Atlantic provinces, and among First Nations living off reserve in Ontario compared to those living on reserve. The regional data also show lower rates of HCV among First Nations people living in northern communities compared to those living in southern communities, and among Inuit living in Nunavut. In 2019, Nunavut had the lowest rate of HCV in the country.

Injection drug use is the most common HCV exposure pathway for Indigenous people, especially among youth populations. Because HCV shares some of the same modes of transmission as HIV, co-infection is possible, thus supporting the need for co-screening and preventative interventions.

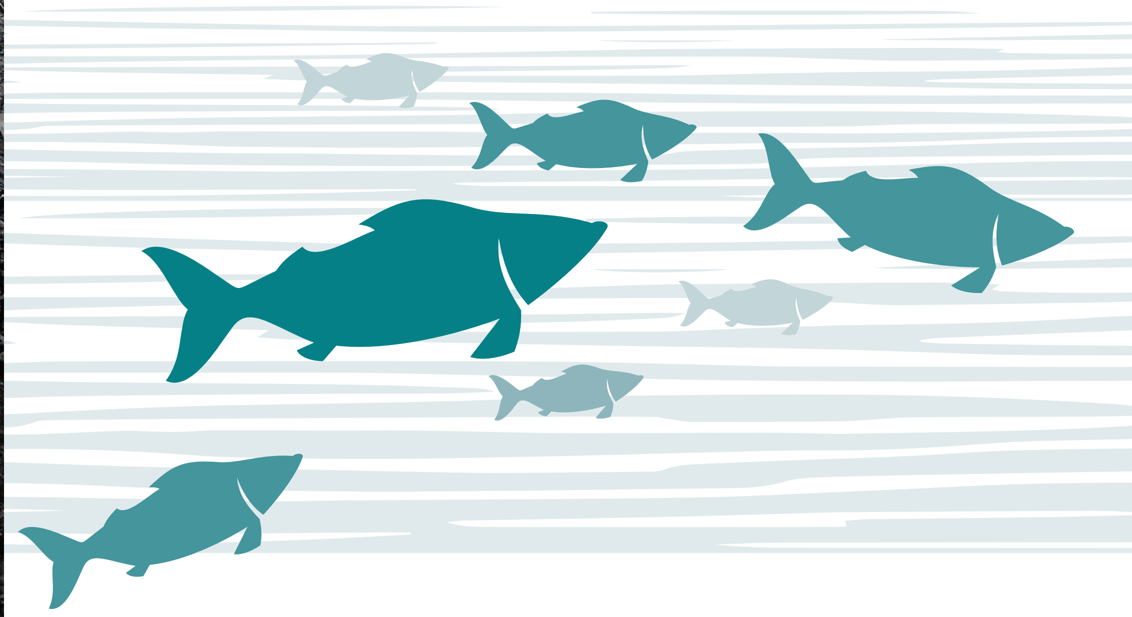


© Credit: iStockPhoto.com, ID 2203902812

Conclusion

The statistics described in this summary provide a snapshot of STBBI rates and trends in Indigenous populations across Canada. This snapshot reveals particularly high rates of STBBIs for select First Nations and Inuit populations. Rates of STBBIs that are primarily transmitted through sexual activity such as syphilis, gonorrhea, and Chlamydia appear to be on the rise. Since these STBBIs can be transmitted from mothers to infants during childbirth, increases in STBBI among Indigenous women may also increase infection among infants, with potentially harmful health consequences in the long term.

The paucity of national-level data on STBBIs among Indigenous populations is problematic. Stale data have the potential to hinder the development of effective solutions for improving STBBI health outcomes for Indigenous people. This surveillance gap needs to be addressed through the consistent application of Indigenous identifiers in the collection of STBBI data across all federal, provincial, and territorial jurisdictions. It is important to note, however, that statistics alone do not tell the full story of the broader structural and systemic contexts facing Indigenous populations. To fully understand the rates and trends of STBBIs and support effective solutions among these populations, greater understanding of the intersecting factors that influence Indigenous peoples' health and well-being, generally, is required.



NCCIH-NCCID STBBI RESOURCES

Resources exploring the effects of the COVID-19 pandemic on Indigenous peoples' access to STBBI and related health services

Together, the National Collaborating Centre for Indigenous Health (NCCIH) and National Collaborating Centre for Infectious Diseases (NCCID), with the support of the Public Health Agency of Canada (PHAC), have developed a suite of ten knowledge translation products to enhance understanding of how the COVID-19 pandemic affected the accessibility, availability, and delivery of health services for sexually transmitted and blood-borne infections (STBBI), including harm reduction services, for First Nations peoples, Inuit, and Métis peoples during the pandemic.

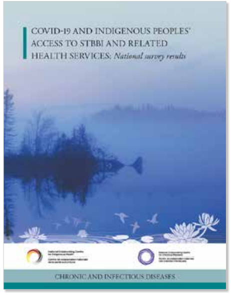
nccih.ca/485/NCCIH_in_the_News.nccih?id=530


COVID-19 AND INDIGENOUS PEOPLES' ACCESS TO STBBI AND RELATED HEALTH SERVICES: *A qualitative study*

CHRONIC AND INFECTIOUS DISEASES

COVID-19 AND INDIGENOUS PEOPLES' ACCESS TO STBBI AND RELATED HEALTH SERVICES:
A QUALITATIVE STUDY


Report summary for the qualitative study and an infographic with recommendations.


COVID-19 AND INDIGENOUS PEOPLES' ACCESS TO STBBI AND RELATED HEALTH SERVICES: *National survey results*

CHRONIC AND INFECTIOUS DISEASES

COVID-19 AND INDIGENOUS PEOPLES' ACCESS TO STBBI AND RELATED HEALTH SERVICES:
NATIONAL SURVEY RESULTS


A report summary and infographic summarizing the national survey.


SEXUALLY TRANSMITTED AND BLOOD-BORNE INFECTIONS IN INDIGENOUS POPULATIONS: *Background paper*

CHRONIC AND INFECTIOUS DISEASES

SEXUALLY TRANSMITTED AND BLOOD-BORN INFECTIONS IN INDIGENOUS POPULATIONS:
BACKGROUND PAPER


Three plain language summaries covering rates and trends, health promotion, and social determinants.

National Collaborating Centre for Indigenous Health
Centre de collaboration nationale de la santé autochtone

National Collaborating Centre for Infectious Diseases
Centre de collaboration nationale des maladies infectieuses