Chapter 3. ESI Level 2

ESI level-2 criteria are the most frequently misinterpreted criteria. This chapter expands on the information contained in Chapter 2 and discusses in greater detail the decision-making process required to determine which patients meet ESI level-2 criteria. A complete understanding of level-2 criteria is critical to avoid both under- and over-triage of patients.

ED nurses are often reluctant to assign level 2 to patients who meet criteria when the ED is crowded and there are long waits. It is important for nurses to understand that the triage nurse's primary responsibility is to assign the correct triage level. A patient who is under-triaged may wait for prolonged periods before being evaluated by a physician. This delay in care may result in negative patient outcomes. These cases are the type most frequently involved in litigation.

Triage nurses without sufficient ED experience may be at risk for over-triaging patients. While it is always safer to over-triage than to under-triage, over-triage presents its own set of problems. If a nurse triages most patients as ESI level 2, beds will not be available for true level-1 and level-2 patients when needed, and physician and nurse colleagues will begin to lose confidence in the nurse, his or her triage levels, and eventually, the validity of ESI. If the algorithm is not used independently of the number and type of patients surging into an ED, then the accurate application of data for off-line planning will be subverted. When a hospital is implementing the ESI in an ED, a considerable time should be devoted to explaining which types of patients should be categorized ESI level 2. In this chapter, we highlight common patient presentations that meet ESI level-2 criteria.

After the triage nurse has determined that the patient does not require immediate life-saving intervention, he or she must then decide whether the patient should wait. When making this decision, the triage nurse should consider the following questions: “Would I use my last open bed for this patient?” or “Would I make an alternative bed for this patient in the hallway due to the criticality and time sensitivity of appropriate intervention?” Patients who meet ESI level-1 criteria require immediate resuscitation. Patients who meet ESI level-2 criteria should have their placement rapidly facilitated. ESI does not specify timeframe to physician evaluation, unlike many other triage systems. However, it is understood that level-2 patients should be evaluated as soon as possible.

The following three questions, also listed in Figure 3-1, should be answered and are key components of ESI level-2 criteria:

- Is this a high-risk situation?
- Is the patient experiencing new onset confusion, lethargy, or disorientation?
- Is the patient experiencing severe pain or distress?

An experienced triage nurse will always assess the patient's chief complaint, presenting signs and symptoms, demographics, and medical history to attempt to identify a high-risk situation.

![Figure 3-1. Patient Assessment](image)

While the purpose of nurse triage is not to make a medical diagnosis, these situations are based on the experienced triage nurse’s knowledge of possible medical diagnoses that are associated with specific chief complaints. A good source of information about the signs and symptoms of various medical diagnoses is the Emergency Nursing Core Curriculum (Emergency Nurses Association [ENA], 2007) or other emergency nursing textbooks. The following discussion provides some selected examples of high-risk situations. This discussion is not intended to be an exhaustive list.

1. Is This a High-Risk Situation?

The ability to recognize a high-risk situation is a critical element of the triage decision-making process, regardless of the triage system used. ESI highlights the importance of recognizing high-risk situations and uses the triage nurse's expertise and experience to identify patients at high risk.

Little has been written about how ED triage nurses make decisions. Knowledge and experience are necessary but not sufficient. Novice triage nurses are taught symptom clustering such as the cardiac
A cluster of chest pain with nausea, shortness of breath, and diaphoresis. From prior clinical situations, ED nurses put together “clinical portraits.” The nurses store patient scenarios in which they were involved in some way. For example, the scenario of a patient with fever, stiff neck, and a meningococcal rash should trigger recognition of meningitis, a high-risk situation. The nurse should then have a high index of suspicion when a patient with a similar set of complaints presents to triage.

Vital signs are not always helpful in the identification of high-risk patients. More frequently, patients present to the ED with a chief complaint, signs and symptoms, or history suggestive of a problem or condition that is serious and, unless dealt with promptly, can deteriorate rapidly. These are considered high-risk situations and often interpretation of the patient’s vital sign data is not required to make the decision that this patient scenario is high-risk. For example, a patient who states that he is allergic to peanuts and just came from a restaurant with throat tightening can be triaged as ESI level 2 (if he does not meet level-1 criteria), prior to obtaining vital signs. The patient is at high risk for anaphylaxis and requires rapid evaluation. Often, patient age, past medical history, and current medications influence the perceived severity of the chief complaint. For example, a frail elderly patient with severe abdominal pain is at a much higher risk of morbidity and mortality than a previously healthy 20-year-old. The elderly patient with abdominal pain should be classified as ESI level 2, while the 20-year-old with stable vital signs will usually be classified as ESI level 3.

It is common for the triage nurse to identify a high-risk situation which may be supported by abnormal vital signs. For example, a patient with a fever and productive cough may have a respiratory rate of 32 and an oxygen saturation of 90 percent. The experienced triage nurse uses knowledge and expertise to recognize that this patient probably has pneumonia and is at high risk for oxygen desaturation.

Inexperienced ED nurses are not likely to consistently identify high-risk situations and make accurate triage decisions because they have not incorporated symptom clustering and clinical portraits into their practices; such approaches are key in identifying the high-risk patient situation. Following are specific examples of high-risk situations.

### Abdominal and Gastrointestinal

Abdominal pain is the most frequent chief complaint evaluated in the ED. What distinguishes high-risk abdominal pain? A good history and assessment of current pain rating, respiratory rate, and heart rate, as well as patient demographics, are important elements to consider that will help determine the presence of a high-risk situation.

Pain rating is only one of many factors to consider. Tachycardia, respiratory distress, pallor, bloating, bleeding, general appearance or hypotension that accompanies severe abdominal pain can represent shock and would place the patient at high risk. The elderly patient with severe abdominal pain presents another potentially high-risk situation. Often the elderly experience bowel obstructions, gastrointestinal bleeds, and other abdominal complications associated with significantly higher morbidity and mortality than younger patients.

Several important assessment questions can help the triage nurse determine whether or not the patient meets high-risk criteria. These include the following:

- How long has the patient had the pain?
- How does the patient describe their pain?
- What made the patient come to the ED today?
- Has the patient had severe nausea, vomiting, or diarrhea?
- Other symptoms, such as fever or loss of appetite?
- Is the patient dehydrated?

Patients with severe "ripping" abdominal pain radiating to the back are at high risk for an abdominal aortic aneurysm (AAA). Patients with an AAA describe the pain as severe, constant, and sudden in onset and may have a history of HTN. Though other less imminently life threatening diagnoses such as pancreatitis can masquerade as an AAA, it is the high-risk nature of an AAA that defines this presentation as an ESI 2.

Patients with abdominal pain are often considered ESI level 3 at the beginning of the triage interview, and after the discovery of tachycardia or other risk factors, the triage nurse may determine that the patient is indeed high-risk. This is described further in Chapter 4.
Vomiting blood or a chief complaint of blood per rectum should be seriously considered and evaluated in the context of vital signs. A 30-year-old with bright red blood per rectum, normal vital signs is appropriately an emergency but does not warrant an ESI level-2 designation. All five ESI levels are appropriate for emergency care within an ED setting. But the elderly patient who called an ambulance because he started vomiting blood and has a heart rate of 117 and a respiratory rate of 24 is high-risk and does meet ESI level-2 criteria.

**Cardiovascular**

Chest pain is also a very common chief complaint evaluated in EDs. The presentation of acute coronary syndromes (ACS) is not always specific, and it is sometimes difficult to determine the risk of ACS at triage. Many EDs do not obtain ECGs at triage. It is important to remember that unless the ECG is interpreted by a physician prior to the triage nurse assessment, it will not alter the triage nurse decision. The mere decision by the triage nurse that the patient should have an ECG can be interpreted that the patient meets ESI level-2 criteria, high risk for cardiac ischemia. Patients who have an episode of chest or epigastric discomfort, with or without accompanying symptoms, usually will need an ECG performed rapidly to determine the presence of ACS and need to be identified as high-risk ESI level 2.

It is also important for the triage nurse to incorporate knowledge of gender differences in the presentational symptoms characteristic of heart disease. The 54-year-old obese female who presents to the ED with epigastric pain and fatigue is at risk of ACS and should be assigned to ESI level 2—high-risk.

Patients with chest pain who are physiologically unstable and require immediate interventions such as intubation or hemodynamic support should be triaged as ESI level 1. Not all chest pain patients meet level-1 or level-2 criteria. For example, a 20-year-old healthy patient with chest pain, normal oxygen saturation, cough, and fever of 101°F is at low risk for ACS and does not meet ESI level-1 or level-2 criteria. But, a 20-year-old healthy patient with chest pain who tells the triage nurse he is using cocaine should be considered high-risk. Another example of a patient with chest pain that does not meet ESI level-2 criteria would be the patient with recent upper respiratory symptoms, productive cough with chest pain, and no other cardiovascular risk factors. Each patient must be assessed individually. Again, careful listening, vigilance, and experience are helpful since certain entities including thoracic aortic dissection can occur from childhood through adulthood.

Other potentially high-risk cardiovascular situations include hypertensive crisis, acute vascular arterial occlusions, and patients who present with a fever post valve replacement.

**Nose and Throat**

Patients who are drooling and/or striderous may have impending airway loss. Although less common, epiglottitis, a foreign body (airway foreign body or esophageal foreign body in a child) and peritonsilar abscess place patients at risk for airway compromise. These are extremely high-risk patients. Patients with either of these complaints are in immediate danger of airway compromise and require immediate intervention. ESI level-1 criteria are met.

When patients with epistaxis present, the triage nurse should obtain a blood pressure, although this is not in the ESI algorithm. Epistaxis can be caused by uncontrolled HTN. Several etiologies of epistaxis represent high-risk situations and include the following: brisk bleeding secondary to posterior nose bleed or in the patient using warfarin or other anti-coagulant. In these situations patients are ESI level 2.

**Environmental**

Patients with inhalation injuries from closed space smoke inhalation or chemical exposure should be considered high-risk for potential airway compromise. If the patient presents with significant airway distress and requires immediate intervention, they meet level-1 criteria.

Patients with third-degree burns should also be considered high-risk and be assigned ESI level 2. It is possible that they will require transfer to a burn center for definitive care.

**General Medical**

Several other general medical complaints need to be considered for possible high-risk situations. These medical complications include:

- Diabetic ketoacidosis
- Hyper- or hypoglycemia
• Sepsis
• Complaints of syncope or near syncope
• A variety of other electrolyte disturbances

Patients with diabetes should have a bedside test of glucose performed at triage whenever possible to identify possible hyperglycemic emergencies. If the glucose level is high, patients may be at risk for diabetic ketoacidosis or hyperosmolar hyperglycemic state (HHS). Conversely, patients may have very low glucose readings that also place them in a high-risk category. The unconscious patient with critically high or low blood sugar is considered an ES I level 1. The most common electrolyte abnormality is hyperkalemia, which is a very high-risk situation that can lead to serious cardiac dysrhythmias. Hyperkalemia might be suspected in any renal dialysis patient. Near syncope is a very common complaint which should be carefully assessed, especially in context of patient demographics and past medical history. Finally, oncology patients with a fever are considered immunosuppressed, especially when undergoing chemotherapy. They are at risk for sepsis and should be identified as high-risk and rapidly evaluated.

Genitourinary

Renal dialysis patients unable to complete dialysis often have a variety of electrolyte disturbances which place them at high risk. Testicular torsion is another one of the life or limb, permanent time sensitive clinical situations capable of producing permanent organ loss. Males with testicular torsion will complain of severe pain, are easily recognized, and require rapid evaluation and surgical intervention in addition to rapid pain control. Such a patient should not be assigned to the waiting area, but must be seen right away.

Mental Health

Many patients who present with mental health problems are at high risk because they may be a danger either to themselves, others, or the environment. Patients who are suicidal, homicidal, psychotic, or violent or present an elopement risk should be considered high-risk.

Intoxication without signs of trauma or associated risk of aspiration does not represent a high-risk criterion. The intoxicated patient needs to be carefully assessed for signs of trauma or behavioral issues related to alcohol use or past medical history, which could represent a high-risk situation; ESI level 2.

Neurological

Patients with severe headache associated with mental status changes, high blood pressure, lethargy, fevers, or a rash should be considered high-risk. Any patient with sudden onset of speech deficits or motor weakness should also be assigned ESI level 2. Patients with these symptoms may be experiencing an acute stroke and immediate evaluation is critical. Time from onset of symptoms is a critical factor in determining treatment options, in particular fibrinolytic therapies. A patient with no past medical history of headaches who presents to the emergency department with the sudden onset of a severe “worst headache of my life,” should be identified as at high risk for a sub-arachnoid bleed. The patient will often describe exactly what they were doing when the headache began, typically after exertion, such as lifting, having a bowel movement, or having sexual intercourse.

Seizures are another common chief complaint. Sometimes patients arrive by ambulance and are already post-ictal. All patients with a reported seizure meet ESI level-2 criteria and should not wait for a prolonged period of time; they may experience another seizure.

Obstetrical and Gynecological

Females with abdominal pain or vaginal bleeding should be carefully assessed and vital signs obtained if there is no obvious life threat. Pregnancy history and last menstrual period should always be ascertained from all females of childbearing age. Patients may not recognize that they are pregnant, so the triage nurse should consider pregnancy a possibility in the assessment of female patients. In early pregnancy, the triage nurse should assess for signs and symptoms of ectopic pregnancy and spontaneous abortion. All pregnant patients with localized abdominal pain, vaginal bleeding or discharge, 14 to 20 weeks and over should be assigned ESI level 2 and seen by a physician rapidly (according to individual institutional policy). Patients with generalized cramping and bleeding with stable vital signs do not meet ESI level-2 criteria.

The triage nurse should assess for signs and symptoms of abruptio placentae and placenta previa in late pregnancy.
A postpartum patient with a chief complaint of heavy vaginal bleeding should also be assigned ESI level 2 and seen by a physician urgently. Any female patient, whether pregnant or postpartum, who presents with significant hemodynamic instability and is in need of immediate life-saving interventions should be triaged as ESI level 1.

**Ocular**

Conditions that may be associated with a chief complaint of some type of visual loss include:
- Chemical splash
- Central retinal artery occlusion
- Acute narrow-angle glaucoma
- Retinal detachment
- Significant trauma

A chemical splash to the eye (especially if unknown, a base, or an acid) is an immediate threat to vision which may result in permanent deficit. Chemical splashes to the eye, particularly alkali, necessitate immediate flushing to prevent further damage to the cornea. As with any immediate time-sensitive threat to life or limb, this constitutes a very high priority level-2 patient. The triage nurse should facilitate immediate irrigation regardless of bed availability.

Trauma to the eye can result in a globe rupture and hyphema. All these conditions require immediate evaluation and treatment to prevent further complications or deterioration. Patients with significant trauma to the eye, sudden partial or full loss of vision, are at high risk for permanent damage to the eye and should be triaged at ESI level 2.

**Orthopedic**

Patients with signs and symptoms of compartment syndrome are at high risk for extremity loss and should be assigned ESI level 2. Other patients with high-risk orthopedic injuries include any extremity injury with compromised neurovascular function, partial or complete amputations, or trauma mechanisms identified as having a high risk of injury such as serious acceleration, deceleration, pedestrian struck by a car, and gun shot or stab wound victims.

Patients with possible fractures of the pelvis, femur, or hip and other extremity dislocations should be carefully evaluated and vital signs considered. These fractures can be associated with significant blood loss. Again, hemodynamically unstable patients who need immediate life-saving intervention such as high-level amputations meet ESI level-1 criteria.

**Pediatric**

It is not uncommon for the triage nurse to be uncomfortable when making triage acuity decisions about children, especially infants. It is important to obtain an accurate history from the caregiver and evaluate the activity level of the child. The child who is inconsolable or withdrawn may be at high risk of serious illness.

The following conditions are examples of high-risk situations for children:
- Seizures
- Severe sepsis, severe dehydration
- Diabetic ketoacidosis
- Suspected child abuse
- Burns
- Head trauma
- Ingestions and overdoses including vitamins
- Infant less than 30 days of age with a fever of 100.4° F or 38° C, or greater
- Sickle cell crisis

See Chapter 6 for a detailed discussion in the use of ESI for triage of patients less than 18 years of age.

**Respiratory**

Many respiratory complaints place patients at high risk. Patients with mild-to-moderate distress should be further evaluated for respiratory rate and pulse oximetry to determine whether they should be categorized ESI level 2. Patients in severe respiratory distress who require immediate lifesaving intervention such as intubation meet level-1 criteria.

The high-risk patient is one who is currently ventilating and oxygenating adequately but is in respiratory distress and has the potential to rapidly deteriorate. Potential etiologies of respiratory distress may include asthma, pulmonary embolus, pleural effusion, pneumothorax, foreign body aspiration, toxic smoke inhalation, or shortness of breath associated with chest pain.
**Toxicological**

Most patients who present with an overdose should be rapidly evaluated and represent a high-risk situation. It is often difficult to determine which drugs were taken and the quantities consumed. A patient who is apneic on arrival or requires other immediate lifesaving interventions should be categorized an ESI level 1; all other admitted overdoses should be considered ESI level 2.

**Transplant**

A transplant patient who comes to the ED for a non-transplant related issue, such as a laceration to a finger, is not automatically ESI level 2. The nurse needs to assess the situation and assign the appropriate triage level. Ill patients who are status post-organ transplant are immunocompromised and considered high-risk. They can present with organ rejection, sepsis, or other complications. Patients who are on a transplant list are also usually considered high-risk.

**Trauma**

Traumatic events may involve high-risk injuries that may not be immediately obvious. Any mechanism of injury associated with a high risk of injury should be categorized ESI level 2. If a trauma patient presents with unstable vital signs and requires immediate intervention, the patient should be triaged as ESI level 1. Serious injury results from the transfer of mechanical or kinetic energy and is caused by acceleration forces, deceleration forces, or both. Victims of motor vehicle and motorcycle crashes, falls, and gunshot and stab wounds are examples of blunt and penetrating trauma, which should be assessed carefully for potential for serious injury.

The triage nurse should obtain the following details regarding the injury, as pertinent:

- Mechanism of injury
- When the injury occurred
- Loss of consciousness
- Head injured patient returning/presenting with symptoms of increase intracranial pressure (headache/vomiting)
- Age of the patient
- Distance the patient fell or jumped
- How fast the vehicle was moving
- Location of penetrating injury
- Number of gunshots heard
- Type of weapon

Again, the nurse will use his or her knowledge of the biomechanics and mechanism of injury to assess the patient and decide whether the patient meets ESI level-2 criteria. Gunshot wounds to the head, neck, chest, abdomen, or groin usually require trauma team evaluation and immediate interventions and should be triaged using ESI criteria. If the patient requires immediate intervention, they should be triaged as ESI level 1. If the patient does not meet level-1 criteria, but has a high-risk situation, they should be triaged as ESI level 2. In EDs that are also trauma centers, trauma criteria and ESI triage criteria should be treated separately and patients should be assigned both an ESI level and a trauma level, which may or may not be the same. For example, a patient made level 1 trauma by mechanism, who has stable vital signs and no complaints, would be an ESI level 2, high-risk mechanism. This patient would not meet ESI level 1 criteria, because he or she does not require a life-saving intervention. These circumstances are often misinterpreted by ED nurses, and it is important to stress this.

**Wound Management**

Several factors signal a high-risk wound. These include: uncontrolled bleeding, arterial bleeding, and partial or full amputations. Most wounds do not meet the criteria for ESI level 2. A patient with a stab wound requires careful assessment including neurovascular status. Any uncontrolled bleeding that requires immediate lifesaving intervention to stabilize the patient meets level-1 criteria.

The examples of high-risk situations above are summarized in Table 3-1.
Table 3-1. Examples of Possible High-risk Situations

<table>
<thead>
<tr>
<th>System</th>
<th>Demographics, Chief Complaint</th>
<th>ESI 2: Yes/No Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdomen</td>
<td>88-year-old female with severe right lower quadrant abdominal pain, vital signs stable.</td>
<td>Yes. High risk for acute abdominal emergency which is associated with a high mortality in the elderly.</td>
</tr>
<tr>
<td></td>
<td>22-year-old male with generalized abdominal pain, nausea, vomiting, and diarrhea for 3 days, vital signs stable.</td>
<td>No. Symptoms are more indicative of gastroenteritis than an acute surgical emergency. Patient is stable to wait.</td>
</tr>
<tr>
<td></td>
<td>45-year-old female who has been vomiting blood and is tachycardic.</td>
<td>Yes. High risk for gastrointestinal bleeding and patient can deteriorate rapidly.</td>
</tr>
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<td></td>
<td>22-year-old female noticed a spot of blood on toilet paper this a.m. after having a bowel movement. Has a history of hemorrhoids.</td>
<td>No. This patient most likely has a hemorrhoid and this is not a high-risk situation.</td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>35-year-old female with a sudden onset of palpitations, anxious, heart rate of 160, blood pressure of 120/70.</td>
<td>Yes. High risk for possible supraventricular tachycardia.</td>
</tr>
<tr>
<td></td>
<td>35-year-old female with sudden onset of palpitations, anxious, heart rate of 90, blood pressure of 120/70.</td>
<td>No. This patient may be having an anxiety attack.</td>
</tr>
<tr>
<td></td>
<td>65-year-old female with sudden onset of shortness of breath and discomfort in chest for 3 hours.</td>
<td>Yes. High risk for possible myocardial ischemia.</td>
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<td></td>
<td>45-year-old male with generalized fatigue, chest pain when coughing, productive cough with green sputum, fever and chills for 4 days.</td>
<td>No. This patient has classic non-cardiac symptoms, despite having chest pain.</td>
</tr>
<tr>
<td></td>
<td>52-year-old male with sudden onset of pain to left foot, a history of diabetes requiring insulin therapy; left foot is cold to touch, and the nurse is unable to palpate a pulse in the foot.</td>
<td>Yes. High risk for acute arterial occlusion.</td>
</tr>
<tr>
<td>Eye, ENT</td>
<td>65-year-old female with sudden onset of loss of vision.</td>
<td>Yes. All complaints with sudden loss of vision are high-risk.</td>
</tr>
<tr>
<td></td>
<td>22-year-old male patient with trauma to eye in a bar fight, unable to open eye.</td>
<td>Yes. High risk for globe rupture or other trauma.</td>
</tr>
<tr>
<td>General medicine</td>
<td>40-year-old female diabetic with vomiting for 2 days.</td>
<td>Yes. At high risk for diabetic ketoacidosis which requires rapid evaluation and management.</td>
</tr>
<tr>
<td></td>
<td>69-year-old male who is weak and dizzy, and undergoes regular kidney dialysis.</td>
<td>Yes. High risk for hyperkalemia and other electrolyte imbalances.</td>
</tr>
<tr>
<td></td>
<td>29-year-old female with a recent history of headaches, blood pressure of 210/120, and no known history of HTN.</td>
<td>Yes. High risk for hypertensive emergency.</td>
</tr>
<tr>
<td></td>
<td>55-year-old male with a laceration to the thumb. Blood pressure of 204/102, known history of HTN and admits to skipping a few doses of blood pressure medication, denies other complaints.</td>
<td>No. Patient will not require emergent treatment of his blood pressure, but will require re-evaluation of his anti-hypertensive dose and agents.</td>
</tr>
</tbody>
</table>

continued
### Table 3-1. Examples of Possible High-risk Situations (Continued)

<table>
<thead>
<tr>
<th>System</th>
<th>Demographics, Chief Complaint</th>
<th>ESI 2: Yes/No Rationale</th>
</tr>
</thead>
</table>
| Genitourinary | 22-year-old male with sudden onset of severe left testicle pain.  
29-year-old female with a 3-day history of urinary frequency and voiding in small amounts.                                                                                                                                                                                                                                                                                 | Yes. High risk for testicular torsion vs. epididymitis.  
No. This patient most likely has a urinary tract infection which does not require rapid evaluation.                                                                                                                                                                                                                                               |
| Gynecological | 24-year-old female, 8 weeks pregnant, left lower quadrant abdominal pain and spotting.  
24-year-old female with severe left lower quadrant pain abdominal, denies vaginal bleeding.  
32-year-old female with generalized abdominal cramping and vaginal bleeding, 14 weeks pregnant, vital signs stable.                                                                                                                                                                                                                       | Yes. High risk for possible ectopic pregnancy.  
Yes. High risk for ectopic pregnancy, unless the triage nurse can confirm the absence of pregnancy.  
No. Most likely this is a threatened abortion which does not require emergent evaluation with stable vital signs.                                                                                                                                                                                                                           |
| Mental Health | 19-year-old female who is combative and hostile.  
22-year-old male with suicidal thoughts.  
35-year-old female who was brought in by the police, alcohol on breath, unsteady gait, a large laceration to head, slurred speech but oriented.  
52-year-old female feeling overwhelmed and requesting a referral to counseling. Denies homicidal or suicidal thoughts. Alert, oriented, and cooperative. | Yes. High risk for safety and this patient should not be left in the waiting room.  
Yes. High risk for patient injury if left alone.  
Yes. High risk for a serious head injury.  
No. This patient is not at high risk.                                                                                                                                                                                                                                                                                                                   |
| Neurological  | 35-year-old female with a severe headache, stiff neck, rash, temperature 102.0.  
55-year-old male with a sudden onset of worst headache of life after stressful activity.  
52-year-old male with sudden onset of slurred speech.  
33-year-old male with “pins and needles” feeling to right first and second fingers for several weeks.                                                                                                                                                                                                       | Yes. High risk for possible meningitis; rapid deterioration is common.  
Yes. High risk for subarachnoid hemorrhage.  
Yes. High risk for acute stroke.  
No. Does not require rapid evaluation.                                                                                                                                                                                                                                                                                                                  |
| Oncologic     | 40-year-old female with lymphoma, currently receiving chemotherapy, and a temperature of 102.2.  
66-year-old male with lung cancer, reports increasing shortness of breath over the past few days. Just completed chemotherapy 2 weeks ago.  
60-year-old female who cut finger while slicing a bagel. Currently receiving radiation for breast cancer.                                                                                                                                                                                                                                      | Yes. High risk for neutropenia and infection  
Yes. High risk for pleural effusion, pulmonary embolus and other emergent conditions.  
No. Not a high-risk situation.                                                                                                                                                                                                                                                                                                                       |
<table>
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<tbody>
<tr>
<td>Pediatric</td>
<td>9-month-old baby with vomiting and diarrhea. She is able to drink, has a wet diaper, and is fussy and crying tears during triage. 9-month-old baby with vomiting and diarrhea. She is unable to drink, hasn’t wet a diaper for several hours, is unable to hold anything down, and has very dry mucous membranes. 6-year-old male with a sudden onset of wheezing that is audible during triage without auscultation, oxygen saturation of 97% on room air, and is in moderate respiratory distress. 14-day-old baby with a fever of 100.8°F.</td>
<td>No. While may be dehydrated, this does not appear to be a high-risk situation. Yes. This baby is at high-risk. Yes. Moderate respiratory distress indicates a possible high risk for deterioration. Yes. Infants in the first 30 days of life with a fever greater than100.4 are at high risk for bacteremia.</td>
</tr>
<tr>
<td>Respiratory</td>
<td>5-year-old female presents with drooling and difficulty swallowing. 25-year-old male with mild wheezing, oxygen saturation of 98% on room air, no obvious respiratory distress. Recent upper respiratory infection. 20-year-old tall thin male with sudden onset of severe shortness of breath after coughing.</td>
<td>Yes. High risk for an airway management problem such as epiglottitis, peri-tonsillar abscess, foreign body, angioedema. No. This is not a high-risk situation. Yes. Tall thin young males are at risk for spontaneous pneumothorax.</td>
</tr>
<tr>
<td>Trauma</td>
<td>45-year-old male involved in a motor vehicle crash immediately prior to arrival. Unable to remember the events, moderately severe headache. 17-year-old male with a stab wound to groin, bleeding controlled. 34-year-old female involved in a low speed motor vehicle crash while driving. 32 weeks pregnant, denies complaints. 6-year-old male fell from the top of the monkey bars today. Reports a 1 minute loss of consciousness at the time. Patient is vomiting, and was sent by pediatrician for head scan.</td>
<td>Yes. At high-risk for a traumatic brain injury and possible epidural hematoma. Yes. High risk for vascular injury. Yes. High risk for maternal and fetal injuries. Yes. High-risk situation.</td>
</tr>
</tbody>
</table>
2. Is the Patient Experiencing New Onset Confusion, Lethargy, or Disorientation?

The second question to consider when determining whether a patient meets level-2 criteria is, “Does the patient have new onset confusion, lethargy, or disorientation?” Altered mental status is another frequent chief complaint. Family members, friends, or paramedics may accompany these patients to the ED. At decision point B of the ESI algorithm, the presence of confusion, lethargy, or disorientation refers to new onset or an acute alteration in level of consciousness (LOC). Chronic dementia and chronic confusion do not meet criteria for ESI level 2. For example, if an elderly patient with dementia presents with a possible fractured hip, they do not meet level 2 criteria because the dementia is not considered to be of new onset.

Confusion, lethargy, or disorientation may be caused by a variety of serious medical conditions including stroke, transient ischemic attack, or other structural pathology to the brain, metabolic or electrolyte imbalances such as hypoglycemia or hyponatremia or toxicological conditions. Other examples of patients who may meet ESI level 2 criteria include patients with diabetic ketoacidosis, patients experiencing an acute psychotic episode, or an otherwise healthy adult or child with new onset confusion.

This portion of the algorithm is usually very clear and leaves very little open to interpretation. If the patient's history is unknown, and the patient presents to triage confused, lethargic, or disoriented, the triage nurse should assume this condition is new and select ESI level 2 as the triage category. Again, if the patient has new onset confusion, lethargy, or disorientation and requires an immediate life-saving intervention as previously described, the patient then meets ESI level-1 criteria (e.g., new onset confusion and difficulty maintaining an airway).

3. Is the Patient Experiencing Severe Pain or Distress?

The third and final question to address when determining whether the patient meets level-2 criteria is, “Is the patient experiencing severe pain or distress?” In 2009, the Emergency Nurses Association (ENA), the American College of Emergency Physicians, the American Society of Pain Management Nursing, and the American Pain Society Board of Directors each approved a joint position statement which articulates 14 core principles of optimal pain management that EDs can strive for. One principle promotes the rapid administration of analgesics (American College of Emergency Physicians, 2009; ENA, 2009). While rapid treatment of pain is important, careful discussion of this criteria and its use in ESI is warranted.

Pain

The patient should be assessed for the presence of severe pain or distress. All patients who have a pain rating of 7/10 or greater should be considered for meeting ESI level-2 criteria. This is the second most frequently misinterpreted criteria of ESI. Not all patients with a pain score of >7 should be triaged as ESI level 2. It is up to the discretion of the triage nurse to determine whether the clinical condition and pain rating in combination warrant a rating of ESI level 2. In general, it is helpful to ask, “Can I do anything at triage to help decrease the pain?” For example, a patient who had a heavy metal object fall on his toe may rate the pain a 10/10. Indeed, the patient may have a fracture and be experiencing severe pain. The patient probably has done nothing to try to relieve the pain prior to arrival in the ED. The correct triage level for this patient would be ESI level 4. Only one defined resource (remember, “resources” in the context of ESI triage refers to those items defined as a resource) will be needed (an x ray). Of course, in addition to the defined resource, good medical care will require adequate pain relief. The triage nurse should implement comfort measures at triage including ice, elevation, and analgesics (if standing orders are in place) to reduce the pain. The triage nurse should believe the patient's pain is 10/10 and address the pain at triage. However, this patient can wait to be seen and you would certainly not use your last open bed for this patient. It is not possible to manage pain at triage for patients with renal colic, cancer, or sickle cell crisis. These patients should be triaged as ESI level 2 and rapid placement should be facilitated whenever possible.

In summary, the triage nurse assesses not only the pain intensity rating provided by the patient, but also the chief complaint, past medical history, physiologic appearance of the patient, and what interventions can be provided at triage to decrease pain, when determining a triage category.
Examples of patients for whom the triage nurse could use severe pain criteria to justify an ESI level-2 rating include:

- A patient with 10/10 flank pain who is writhing at triage
- An 80-year-old female with 7/10 generalized abdominal pain with severe nausea
- A 30-year-old patient in acute sickle cell pain crisis
- An oncology patient with severe pain
- Any full- or partial-thickness burn that will require immediate pain control
- Females, and more commonly males, with acute urinary retention

All ED patients are to be assessed for pain and asked to rate their pain using a scale such as the visual analog scale. Many triage nurses are uncomfortable with documenting a patient’s pain rating and then having the patient wait to be seen. It is important for the triage nurse to understand that the patient's self-reported pain rating is only one piece of the pain assessment. Triage nurses should assign ESI level 2 if the patient reports a pain rating of 7/10 or greater and the triage nurse's subjective and objective assessment confirms that the patient's pain requires interventions that are beyond the scope of triage. The triage nurse concludes that it would be inappropriate for this patient to wait and would assign this patient to the last open bed.

**Distress**

Finally, in determining whether a patient meets ESI level-2 criteria, the triage nurse must assess for severe distress, which is defined as either physiological or psychological. In addition to pain, patients experiencing severe respiratory distress meet criteria for ESI level 2 for physiological disturbances.

Examples of severe psychological distress include patients who are:

- Distraught after experiencing a sexual assault
- Exhibiting behavioral outbursts at triage
- Combative
- Victims of domestic violence
- Experiencing an acute grief reaction
- Suicidal and a flight risk (this patient also meets high-risk criteria)

These are patients that the triage nurse usually prefers to have placed in the treatment area immediately to address the acute issue expeditiously. Additionally this will serve to avoid persons in the waiting room from becoming agitated.

**Special Situations**

Many EDs now have special alert processes that initiate a team approach to a specific time-sensitive problem. Clinical syndromes response therefore may include immediate activation of alerts such as myocardial infarction alert, stroke alert, sepsis alert, and trauma alert. These are hospital specific, protocol driven responses. Patients that qualify for alert activation are automatically high-risk and therefore at least an ESI 2. For example, a patient may present to triage awake, alert, and oriented, complaining of left sided weakness; the patient does not meet ESI level-1 criteria but is at high risk for a stroke. This patient meets ESI level-2 criteria. If deteriorating or in extremis, the patient would be labeled an ESI 1.

**Summary**

We have reviewed the key components and questions that need to be answered to determine whether a patient meets ESI level-2 criteria. It is critical that the triage nurse consider these questions as he or she triages each patient. Missing a high-risk situation may result in an extended waiting period and potentially negative patient outcomes. Many high-risk situations have not been discussed and are beyond the scope of this handbook. With ESI level 2, the role of the triage nurse is to gather subjective and objective information from the patient, analyze it, and decide whether this patient has a high-risk situation.

*Note: Appendix A of this handbook includes frequently asked questions and post-test assessment questions for Chapters 2 through 8. These sections can be incorporated into a locally-developed ESI training course.*
References

