

THE SAFETY ASSESSMENT CODE (SAC) MATRIX

The Severity Categories and the Probability Categories that are used to develop the Safety Assessment Codes (SACs) for adverse events and close calls are presented in the following, and are followed by information on the SAC Matrix.

1. SEVERITY CATEGORIES

a. Key factors for the severity categories are extent of injury, length of stay, level of care required for remedy, and actual or estimated physical plant costs. These four categories apply to actual adverse events and potential events (close calls). For **actual adverse events**, assign severity based on the patient's actual condition.

b. If the event is a **close call**, assign severity based on a reasonable "worst case" systems level scenario. **NOTE:** For example, if you entered a patient's room before they were able to complete a lethal suicide attempt, the event is catastrophic, because the reasonable "worst case" is suicide.

<p>Catastrophic</p> <p><u>Patients with Actual or Potential:</u> Death or major permanent loss of function (sensory, motor, physiologic, or intellectual) not related to the natural course of the patient's illness or underlying condition (i.e., acts of commission or omission). This includes outcomes that are a direct result of injuries sustained in a fall; or associated with an unauthorized departure from an around-the-clock treatment setting; or the result of an assault or other crime. Any of the adverse events defined by the Joint Commission as reviewable "Sentinel Events" should also be considered in this category (see App. A, subpar. 1b).</p> <p><u>Visitors:</u> A death; or hospitalization of three or more visitors <u>Staff:</u> A death or hospitalization of three or more staff* <u>Fire:</u> Any fire that grows larger than an incipient stage‡</p>	<p>Major</p> <p><u>Patients with Actual or Potential:</u> Permanent lessening of bodily functioning (sensory, motor, physiologic, or intellectual) not related to the natural course of the patient's illness or underlying conditions (i.e., acts of commission or omission) or any of the following: a. Disfigurement b. Surgical intervention required c. Increased length of stay for three or more patients d. Increased level of care for three or more patients</p> <p><u>Visitors:</u> Hospitalization of one or two visitors</p> <p><u>Staff:</u> Hospitalization of one or two staff or three or more staff experiencing lost time or restricted duty injuries or illnesses</p> <p><u>Equipment or facility:</u> Damage equal to or more than \$100,000**•</p>
<p>Moderate</p> <p><u>Patients with Actual or Potential:</u> Increased length of stay or increased level of care for one or two patients <u>Visitors:</u> Evaluation and treatment for one or two visitors (less than hospitalization) <u>Staff:</u> Medical expenses, lost time or restricted duty injuries or illness for one or two staff <u>Equipment or facility:</u> Damage more than \$10,000, but less than \$100,000**• <u>Fire</u> – Incipient stage or smaller‡</p>	<p>Minor</p> <p><u>Patients with Actual or Potential:</u> No injury, nor increased length of stay nor increased level of care <u>Visitors:</u> Evaluated and no treatment required or refused treatment <u>Staff:</u> First aid treatment only with no lost time, nor restricted duty injuries nor illnesses <u>Equipment or facility:</u> Damage less than \$10,000 or loss of any utility without adverse patient outcome (e.g., power, natural gas, electricity, water, communications, transport, heat and/or air conditioning)**•</p>

*Title 29 Code of Federal Regulations (CFR) 1960.70 and 1904.8 requires each Federal agency to notify the Occupational Safety and Health Administration (OSHA) within 8 hours of a work-related incident that results in the death of an employee or the in-patient hospitalization of three or more employees. Volunteers are considered to be non-compensated employees.

**The Safe Medical Devices Act of 1990 requires reporting of all incidents in which a medical device may have caused or contributed to the death, serious injury, or serious illness of a patient or another individual.

‡ An incipient fire is a fire that is smaller than a burning waste paper basket. It is easily extinguished by using a single portable fire extinguisher (or equivalent) and it is not necessary to take evasive action (stooping, etc.) when approached to avoid heat or smoke.

•The effectiveness of the facilities disaster plan must be critiqued following each implementation to meet the The Joint Commission's Environment of Care Standards.

2. PROBABILITY CATEGORIES

a. Like the severity categories, the probability categories apply to actual adverse events and close calls.

b. In order to assign a probability rating for an adverse event or close call, it is ideal to know how often it occurs at your facility. Sometimes the data will be easily available because they are routinely tracked (e.g., falls with injury, Adverse Drug Events (ADEs), etc.). Sometimes, getting a feel for the probability of events that are not routinely tracked will mean asking for a quick or informal opinion from staff most familiar with those events. Sometimes it will have to be your best educated guess.

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- (1) **Frequent** – Likely to occur immediately or within a short period (may happen several times in 1 year).
- (2) **Occasional** – Probably will occur (may happen several times in 1 to 2 years).
- (3) **Uncommon** – Possible to occur (may happen sometime in 2 to 5 years).
- (4) **Remote** – Unlikely to occur (may happen sometime in 5 to 30 years).

3. How the Safety Assessment Codes (SAC) Matrix Looks

Probability and Severity	Catastrophic	Major	Moderate	Minor
Frequent	3	3	2	1
Occasional	3	2	1	1
Uncommon	3	2	1	1
Remote	3	2	1	1

4. How the SAC Matrix Works. When a severity category is paired with a probability category for either an actual event or close call, a ranked matrix score (3 = highest risk, 2 = intermediate risk, 1 = lowest risk) results. These ranks, or SACs, can then be used for doing comparative analysis and for deciding who needs to be notified about the event.

5. Reporting

a. All known reporters of events, regardless of SAC score (one, two, or three), must receive appropriate and timely feedback.

b. The Patient Safety Manager, or designee, must refer adverse events or close calls related solely to staff, visitors, or equipment and/or facility damage to relevant facility experts or services on a timely basis, for assessment and resolution of those situations.