

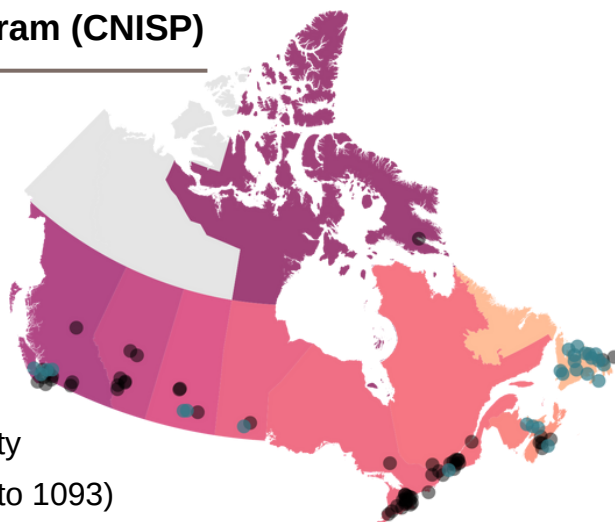
# Trends among healthcare-associated infections (HAIs) and antimicrobial-resistant organisms (AROs) in Canada

## Canadian Nosocomial Infection Surveillance Program (CNISP)

HAIs and AROs are a major threat to global public health due to their increased morbidity, mortality, healthcare cost and burden on hospitals.

In 2020, CNISP conducted active surveillance in **87** adult and/or pediatric acute care hospitals across 10 provinces and one territory:

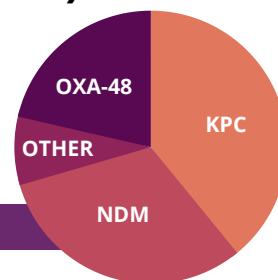
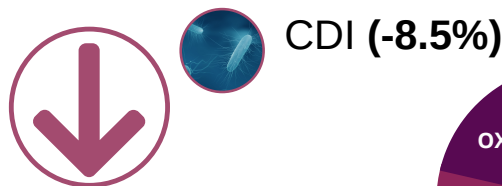
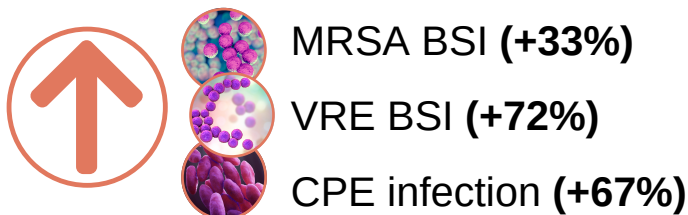
- **27 (31%)** were **non-teaching hospitals** in the community
- The median number of hospital beds was **228** (range: 3 to 1093)



### HAIs and AROs, 2016-2020

In 2020, **1 in 223** patients admitted to a CNISP participating hospital had a MRSA BSI, VRE BSI, CPE or *C. difficile* infection.

#### Percent change from 2016 to 2020

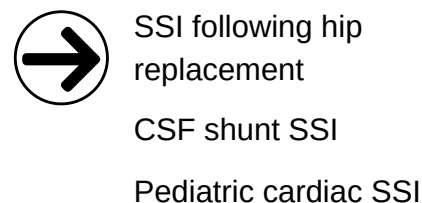
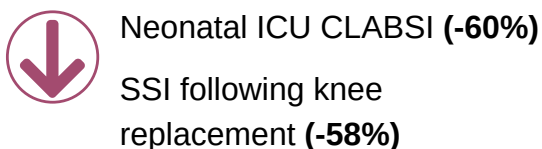
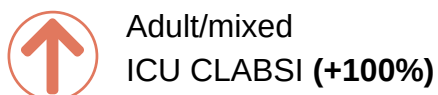


Among CPE in 2020, KPC, NDM and OXA-48 made up 91.9% of carbapenemases. To learn more, click [here](#).

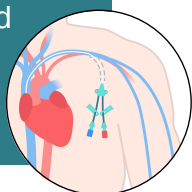
### Device and surgical procedure-related infections, 2011-2020

In 2020, **1 in 171** patients undergoing a hip or knee replacement, paediatric cardiac, or CSF shunt surgery at a CNISP participating hospital had a SSI.

#### Percent change from 2011 to 2020

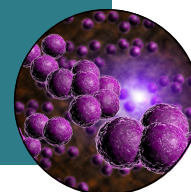


CLABSIs in ICU represented 67% of identified device and surgical procedure-related HAIs (n=4,751).



To learn more, click [here](#).

CoNS (27%) and *S. aureus* (16%) were the most frequently reported pathogens among identified device and surgical procedure-related HAIs (n=5,071).



MRSA BSI, Methicillin-resistant *Staphylococcus aureus* bloodstream infections; VRE BSI, Vancomycin-resistant *Enterococci* bloodstream infections; CPE, Carbapenemase-producing *Enterobacteriales*; CDI, *Clostridioides difficile* infection; KPC, *Klebsiella pneumoniae* carbapenemase; NDM, New Delhi metallo-β-lactamase; OXA-48, Carbapenem-resistant OXA β-lactamases; SSI, Surgical site infections; CSF, Cerebrospinal fluid; CLABSI, Central line-associated bloodstream infections; ICU, Intensive care unit; CoNS, Coagulase-Negative *Staphylococci*

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