



**Provincial surveillance protocols
for
Healthcare associated infections (HAIs):
Clostridium difficile
and
Methicillin resistant *Staphylococcus aureus***

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***Clostridium difficile* infection surveillance**

Purpose: To provide a consistent provincial approach for a surveillance system for *Clostridium difficile* infection.

Background:

Public Health importance of *Clostridium difficile* associate diarrhea

Since 2000 *Clostridium difficile* infection (CDI) has become a common and serious nosocomial infectious complication in Canada.¹ Symptoms can range from asymptomatic colonization to severe diarrhea, toxic megacolon and death.² In addition to the impact on the patient's quality of life, a conservative estimate of the cost of this disease in the United States exceeds \$1.1 billion per year.³ A study by the Canadian Nosocomial Infections Surveillance Program (CNISP) found the incidence of nosocomial CDI in Canada to be 5.9 cases per 1000 admissions.⁴ However rates of 25 cases per 1000 admissions have been reported for several health care institutions in Quebec.⁵ Although every institution is different a Canadian expert recommends that institutions should aim for an incidence rate of < 6 cases per 1000 admissions or < 0.6 per 1000 patient care days (excluding pediatric cases).⁶ In 2007 the 49 hospitals participating in CNISP reported a mean incidence rate of 4.8 per 1000 admissions and 6.4 per 10,000 patient days for hospital acquired CDIs.⁷

Objectives of the surveillance system:

1. To determine the incidence and burden of disease of *Clostridium difficile* infection (CDI) in NL
2. To describe the epidemiology of CDI in NL
3. To determine the demographics for CDI in NL

Definitions:

- *Clostridium difficile* infection (CDI) case - Laboratory confirmation (positive toxin or culture with evidence of toxin production)
- Nosocomial (hospital) acquired - A case whose symptoms occur at least 72 hours or more after the current admission or symptoms cause readmission in a patient who had been hospitalized within the previous two months of the current admission or occurs less than 72 hours after discharge.
- Long Term Care acquired - Symptoms occur at least 72 hours after the admission and the resident has not had a hospital admission within the last two months
- Recurrent CDI – A case as defined above with recurrence of diarrhea within 2 months of a previous *C difficile* infection episode.
- Reinfection – A case as defined above whose symptoms started greater than 2 months from a previous *C difficile* infection.
- Episode – The time from the start of the symptoms until the symptoms resolve.
- Healthcare associated CDI- refers to infections that occur as a result of contact with the health care system for care provided in any of the following locations: emergency room, ambulatory clinics, personal care homes, doctor’s office, nursing clinics, or in the home 2 months prior to the diagnosis of CDI infection
- Community associated CDI - The patient has not had any contact with the health care system within the past two months. The symptoms onset is in the community or occurs less than 72 hours after admission to the facility
- Unknown – A patient does not fit any of the above criteria

Roles, Responsibilities & Reporting:

Laboratory testing:

All specimens requiring testing for CDI are processed through the microbiology laboratory of the acute care hospital facility in the Region.

- In the Labrador Grenfell Health Region specimens are sent from the microbiology laboratory at Captain William Jackman Memorial Hospital and the microbiology laboratory of the Labrador Health Centre to the Provincial Public Health Laboratory (PHL)
- At the Charles S. Curtis Memorial Hospital the specimens are processed on site
- In the Eastern Health Region the specimens are transported to the PHL for testing
- In the Central Health & Western Health Regions the testing is done on site

Laboratory reporting:

- The Public Health Laboratory will reports all positive samples to the referring laboratory & Medical Officer of Health in the Region
- In each Region all laboratory confirmed positive toxin assays for *Clostridium difficile* infection (CDI) will be reported by the microbiology laboratory staff to:
 - MOH
 - the attending physician and
 - the Infection Control Practitioner (ICP) responsible for CDI regional surveillance

ICP responsibilities:

All cases of *Clostridium difficile* infection will be reviewed by the Infection Control Practitioner (ICP). If necessary the ICP will collaborate with the Communicable Disease Control Nurse (CDCN) and/or the Environmental Health Officer to collect the data. The ICP will:

- determine if the person is a patient/resident in a health care facility or if the person is in the community
- review the patient's medical records to obtain clinical information including:
 - facility, care unit, type of care unit,
 - age, date of admission, reason for admission, date of discharge, sex
 - date of first positive lab specimen, reason for specimen being done
 - determination if a previous infection occurred within the previous two months, and outcome data
 - if the person required intensive care treatment as a result of the CDI
 - the patient/residents disposition at 30 days after CDI diagnosis
 - the treatment protocol
- A data collection form (Appendix A) will be completed on each case of CDI
 - Data from the form will be entered into an ACCESS[®] database.

Public Health reporting:

- On a monthly basis the ICP (responsible for regional CDI surveillance) will extract a query report from the ACCESS[®] database based on the sample CDI reporting form (Appendix C)
- This report will be sent to the Regional Medical Officer of Health (RMOH) and the provincial epidemiologist

Medical Officer of Health responsibilities:

- Review the monthly reports
- Determine actions necessary as indicated by burden of disease

Provincial epidemiologist responsibilities:

- Develop an ACCESS[®] database for the CDI information
- Implement the database for the Regions and provide an orientation for the users
- Provide the Regions with an electronic reporting mechanism
 - Ensure that the standard query report can be transmitted efficiently
- Offer ongoing technical support for database management

- Incorporate the provincial CDI report into the communicable disease monthly report
- Distribute the communicable disease monthly report to key stakeholders

Provincial Infection Control Nurse Specialist responsibilities

- Develop the protocol for CDI surveillance
- Provide input on the clinical requirements for the database development
- Review the monthly reports from the regions
- Develop a provincial report on CDI
- Review the report with the Director of Disease Control
- Transmit the report to the provincial epidemiologist for distribution to key stakeholders

Ethics:

Specific ethics approval is not required for surveillance for diseases of importance to public health; however, all data collected will be governed by the **privacy policies** within the Regional Health Authorities (RHAs) and the Provincial Department of Health. The database will be the responsibility of the Regional Health Authority. It is recommended that one person at each facility be responsible for the data entry and that the data be password protected.

Use of the data:

The data will be used to meet the objectives. The province will collect aggregate data from each RHA and no facility will be defined nominally. Additionally RHAs will be able to use their own data as they feel appropriate and may want to collect additional data to support their internal infection control programs.

Data Analysis:

The data will be entered into an ACCESS database and analyzed with the help of an epidemiologist. Included in the analysis will be the:

- rate of nosocomial *Clostridium difficile* infections per 10,000 patient /resident days
- rate of nosocomial CDI infections per 1000 patient admissions
- number of CDI recurrent infections
- number of CDI reinfections
- number of CDI community cases

References

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6. Miller M. (2006). *C difficile*-associated disease (CDAD)-what we know, what we still don't know and what we learned from the Quebec epidemic. CHICA-Canada Conference, May 19, 2006, London, Ontario.
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Appendix A: CDI Surveillance Form

1	Patient unique number	
2	Chart # (if applicable)	
3	a) Type of Care (Acute, LTC, Other)	
	b) Facility (Name)	
4	Patient Care Unit in Facility	
5	Type of patient care unit	<input type="checkbox"/> Surgical Unit <input type="checkbox"/> Critical Care Unit <input type="checkbox"/> Medical Unit <input type="checkbox"/> Obstetrical Unit <input type="checkbox"/> Combined (med/surg) Unit <input type="checkbox"/> Other; specify _____
6	Date of Birth	____/____/____ DD MMM YYYY Month = (ie., May)
7	Date of Admission	____/____/____ DD MMM YYYY
8	Reason for Admission	
9	Date of Discharge	____/____/____ DD MMM YYYY
10	Sex	<input type="checkbox"/> Male <input type="checkbox"/> Female
11	Date of current positive lab test?	____/____/____ DD MMM YYYY
12	Why was the specimen collected?	<input type="checkbox"/> clinical signs and symptoms <input type="checkbox"/> other _____
13	Has the patient ever had CDI before?	<input type="checkbox"/> No <input type="checkbox"/> Yes, less than 2 months ago <input type="checkbox"/> Yes, more than 2 months ago <input type="checkbox"/> Unknown
14	Where was the CDI acquired? (Check one answer only)	<input type="checkbox"/> Same as treatment facility (#3b) – nosocomial If not acquired in the same facility as #3b <input type="checkbox"/> Another Acute Care (AC) in region _____ <input type="checkbox"/> Another LTC in region _____ <input type="checkbox"/> An exposure outside the region _____ <input type="checkbox"/> Healthcare associated <input type="checkbox"/> Community-associated <input type="checkbox"/> Unknown
15	Did patient require ICU admission for this episode?	<input type="checkbox"/> No <input type="checkbox"/> Yes, admitted to ICU for complications of CDI
16	Treatment for CDI	<input type="checkbox"/> Metronidazole <input type="checkbox"/> x 1 <input type="checkbox"/> x 2
		<input type="checkbox"/> Vancomycin <input type="checkbox"/> x 1 <input type="checkbox"/> x 2
		<input type="checkbox"/> No antibiotic <input type="checkbox"/> Other
17	Patient disposition at 30 days after diagnosis	<input type="checkbox"/> Alive, in hospital due to CDI <input type="checkbox"/> Alive, in hospital for other reasons <input type="checkbox"/> Alive, in a LTC facility <input type="checkbox"/> Discharged from hospital prior to 30 days <input type="checkbox"/> Deceased <input type="checkbox"/> Unknown <input type="checkbox"/> Other _____

Appendix B : Data Dictionary

***Clostridium difficile* infection surveillance form data dictionary**

1. Patient unique reference number
2. Chart number for those facilities that use a chart number as a patient identifier
3. a) Type of care – Placement of the patient at the time of the positive culture; identify if it was acute care, long term care, or other. Other = living in the community or living in a personal care home at the time of the positive culture.
b) Facility – If applicable, identify the name of the acute care facility or the long term care facility where patient resided when the positive culture was identified. The facilities can be identified from the drop down tab.
4. Name of patient care unit in the facility in Question 3 eg., , H4N, 3B.
5. If the patient was in a facility when laboratory confirmation was known, indicate the type of service provided on that Unit: medical, surgical, and critical care units. The ICP should use best judgment to determine to which unit the transmission is associated.
6. Date of Birth: Please enter Day (##), Month (eg., May) and Year (2008) in this order.
7. Date of Admission: Enter Day (##), Month (eg., May) and Year (2008) in this order.
8. Reason for Admission: why is the person in the facility?
9. Date of Discharge: Enter Day (##), Month (eg., May) and Year (2008) in this order.
Not applicable – for example, if the person is a resident of LTC
10. Sex: Check male or female gender as appropriate
11. What was the date of this patient’s newly identified CDI culture? Enter day (##), Month (eg., May), and Year (2007) in this order, from the most recent diagnosed episode of CDI.
12. Identify the reason for the CDI testing.
13. Assess if the person has had previous testing for CDI and determine if this is a recurrence of CDI or a reinfection.

14. Where was the CDI acquired? - Use the definitions to guide making this decision.
- *Same as treatment facility* – This applies to CDIs which have been acquired in the treatment facility identified in #3b. If the CDI has not been acquired in the treatment facility identified in #3b choose an option in the **type of care box**:
 - Acute Care
 - Long Term Care
 - Other
 - **In the facility box** – choose either the acute care or long term care facility or choose one of the following options: outside your health region, healthcare associated, community-associated, or personal care home,
15. Outcome: Did the patient require an ICU admission due to CDI?
16. What antibiotics were prescribed for CDI? How many courses of the antibiotic were required to treat the person? X1 = one course of antibiotic; X2 = two courses of antibiotic; Other – indicate the type of antibiotic used and if one, two or more courses were required
17. Disposition: At 30 days post CDI diagnosis, where was the person?
18. Comments - for personal use not for entry into the database.

Appendix C: Sample Public Health Reporting Form for CDI

Region: _____ Month: _____ Date: _____

1. Numerator Data

Table 1: Number of CDIs in Acute Care

Facility	A. Total number of infections	B. Total number of reinfections
Acute Care Facility 1		
Acute Care Facility 2		
Total		

Total infections for Acute Care Facilities for region = A + B

Table 2: Number of CDIs in Long Term Care

Facility	A. Total number of infections	B. Total number of reinfections
Long Term Care Facility 1		
Long Term Care Facility 2		
Total		

Total infections for Long Term Care for region = A + B

2. Denominator Data

Table 3

Facility	Patient Care Days	Number of admissions
Acute Care Facility 1		
Acute Care Facility 2		
Total		

Table 4

	Resident Care Days
Long Term Care Facility 1	
Long Term Care Facility 2	
Total	

3. Number of cases of Community associated CDI infections

Table 5.

Region	Number of Cases

Methicillin resistant *Staphylococcus aureus* surveillance

Purpose: To provide a consistent provincial approach for a surveillance system for methicillin resistant *Staphylococcus aureus*.

Background:

Public Health importance of methicillin resistant *Staphylococcus aureus*

The presence of multidrug resistant organisms, especially Methicillin resistant *Staphylococcus aureus* (MRSA), has become a significant and growing public health concern especially for consumers of health care. In specific Canadian hospitals the MRSA rates increased from 0.4 cases per 1000 admissions to 5.10 per 1000 admissions between 1995 and 2003.¹ The mortality rate associated with MRSA bacteremia is significantly higher than is methicillin sensitive *Staphylococcus aureus* (MSSA) bacteremia.^{2,3} Surveillance for MRSA cases is considered a component of an infection control program.⁴ In 2008, the Canadian Council on Health Service Accreditation will require organizations to monitor and report their rates of MRSA and or *Clostridium difficile* infection as a component of the accreditation process.

Objectives of the surveillance system:

1. To determine the incidence and burden of illness associated with the MRSA in NL
2. To determine the epidemiology of MRSA in NL

Definitions:

MRSA Case – Laboratory reported positive case of MRSA identified for the first time. Cases previously identified at this or another facility are not included.

Nosocomial (hospital acquired) infected case – The infection was not present on admission, with onset of symptoms > 48 hours after admission to the acute care facility, or the infection was present at the time of admission but is related to a previous admission to the same facility within the last 12 months.

Nosocomial (hospital acquired) colonized case – The case was identified as part of a screening endeavor 48 hours or more after the patient was admitted to the facility.

Long term care acquired infected case – The case must have developed the symptoms 72 hours or more after the residents was admitted to the facility and the resident was not a patient in the hospital during the past 12 months.

Long term care acquired colonized case – The case must have been identified 72 hours or more after the residents was admitted to the facility as part of a screening endeavor and the resident was not a patient in the hospital during the past 12 months.

Health care associated – refers to infections that occur as a result of contact with the health care system for care provided in any of the following locations: emergency room, ambulatory clinics, personal care homes, doctor’s office, nursing clinics, or care provided in the home within the past 12 months.

Community associated case – No established health-care associated risk factors, and:

- Hospitalized <72 hours
- No previous history of MRSA
- No medical devices such as urinary catheters, I/V lines, feeding tubes, tracheostomy, dialysis access, etc.
- No history of hospitalization, surgery, or dialysis within 1 year of MRSA culture
- Not in residence at a long term care facility within 1 year of MRSA culture

Roles, Responsibilities & Reporting:

Laboratory responsibilities:

Laboratory testing

All specimen requiring testing for culture and sensitivity are processed through the microbiology laboratory of the acute care hospital facility in the Region.

- In the Labrador Grenfell Health Region the specimens showing methicillin *Staphylococcus aureus* resistance are sent from the microbiology laboratory at Captain William Jackman Memorial Hospital and the microbiology laboratory of the Labrador Health Centre to the Provincial Public Health Laboratory (PHL) for confirmatory testing
- At the Charles S. Curtis Memorial Hospital the specimens are processed on site

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- In the Eastern Health, Central Health & Western Health Regions the testing of specimens for culture and sensitivity is done on site

Laboratory reporting

- The Public Health Laboratory reports all positive samples for MRSA to the referring microbiology laboratory and to the Medical Officer of Health
- The microbiology laboratory staff in each facility will report all confirmed cases of MRSA to the
 - MOH
 - Attending physician and the
 - Infection Control Practitioner (ICP) responsible for MRSA regional surveillance

ICP responsibilities:

All laboratory identified cases of MRSA will be reviewed by an Infection Control Practitioner (ICP). The ICP will determine if the case meets the criteria in the definitions section. Cases previously known will be excluded. If necessary the ICP will collaborate with the Communicable Disease Control Nurse (CDCN) to collect the data. The ICP will:

- Review the patient's medical record to obtain clinical information including:
 - facility, care unit, type of care unit
 - age, date of admission, reason for admission, date of discharge, sex
 - date of first positive lab specimen, and the reason for the specimen being done
 - According to the ICP's best judgment an attempt will be made to determine whether the MRSA was acquired in a hospital, in a long-term care facility or in the community
 - An endeavor will be made to establish if a case is epidemiological linked to other known cases in the facility
 - The presence of infection caused by MRSA will be determined according to standard definitions used in infection surveillance⁵
 - MRSA colonization will be defined as the presence of MRSA without any clinical signs or symptoms of infection⁶
- A data collection form (Appendix A) will be filled in on each case of MRSA and forwarded to the ICP responsible for Regional surveillance.
- Data from the form will be entered into an ACCESS[®] database

Public Health reporting:

On a monthly basis the ICP (responsible for Regional MRSA surveillance) will extract a query report from the ACCESS[®] database based on the sample MRSA reporting form (Appendix C)

- The ICP will sent the report to the Regional Medical Officer of Health (RMOH) and to the CDCN
- The CDCN will transmit the MRSA monthly report to the province

Medical Officer of Health responsibilities:

- Review the monthly reports
- Determine any actions necessary as indicated by burden of disease

Provincial epidemiologist responsibilities:

- Develop an ACCESS[®] database for the MRSA information
- Implement the database for the Regions and provide an orientation for the users
- Provide the Regions with an electronic reporting mechanism
 - Ensure that the standard query report can be transmitted efficiently
- Offer ongoing technical support for database management
- Incorporate the provincial MRSA report into the communicable disease monthly report
- Distribute the communicable disease monthly report to key stakeholders

Provincial Infection Control Nurse Specialist responsibilities

- Develop the protocol for MRSA surveillance
- Provide input on the clinical requirements for the database development
- Review the monthly reports from the regions
- Develop a provincial report on MRSA
- Review the report with the Director of Disease Control
- Transmit the report to the provincial epidemiologist

Ethics:

Specific ethics approval is not required for surveillance for diseases of importance to public health; however, all data collected will be governed by the **privacy policies** within the Regional Health Authorities (RHAs) and the Provincial Department of Health. The database will be the responsibility of the Regional Health Authority. It is recommended that one infection control practitioner at each facility is responsible for the data entry and that the data be password protected.

Use of the data:

The data will be used to meet the objectives. The province will collect aggregate data from each RHA and no facility will be defined nominally. Additionally RHAs will be able to use their own data as they feel appropriate and may want to collect additional data to support their internal infection control programs.

Data Analysis:

The data will be entered into an ACCESS database and analyzed with the help of an epidemiologist. Included in the analysis will be the:

- rate of nosocomial MRSA infections per 10,000 patient days
- rate of nosocomial MRSA colonizations per 10,000 patient days
- rate of nosocomial MRSA infections per 1000 admissions
- rate of nosocomial MRSA colonizations per 1000 admissions
- rate of Long Term Care acquired infections per 1000 resident days
- rate of Long Term Care acquired colonizations per 1000 resident days

- number of community associated cases

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Appendix A: MRSA Surveillance Form

1	Patient unique number	
2	Chart # (if applicable)	
3	a) Type of Care (Acute, LTC, Other)	
	b) Facility (Name)	
4	Patient Care Unit in Facility	
5	Type of patient care unit	<input type="checkbox"/> Surgical Unit <input type="checkbox"/> Critical Care Unit <input type="checkbox"/> Medical Unit <input type="checkbox"/> Obstetrical Unit <input type="checkbox"/> Combined (med/surg) Unit <input type="checkbox"/> Other; specify _____
6	Date of Birth	____ / ____ / ____ DD MMM YYYY (Month=eg., May)
7	Date of Admission	____ / ____ / ____ DD MMM YYYY
8	Reason for Admission	
9	Date of Discharge	____ / ____ / ____ DD MMM YYYY
10	Sex	<input type="checkbox"/> Male <input type="checkbox"/> Female
11	What was the date of this patient's newly identified MRSA culture?	____ / ____ / ____ DD MMM YYYY
12	Why was the first culture done? (Check one answer only)	<input type="checkbox"/> Admission screen <input type="checkbox"/> Clinical isolate <input type="checkbox"/> Contact screening <input type="checkbox"/> Other screening _____
13	Where was the MRSA acquired? (Check one answer only)	<input type="checkbox"/> Same as treatment facility (#3b) – nosocomial If not acquired in the same facility as #3b <input type="checkbox"/> Another Acute Care (AC) in region _____ <input type="checkbox"/> Another LTC in region _____ <input type="checkbox"/> An exposure outside the region _____ <input type="checkbox"/> Healthcare associated <input type="checkbox"/> Community-associated <input type="checkbox"/> Unknown
14	At which site has MRSA been isolated (positive culture obtained)? Check all that apply	
	Site of positive culture	Infected or colonized
	<input type="checkbox"/> Blood	<input type="checkbox"/> Infected
	<input type="checkbox"/> Surgical wound	<input type="checkbox"/> Infected <input type="checkbox"/> Colonized
	<input type="checkbox"/> Sputum/Respiratory	<input type="checkbox"/> Infected <input type="checkbox"/> Colonized
	<input type="checkbox"/> Urine	<input type="checkbox"/> Infected <input type="checkbox"/> Colonized
	<input type="checkbox"/> Rectum/Peri-anal/Perineum	<input type="checkbox"/> Infected <input type="checkbox"/> Colonized
<input type="checkbox"/> Nose	<input type="checkbox"/> Colonized	

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	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Infected <input type="checkbox"/> Colonized
15	Is the patient epidemiologically linked to others within your institution?	<input type="checkbox"/> No <input type="checkbox"/> Yes
16	Treatment for MRSA	<input type="checkbox"/> Vancomycin <input type="checkbox"/> No antibiotic <input type="checkbox"/> Other _____
17	Patient disposition at 30 days after diagnosis	<input type="checkbox"/> Alive, in hospital due to MRSA <input type="checkbox"/> Alive, in hospital for another reason <input type="checkbox"/> Alive, in a LTC facility <input type="checkbox"/> Discharged from hospital prior to 30 days <input type="checkbox"/> Deceased <input type="checkbox"/> Unknown <input type="checkbox"/> Other _____

Comment: _____

Appendix B: MRSA questionnaire Data Dictionary

1. Patient unique reference number
2. Chart number for those facilities that use a chart number as a patient identifier
3. a) Type of care – Placement of the patient at the time of the positive culture; identify if it was acute care, long term care, or other. Other = living in the community or living in a personal care home at the time of the positive culture.
b) Facility – If applicable, identify the name of the acute care facility or the long term care facility where the patient resided when the positive culture was identified. The facilities can be identified from the drop down tab.
4. Patient Care Unit - Name of patient/resident care unit of facility in Question 3 eg., 4NB, 3B
5. If the patient was in hospital when laboratory confirmation was known, indicate the type of service provided on that Unit: : medical, surgical, critical care etc. The ICP should use best judgment to determine the Unit associated with the transmission
6. Date of Birth: Please enter Day (##), Month (eg., May) and Year (2008) in this order.
7. Date of Admission: Enter Day (##), Month (eg., May) and Year (2008) in this order.
8. Reason for Admission: why is the person in the facility?
9. Date of Discharge: Enter Day (##), Month (eg., May) and Year (2008) in this order.
Not applicable – If person a resident of LTC
10. Sex: Check male or female gender as appropriate
11. Enter Day (##), Month (eg., May) and Year (2008) in this order, for the most recent diagnosed MRSA culture
12. Why was the culture done: Check the appropriate response
 - **Admission screening** – This culture was done as part of a protocol on admission that requires patients to be screened for MRSA.
 - **Clinical Isolate** – This culture was a result of some clinical indication or suspicion of infection.
 - **Contact Screen** – The screening was done due to the patient/resident being in the room, ward or unit of a recently identified positive case
 - **Other screen** – This culture was taken in the course of working-up an outbreak or cluster, prevalence screen or other screening for MRSA. This culture would not have been done routinely.
13. Where was the MRSA acquired? Use the definitions to guide making this decision.

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- *Same as treatment facility* – This applies to MRSA infection or colonization which had been acquired in the treatment facility identified in #3b. If the MRSA has not been acquired in the treatment facility identified in #3b choose an option in the **type of care box**:
 - Acute Care
 - Long Term Care
 - Other
- **In the facility box** – choose either the acute care, long term care facility or choose one of the following options: outside your health region, healthcare associated, community-associated, or personal care home

14. At which site has MRSA been isolated (positive culture obtained)?

- Check the boxes in the culture positive column for each site that MRSA has been isolated
- In the second column identify whether the positive culture represented an infection or colonization. MRSA infection is determined by the presence of signs and symptoms associated with MRSA infections. MRSA colonization is the presence of MRSA on the skin, soft tissue, nose or other site which is not associated with clinical signs and symptoms of infection. If the person is found to be colonized from one site and infected at another site, the person would be considered an infected case.

15. Epidemiological link:

- This refers to MRSA thought to be epidemiologically linked to another person with MRSA in your facility through (e.g., common exposures, shared rooms, contact with implicated healthcare worker, contact with another person with MRSA). Using your “Best Judgment” identify whether an epidemiological link has been established between this person and any other known MRSA person in your facility. Check yes or no.

16. Was an antibiotic prescribed for the MRSA diagnosis? If yes, which antibiotic?

17. Outcome: At 30 days post MRSA diagnosis, where was the person?

Comments - for personal use not for entry into the database.

Methicillin resistant *Staphylococcus aureus* surveillance protocol
Appendix C: Sample Public Health Reporting Form for MRSA

Region: _____ Month: _____ Date: _____

1. Numerator Data

Table 1: Number of MRSA infections & colonizations for each Acute Care Facility

Facility	Number of MRSA infections	Number of MRSA colonizations
Acute Care Facility 1		
Acute Care Facility 2		
Total		

Table 2: Number of MRSA Infections & Colonization for each Long Term Care Facility

Facility	Number of MRSA infections	Number of MRSA colonizations
Long Term Care Facility 1		
Long Term Care Facility 2		
Total		

2. Denominator Data

Table 3. Number of Patient Care Days and Number of Admissions for each Acute Care Facility

	Patient Care Days	Number of Admissions
Acute Care Facility 1		
Acute Care Facility 2		
Total		

Table 4. Number of Resident Care Days for each Long Term Care Facility

Facility	Resident Care Days
Long Term Care Facility 1	
Long Term Care Facility 2	
Total	

3. Number of cases of Community associated infections

Table 3. Number of cases of Community associated MRSA infections

Region	Number of Cases