**Primary Cause of Death Study – Case Report Form (12.1.2015 version)**

**Mechanism (Circle ONE):**
- MVC  PVA  GSW  SW  Other: __________
- MCC  BVA  Multiple GSW  Multiple SW
- Fall  Found Down  Crush  Assault

**Primary Cause of Death (Please select ONE) (definitions are on the back of this page)**
- Early physiological collapse (within 24 hours)  Traumatic Brain Injury
- Late physiological collapse (after 24 hours)  TBI – non-survivable
- Airway  TBI – potentially survivable
- Sudden Unexpected Event  Exsanguination*
  - Air embolus  Medical event immediately preceding trauma*
  - Tension pneumothorax  Myocardial infarction
  - Cardiac tamponade  Stroke
  - Pulmonary embolism  Sepsis
  - Iatrogenic cause  Seizure
  - Other: __________________________

*Secondary Defining Causes of Death (Select ALL that apply)
*Do not select a secondary cause if the primary cause was exsanguination or a medical event
- Hemorrhagic shock  Sepsis  Pre-existing medical disease
- Obstructive shock  Stroke  Delayed or missed diagnosis
- TBI  MOF  Procedural complication
- Airway  Cardiopulmonary collapse  Other: __________________________
- Respiratory failure  Trauma related
- Pulmonary embolism  Non-trauma related

Death occurred on hospital day number: ______ (admit day = day 0)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thoracotomy in the ED?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Pre-hospital arrest?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Comfort Care / Withdrawal of Care?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Pre-existing advance directive / POLST form?</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>DNR orders placed in hospital?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Family / Surrogate available to make decisions?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Coroner’s case?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Was the death due to disease process, or withdrawal of care?  Disease Process  W/d of care

Location of death:  ED  Radiology  OR  IR  ICU  Other: __________

Total Products Received during first 24 hours: uPRBCs: _____  uFFP: _____  uPlts: _____

Please provide a brief synopsis of the case (a few sentences):

**Form completed by:** __________________________
PRIMARY CAUSE OF DEATH - DEFINITIONS

Early physiological collapse: the patient died within 24 hours of arrival to the hospital from physiological collapse, after adequate control of surgical bleeding.

Late physiological collapse: the patient died after 24 hours from arrival to the hospital, after adequate control of surgical bleeding.

Airway: airway obstruction, laryngeal injury, inability to secure orotracheal or surgical airway prior to irreversible hypoxic injury.

Sudden Unplanned Event: A sudden, unexpected event that contributes to the death of the patient. Examples of sudden unexpected events include: air embolus, tension pneumothorax, cardiac tamponade, PE, or iatrogenic events.

Traumatic Brain Injury

TBI nonsurvivable: the patient’s traumatic brain injury was deemed by Neurosurgery Service to be a non-survivable injury by at least one of the following: physical exam, diagnostic imaging (i.e. CT scan), cerebral blood flow imaging or operative findings.

TBI potentially survivable: the patient’s traumatic brain injury was deemed by Neurosurgery service to be potentially survivable by at least one of the following: physical exam, diagnostic imaging (i.e. CT scan), cerebral blood flow imaging or operative findings.

Exsanguination: the patient died due to uncontrolled surgical hemorrhage.

Medical Event immediately preceding trauma: A non-traumatic medical event that directly precedes and results in secondary trauma, wherein the initial medical event is the primary contributing cause of the patient’s death. Examples of medical events include MI, Stroke, Sepsis, Seizure, or Intoxication/Ingestion; most common secondary trauma is a patient falls as a result of the medical event.

SECONDARY CAUSE OF DEATH - DEFINITIONS

Hemorrhagic Shock: shock associated with the sudden and rapid loss of significant amounts of blood.

Obstructive Shock: Cardiopulmonary collapse secondary to tension pneumothorax or cardiac tamponade that was unable to resolve prior to irreversible cardiopulmonary changes that are incompatible with survival despite resuscitative efforts.

Traumatic Brain Injury (TBI): An injury to the brain that: 1) is imminently non-survivable (catastrophic brain injury) and death occurs in under 24 hours or 2) results in deterioration and multisystem collapse following hemodynamic changes consistent with herniation and brain death.

Airway: airway obstruction, laryngeal injury, inability to secure orotracheal or surgical airway prior to irreversible hypoxic injury.

Respiratory failure: secondary to parenchymal lung injury or pulmonary contusion resulting in hypoxic or hypercarbic respiratory failure that is unable to be rescued with advanced ventilator and other strategies.

Pulmonary Embolism: A new blood clot, radiographically detected, in the pulmonary artery with acute cardiopulmonary changes resulting in death.

Sepsis: An overwhelming systemic response to documented infection resulting in cardiovascular and multisystem collapse. Patients dying of sepsis usually do so > 72 hours after admission.

Stroke: A sudden and new neurological deficit lasts > 24 hours and is confirmed as an ischemic or hemorrhagic lesion by CT or MRI. The resultant neurologic deficit is responsible for death either secondary to multisystem collapse or transition to comfort care.

Multiorgan Failure (MOF): Altered function of at least 2 organ systems. The progressive and profound organ dysfunction is incompatible with life without multisystem support. Death for multiple organ dysfunction usually occurs greater than 48 hours from admission.

Cardiopulmonary Collapse: A sudden and unexpected loss of perfusing pulsatile blood flow attributable to cessation of cardiac mechanical activity. Please differentiate whether the cardiopulmonary collapse is related to trauma or not.

Delayed or missed diagnosis: A late or missed critical diagnosis, wherein the delay in diagnosis and treatment attributes to patient death.

Procedural Complication: an unanticipated complication that arises following, and is a result of, a procedure or treatment.

Pre-existing medical disease: A medical disease that was diagnosed prior to the traumatic event.

Other: Please elaborate if the secondary defining cause is not included in the above options.