

WFPICCS SEPSIS SURVEY

PLEASE COMPLETE THE FOLLOWING SURVEY BY FILLING IN THE BLANKS PROVIDED. Some questions will require you to check the box associated with your response. FOR QUESTIONS, please contact either Dr. Kissoon at nkissoon@cw.bc.ca or the Data Manager, Victor Espinosa at vespinosa@cw.bc.ca

1.0 GENERAL INFORMATION

1.1 Date of assessment: _____

1.2i Name (or initials) of person Completing the Form: _____

1.2ii Title of person Completing the Form: _____

1.2iii Email address of person Completing the Form: _____

1.3 Name of Health Facility: _____

- 1.4 Health facility affiliation
- Government
 - Private
 - Not for profit
 - NGO-base
 - Acedemic university
 - Other

Other: _____

1.5i City location of Health Facility _____

1.5ii Country location of Health Facility _____

- 1.6 Type of health facility
- District clinic
 - District hospital
 - Regional hospital
 - Tertiary care referral general hospital
 - Tertiary care childrens hospital
 - Other

Other: _____

1.7 TOTAL NUMBER OF STAFF IN THE HOSPITAL:

Indicate below the number of staff in the hospital for each category:

Pediatric specialists _____

Pediatric residents _____

General physicians _____

Medical officers _____

Interns _____

Nurses _____

Nursing aides _____

Lab technicians _____

Non-professional _____

Other _____

Specify other: _____

2.0 BARRIERS TO SEPSIS THERAPY

2.1 Important barriers to appropriate sepsis therapy in your setting:

In the area where you practice, think about the most important barriers to appropriate sepsis therapy for children. Mark how strongly you agree/disagree with the following as barriers to sepsis therapy.

1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree

2.1.1 Deficits in parental education

1 2 3 4 5

2.1.2 Access to health care services

1 2 3 4 5

2.1.3 Lack of medical equipment resources

1 2 3 4 5

2.1.4 Lack of vascular access and crystalloid resuscitation

1 2 3 4 5

2.1.5 Lack of antibiotics

1 2 3 4 5

2.1.6 Failure to diagnose sepsis by referring facilities

1 2 3 4 5

2.1.7 Not enough trained hospital person

1 2 3 4 5

2.1.8 No defined protocol for managing pediatric sepsis

1 2 3 4 5

2.1.9 Long triage waiting times

1 2 3 4 5

2.2 What other barriers exist for delivering sepsis therapy to children? List them below:

3.0 ACUTE CARE/EMERGENCY MANAGEMENT AREA (FIRST CONTACT WITH HOSPITAL)

3.1 Staff and Operation Description

3.1.1 Is there an acute care area or emergency management area where acutely ill/injured children are managed?

Yes No

3.1.2 Is the paediatric acute care area separate from the adult area?

Yes No

3.1.3 How many hours/day is the pediatric acute care area functional?

3.1.4 Is the acute care area open at night?

Yes No

3.1.5 Is the acute care area open on weekends?

Yes No

3.1.6 Which is the distribution of ED staff over 24 hours? Enter the number staff in each category according to DAYSHIFT and NIGHTSHIFT.

Number on DAYSHIFT

Pediatric specialists

Pediatric residents

General physicians

Medical officers

Interns

Nurses

Nursing aides

Lab technicians _____

Other _____

TOTAL ED staff on DAYSHIFT: _____

Number on NIGHTSHIFT

Pediatric specialists _____

Pediatric residents _____

General physicians _____

Medical officers _____

Interns _____

Nurses _____

Nursing aides _____

Lab technicians _____

Other _____

TOTAL ED staff on NIGHTSHIFT: _____

3.2 Functional Description

3.2.1 Is there a system to screen and prioritize very sick children?

Yes No

3.2.2 Who is responsible for prioritizing:

- Pediatric specialists
- Pediatric residents
- General physicians
- Medical officers
- Interns
- Nurses
- Nursing aides
- Other

3.2.3 What is the average time (units below) from arrival to prioritization: _____

- hours
- mins

3.2.4 What is the average time (units below) from prioritization to being seen by a physician: _____

- hours
- mins

3.2.5 Are any specific guidelines used for prioritization:

IMCI (Integrated Management of Childhood Illnesses)

Yes No

ETAT (Emergency Triage Assessment and Treatment)

Yes No

APLS (Advanced Pediatric Life Support)

Yes No

ACCM/PALS (American College of Critical Care Medicine/Pediatric Advanced Life Support)

Yes No

Specify other guidelines: _____

3.3 Are children with suspected sepsis given emergency priority:

Yes No

Describe how these children are given priority. COMMENTS:

3.4 Staff Expertise

3.4.1 Are the staff trained in screening and prioritization of the severely ill children?

Yes No

3.4.2 What specific training do they received:

IMCI (Integrated Management of Childhood Illnesses

Yes No

ETAT (Emergency Triage Assessment and Treatment)

Yes No

APLS (Advanced Pediatric Life Support)

Yes No

ACCM/PALS (American College of Critical Care Medicine/Pediatric Advanced Life Support)

Yes No

Other training:

Yes No

Specify:

Additional other training:

Yes No

Specify:

4.0 PEDIATRIC WARD/INPATIENT AREA (HOSPITALIZED CHILDREN)

4.1 Staff and Operation Description

4.1.1 How many total pediatric beds are in the facility? _____

4.1.2 Are there specific beds designated for acutely ill children on the unit/ward?

Yes No

If YES, how many? _____

4.1.3 Are these beds located on the ward?

Yes No

4.1.4 Are these beds located in a designated pediatric ICU?

Yes No

4.1.5 Do you have an infectious disease (isolation) ward?

Yes No

4.1.6 Do patients come with referral notes when they have been referred from first level units?

Never Sometimes Often Most of the time Always

COMMENTS:

4.1.7 What is the distribution of ward staff over 24 hours?

Number on DAYSHIFT

Pediatric specialists

Pediatric residents

General physicians

Medical officers

Interns

Nurses

Nursing aides

Lab technicians

Other

TOTAL ward staff on DAYSHIFT

Number on NIGHTSHIFT

Pediatric specialists

Pediatric residents

General physicians

Medical officers

Interns

Nurses

Nursing aides

Lab technicians

Other

TOTAL ward staff on NIGHTSHIFT

4.1.8i Is there a physician on call 24 hours?

- Yes No

4.1.8i Who is the frontline care provider?

- Pediatric specialist
- Pediatric resident
- General physician
- Intern
- Medical officer
- Other

Specify:

4.1.9 Who receives the new patients on the ward?

- Pediatric specialists
- Pediatric residents
- General physicians
- Medical officers
- Interns
- Nurses
- Nursing aides
- Other

Specify:

4.2 Functional Description

4.2.1 DESCRIBE what would happen to a child with suspected SEPSIS sent to ER and the ward/ICU:

Vascular access obtained immediately

>1hr No

Crystalloid bolus given (

>1hr No

Antibiotics given (

>1hr No

Central line started

>1hr No

Arterial line started

>1hr No

Blood cultures sent

>1hr No

Chest X-Ray obtained

>1hr No

Blood gas obtained

>1hr No

Attending physician sees patient

>1hr No

4.2.2 Who sees the patient first?

- Pediatric specialists
- Pediatric residents
- General physicians
- Medical officers
- Interns
- Nurses
- Nursing aides
- Other

4.2.3 Who reviews the patient?

- Pediatric specialists
- Pediatric residents
- General physicians
- Medical officers
- Interns
- Nurses
- Nursing aides
- Other

4.2.4 How is the child's severity of illness determined?

- Physical exam alone
- Algorithm (IMCI or ETAT)
- Institutional protocol
- Scoring system
- Lab values
- Other

4.2.5 Who is responsible for achieving vascular access?

- Pediatric specialists
- Pediatric residents
- General physicians
- Medical officers
- Interns
- Nurses
- Nursing aides
- Other

4.2.6 Who is responsible for administering crystalloid boluses?

- Pediatric specialists
- Pediatric residents
- General physicians
- Medical officers
- Interns
- Nurses
- Nursing aides
- Other

4.2.7 What PERCENTAGE of patients with sepsis receive IV fluid resuscitation according to the PALS/ACCM guidelines? [up to and over 60ml/kg in the first 15 minutes titrated to improved perfusion and evaluating for development of rales/hepatomegaly]

4.2.8 Who prescribes antibiotics?

- Pediatric specialist
- Pediatric resident
- General physician
- Intern
- Medical officer
- Other

4.2.9 Which antibiotics are most commonly used for sepsis?

Please check any of the following:

- Ampicillin
- Penicillin
- Vancomycin
- Ceftriaxone
- Ceftriaxone
- Gentamicin
- Chloramphenicol
- Other: Quinine, Coartemisin

4.2.10 What percentage of pediatric patients with sepsis receives antibiotics:

within one hour?

within 2 hours?

4.2.11 What labs are usually ordered for a patient with sepsis?

Please check any of the following:

- Complete blood count
- Chemistry
- Blood gas
- Coagulation profile
- Urinalysis
- Blood smear for malaria
- Other
- Other (additional)

Specify Other lab test:

Specify additional Other lab test:

4.2.12 What percentage of patients have a blood culture obtained?

4.2.13 What percentage of blood cultures yield an isolate that is helpful for patient management?

4.2.14 If a patient becomes severely ill, are they transferred to another area?

- Yes No

If YES, where are they transferred?

- Intensive care unit Another hospital Other

Specify:

4.3 Patient Monitoring

4.3.1 What equipment is available for patient monitoring?

Cardiac monitor

Yes No

Pulse oximeter

Yes No

Blood pressure machine

Yes No

Other

Yes No

Specify other equipment:

4.3.2 How many times in 24 hours are the following observations taken and recorded in patients with sepsis or suspected sepsis?

Respiratory rate (times / 24 hours)

Temperature (times / 24 hours)

Pulse (times / 24 hours)

Blood pressure (times / 24 hours)

Oxygen saturation (times / 24 hours)

Other (times / 24 hours)

Specify other observation:

4.3.3 How many times in 24hrs are the severely ill children reviewed?

4.3.4 Who are severely ill children reviewed by?

- Pediatric specialists
- Pediatric residents
- General physicians
- Medical officers
- Interns
- Nurses
- Nursing aides
- Other

Specify:

4.4 Guidelines and Objectives

4.4.1 Are there any specific guidelines used when treating a child with sepsis?

Yes No

IF YES, which guidelines are used:

4.4.2 What goals are used to direct sepsis therapy?

Reduction in Heart rate

Yes No

Improvement in blood pressure

Yes No

Improvement in mental status

Yes No

Urine Output

Yes No

Improved peripheral perfusion

Yes No

Serum markers (lactate, SVO₂)

Yes No

Other Goals:

5.0 SEPSIS STATISTICS IN YOUR INSTITUTION

5.1 Types of patients Seen

5.1.1 What types of patients are seen in this area? (please list ages, diagnoses, etc)

Youngest age (in years):

Oldest age (in years):

Medical emergencies

Yes No

Trauma

Yes No

Surgical emergencies

Yes No

5.1.2 What are the common comorbidities that exist in patients with sepsis?

Tuberculosis

Yes No

Malnutrition

Yes No

Other:

Yes No

Specify other comorbidity:

Other (additional):

Yes No

Specify other comorbidity:

5.1.3 What organism(s) is/are responsible for most childhood deaths due to sepsis?

BACTERIAL

- Streptococcus pneumoniae
- Group A Strep
- Staphylococcus aureus
- Gram negative rods
- Other

Specify other bacteria:

VIRAL

List:

PROTOZOAL

- Malaria
- Other

Specify other protozoa:

FUNGAL

List:

5.2 How many patient visits occurred in your facility in the last calendar year (January – December 2009)?

5.3 How many patient visits occurred in the emergency department?

5.4 Total number of patients evaluated for sepsis in the emergency department

5.5 Total number of inpatient admissions:

5.6 Total number of inpatients admitted with a primary diagnosis of sepsis:

5.7 Total number of inpatient deaths:

5.8 Total number of inpatients who died from sepsis:

6.0 RESUSCITATION FACILITIES: DRUGS AND OTHER SUPPLIES

Indicate if the following items are available in the Acute Care/ Emergency Area and in the Pediatric ward. Provide any additional remarks.

SELECT: Yes = available; No = not available; NA= not applicable

Job aides/guidelines for management of childhood emergencies:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks _____

6.1 EQUIPMENT & SUPPLIES

Resuscitation Table:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks _____

Suction machines:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks _____

Ambu bag and masks:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Oxygen source:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Nasal prongs/cannula/catheter:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Facemask (simple or non-rebreather):

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

IV administration sets:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Infusion pumps:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Needle system for IV infusion (i.e. butterflies or scalp vein sets):

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

List sizes:

Intravenous cannulae (angiocaths, jelcos, venflons):

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Central line kits:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Arterial line kits:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Blood giving sets:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Torch:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Oropharyngeal airways:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Laryngoscope:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Endotracheal tubes (all sizes):

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Mechanical ventilator:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Source of Heat:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

List Heat Sources:

Thermometer:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Naso-gastric tubes:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Antiseptic (for cleaning the skin):

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Specimen bottles for microbiology:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Weighing machines:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Dextrose stix and glucometer:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Blood slides:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

LP needles:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Blood gas machine:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Pulse oximeter:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Blood Pressure Machine (Pedi cuff):

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Cardiac monitoring (heart rate, EKG):

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

EKG machine:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Portable Chest radiograph:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Clean water supply:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

6.2 DRUGS

Diazepam:

Acute care/ Emergency Area

 Yes No NA

Pediatric ward

 Yes No NA

Remarks

Glucose 5%:

Acute care/ Emergency Area

 Yes No NA

Pediatric ward

 Yes No NA

Remarks

Glucose 25%:

Acute care/ Emergency Area

 Yes No NA

Pediatric ward

 Yes No NA

Remarks

Glucose 10%:

Acute care/ Emergency Area

 Yes No NA

Pediatric ward

 Yes No NA

Remarks

Oral rehydration solution:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Benzyl Penicillin:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Ampicillin:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Vancomycin:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Gentamicin:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Pediatric ward

Yes No NA

Remarks

Ceftriaxone:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Chloramphenicol injection:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Quinine injection:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Adrenaline (epinephrine):

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

List concentration:

Dopamine:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Hydrocortisone:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Normal Saline:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Hartmann's Solution:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Coartemesin:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Tab Quinine:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Cotrimoxazole:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Furosemide:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Calcium gluconate:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

Sodium bicarbonate:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Remarks

OTHER DRUGS

Specify Other Drug:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Specify Other Drug:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Specify Other Drug:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

Specify Other Drug:

Acute care/ Emergency Area

Yes No NA

Pediatric ward

Yes No NA

7.0 ASSESSMENT OF LABORATORY RESOURCES

7.1 Is the laboratory 24 hours?

Yes No

IF NO, what hours is it open? _____

Time Lab Opens (in 24hr): _____

Time Lab Closes (in 24hr): _____

7.2 Which of the following tests are done in the laboratory?

YES 24hr = available 24hr;

YES

7.2.1 Blood sugar

Yes 24hr Yes No

7.2.2 Blood Slide

Yes 24hr Yes No

7.2.3 Blood Film

Yes 24hr Yes No

7.2.4 Hemoglobin/ PCV

Yes 24hr Yes No

7.2.5 WBC count

Yes 24hr Yes No

7.2.6 CSF "microscopy

Yes 24hr Yes No

7.2.7 Urine "microscopy

Yes 24hr Yes No

7.2.8 Blood grouping and cross match

Yes 24hr Yes No

7.3 Blood culture

Yes 24hr Yes No

7.3.1 Urine culture

Yes 24hr Yes No

7.3.2 CSF culture

Yes 24hr Yes No

7.4i Other Lab Test Specify:

7.4ii Other

Yes 24hr Yes No

You have completed the Sepsis Survey. To Submit survey, select "Submit" below.