

Timely Tips Toxic Shock Syndrome Reporting 7/2010



<u>Tip #1</u> The Toxic Shock Syndrome (TSS) Case Definition is based on <u>clinical findings</u>:

- **1.** Fever: temperature greater than or equal to 102.0° F (greater than or equal to 38.9° C)
- 2. Rash: diffuse macular erythroderma
- **3.** *Desquamation*: 1-2 weeks after onset of illness, particularly on the palms and soles
- **4.** *Hypotension*: systolic blood pressure less than or equal to 90 mm Hg for adults or less than fifth percentile by age for children aged less than 16 years; orthostatic drop in diastolic blood pressure greater than or equal to 15 mm Hg from lying to sitting, orthostatic syncope, or orthostatic dizziness
- **5.** *Multi-system involvement* (**three or more** of the following):
 - a. Gastrointestinal: vomiting or diarrhea at onset of illness
 - b. *Muscular*: severe myalgia or creatine phosphokinase level at least twice the upper limit of normal
 - c. Mucous membrane: vaginal, oropharyngeal, or conjunctival hyperemia
 - d. *Renal*: blood urea nitrogen or creatinine at least twice the upper limit of normal for laboratory or urinary sediment with pyuria (greater than or equal to 5 leukocytes per high-power field) in the absence of urinary tract infection
 - e. *Hepatic*: total bilirubin, alanine aminotransferase (ALT/SGPT) enzyme, or asparate aminotransferase (AST/SGOT) enzyme levels at least twice the upper limit of normal for laboratory
 - f. Hematologic: platelets less than 100,000/mm³
 - g. *Central nervous system*: disorientation or alterations in consciousness without focal neurologic signs when fever and hypotension are absent

Tip #2 Toxic Shock Syndrome Case Classifications:

Only *Confirmed* and *Probable* (see classification explanations below) have been developed (i.e., no *Suspect* classification). Both classifications require certain laboratory criteria (also described below).

<u>Tip #3</u> Toxic Shock Syndrome Case Classification — *Confirmed*:

A case which meets the laboratory criteria and in which <u>all five of the clinical findings</u> described above are present, including desquamation, unless the patient dies before desquamation occurs.

<u>Tip #4</u> Toxic Shock Syndrome Case Classification — *Probable*:

A case which meets the laboratory criteria and in which <u>four of the five clinical findings</u> described above are present.

<u>Tip #5</u> Laboratory criteria include <u>negative</u> results on the following tests, if obtained:

- Blood, throat, or cerebrospinal fluid cultures (blood culture may be positive for *Staphylococcus aureus*)
- Rise in titer to Rocky Mountain spotted fever, leptospirosis, or measles

Tip #6 MDSS Reporting-

- Positive laboratory results for Toxic Shock (TSST-1) antibody or staphylococcus enterotoxin B (SEB) in the absence of clinical signs and symptoms, as listed above are not reportable; please mark these as "Completed", "Not a Case".
- Often, to verify Multi-system involvement the investigator must determine the laboratory's normal ranges for results for creatine phosphokinase, blood urea nitrogen (BUN) or creatinine levels, urinary sediment with pyuria (≥5 leukocytes per high-power field) in the absence of a UTI, total bilirubin, alanine aminotrasferase enzyme (ALT/SGPT) or asparate aminotrasferase (AST/SGOT) enzyme and platelets.
- Patient interview or chart abstraction should focus on recovering clinical syndrome evidence as listed in Tip #1.

Thank you for your continued efforts in reportable disease surveillance!