Canadian Nosocomial Infection Surveillance Program

Established in 1994, CNISP conducts national surveillance in sentinel acute-care hospitals across Canada on healthcare-associated infections such as bloodstream infections and on antimicrobial resistant organisms such as methicillin-resistant *Staphylococcus aureus*

This time-line highlights the significant milestones initiated by CNISP which have provided the data needed to monitor and help reduce the impact of healthcare-associated and antimicrobial resistant infections.

**1994**
- **35 HOSPITALS** participate in CNISP
- *MRSA* surveillance initiated
- *NML* analyzed molecular characteristics (strain typing) and antibiotic resistance testing of *MRSA*

**1995**
- *MRSA* surveillance completed
- 4-week HA-CDI surveillance study completed

**1996**
- *MRSA* surveillance initiated

**1997**
- *ESBL* surveillance initiated
- *NML* identified molecular characteristics (strain typing) and antibiotic resistance testing of *VRE* and *E.coli*

**1998**
- *BSI* surveillance in ICUs and hemodialysis units conducted for 6-month pilot period

**2000**
- **35 HOSPITALS** participate in CNISP
- *Post CSF shunt insertion SSI* pilot study conducted from 2000–2002
- *NML* developed a new gene that makes an Enterococci species resistant to the antibiotic vancomycin

**2001**
- *NML* identified molecular characteristics of *E.coli* resistant to the antibiotic cefoxitin

**2002**
- *A point prevalence survey* counting all HAIs that were present during a 24-hour period in acute-care hospitals was conducted
- *NML* analyzed *E.coli* and Klebsiella organisms that produce enzymes making them resistant to the penicillin family of antibiotics

**2003**
- *NML* analyzed *E.coli* and *CVC-BSI* surveillance initiated
- *Ongoing HA-CDI and CVC-BSI surveillance initiated*

**2004**
- *NML* identified and characterized a *C. difficile* isolate with reduced susceptibility to vancomycin
- *A second point prevalence survey* counting all HAIs that were present during a 24-hour period in acute-care hospitals was conducted
- *Pandemic H1N1 surveillance* added to Adult flu surveillance, data sent to FluWatch thereby enhancing national flu data
- *Surveillance for organisms that are resistant to the group of last resort antibiotics known as carbapenems (CRGN)* initiated

**2005**
- *65 HOSPITALS* now participate in CNISP
- *NML* identified and characterized a *C. difficile* isolate with reduced susceptibility to vancomycin

**2006**
- *NML* detected and molecularly characterized first heterogeneous *VRE*

**2007**
- *Surveillance fororganisms that are resistant to the group of last resort antibiotics known as carbapenems (CRGN)* initiated

**2008**
- *Ongoing HA-CDI and CVC-BSI surveillance initiated*
- *Public Health Agency of Canada (PHAC) CNISP/Laboratory (NML) and 110 sentinel hospitals in Canada participating through CHEC/AMMI*

**2009**
- *Surveillance of SSI post Hip and Knee prosthetic surgery initiated*
- *Surveillance for organisms that are resistant to the group of last resort antibiotics known as carbapenems (CRGN) initiated*

**2010**
- *NML* identified and characterized a *C. difficile* isolate with reduced susceptibility to vancomycin

**2011**
- *Surveillance of SSI post Hip and Knee prosthetic surgery initiated*

**2012**
- *NML* molecularly characterized various strains of CA-MRSA

**2013**
- *Post pediatric cardiac surgery SSI surveillance initiated*

**2014**
- *NML* analyzed 4 plasmids from *E.coli* and *S.marcescens* bacteria that carry a gene which makes them resistant to multiple antibiotics

**2015**
- *NML* analyzed 4 plasmids from *E.coli* and *S.marcescens* bacteria that carry a gene which makes them resistant to multiple antibiotics

**2016 AND BEYOND**
- *NML* analyzed 4 plasmids from *E.coli* and *S.marcescens* bacteria that carry a gene which makes them resistant to multiple antibiotics

Since 1995, CNISP has produced over 260 publications including scientific articles, reports and conference abstracts that provide scientific evidence to inform public health action to reduce infections.