

Emergency Severity Index Test Cases

This text-only version has the test case at the top of the page and the answer at the bottom.



Test Case 1

“I shouldn’t have eaten those fried clams,” the patient tells you as you begin her triage assessment. Her chief complaint is abdominal pain that started two hours ago which she rates as a 6/10. She has vomited once and continues to be nauseous. She is 48 y o with no PMH, takes no medications and has no known allergies. Vital signs: T 99, HR 98, RR 20, BP 142/84.

Test Case 1 – Answer

- ESI Level 3
- This 48-year-old healthy female has abdominal pain that started two hours prior to admission. She has vomited once but continues to be nauseous. Her vital signs are within normal limits. This patient does not meet the criteria for ESI level 1 or 2. She will need two or more resources; labs, an IV with fluid, IV medication for nausea and pain as well as other diagnostic studies.

Test Case 2

EMS brings in an elderly patient from the nursing home. They were called to the scene for a “possible stroke.” The patient is unresponsive with an obvious facial droop. VS: HR 96, RR 10, SPO2 89% on RA. She has a long medical history and no other information was sent with the patient from the nursing home.

Test Case 2 – Answer

- ESI Level 1
- This patient is unresponsive, with a respiratory rate of 10 and an oxygen saturation of 89%. This patient required immediate life saving interventions.

Test Case 3

“I have been sick for 4 days with the GI bug that is going around. Today, I am really dizzy.” Reports multiple episodes of vomiting and diarrhea for 4 days, denies fever or chills, lips are dry and cracked. This 29 year old male is healthy, takes no medications and has no allergies. Vital signs: T. 99.2, HR 132, RR 24, BP 82/palp.

Test Case 3 – Answer

- ESI Level 2
- A high-risk situation. This 29-year-old patient has been sick for 4 days with vomiting and diarrhea. He is now dizzy, has cracked dry lip, a heart rate of 132 and a blood pressure of 82/palpable. It would be unsafe for this patient to wait for more than a few minutes for care.

Test Case 4

Medflight arrives with a 32 year old female who was the restrained driver in a high speed MVC. The patient is 7 months pregnant and complaining of pain in her right lower leg and abrasions on her face from the airbag. She appears in no acute distress. Her skin is warm and dry. She asks you if her baby is going to be ok.

VS: HR 100, RR 26, BP 140/82.

Test Case 4 – Answer

- ESI Level 2
- A high-risk situation based on the mechanism of injury.

Test Case 5

A 19 year old requests to see a doctor for treatment of an in grown toenail. He tells you that the nail area is red, tender and draining pus. He denies any medical problems, is on no medications and has no allergies. Vital signs: T 98.6, HR 82, RR 16, BP 118/72.

Test Case 5 – Answer

- ESI Level 4
- This patient does not meet the criteria for ESI level 1 or 2. He will need an incision and drainage of his toe – one resource. Therefore he meets ESI level 4 criteria.

Test Case 6

“Mom thinks I broke my toe. I was running on the beach and stubbed it on a rock.” A healthy 11 year old male points to his bruised 4th toe on his right foot. “It hurts to walk or put on a shoe.” His mother tells you that he takes no medications and has no allergies. Vital signs: T. 98.4, HR 82, RR 18, BP 102/78.

Test Case 6 – Answer

- ESI Level 4
- This child’s toe will probably be x- rayed to determine if there is a fracture. X-ray is one resource.

Test Case 7

EMS arrives with a 76 year old female who tripped over her dog and injured her right hip. On exam her right leg is shortened, externally rotated with +CMS. The patient rates her pain as 5/10. She has a history of HTN, medications include a diuretic, and she has no allergies. Vital signs: T 96.2, HR 78, RR 18, BP 148/90.

Test Case 7 – Answer

- ESI Level 3
- This elderly patient tripped over her dog and probably sustained a fractured hip. On arrival in the emergency department her pain is less than 7 out of 10. She does not meet ESI level 2 criteria. If there was no clear history as to why she fell or her pain was more intense she would be assigned to ESI level 2. This patient will consume two or more resources; x-ray, labs, IV pain medication and an orthopedic consult.

Test Case 8

A 55 y/o female presents to triage with a sudden onset of acute loss of vision in her left eye. She has normal visual acuity in her right eye. She denies medical history or medication use. VS: T 98.6, HR 88, RR 16, BP 140/85

Test Case 8 – Answer

- ESI Level 2
- This is a high-risk situation. The patient's symptoms are suggestive of central retinal artery occlusion.

Test Case 9

“My heart is just pounding in my chest” reports a 26 year old female with a history of SVT. At triage she has a HR of 188 and a BP of 70/palp. “I feel like I am going to pass out” she tells you.

Test Case 9 – Answer

- ESI Level 1
- This patient requires immediate life saving interventions. She needs to be seen immediately by a physician and a nurse and care initiated.. The patient is currently unstable and needs IV access, IV medications and perhaps cardioversion.

Test Case 10

A 17 year old male walks into triage stating: “My boss won’t let me come back to work until I get a note from a doctor. I work in a grocery store stocking shelves. Yesterday I was moving stock and several boxes fell and hit my foot. I’m fine, it doesn’t hurt but my boss made me come. No signs of trauma to the foot. T. 98.4, HR 64, RR 16, BP 122/78.

Test Case 10 – Answer

- ESI Level 5
- This patient has no complaints and has no obvious signs of trauma. The patient needs to be seen by a physician, examined and discharged. No resources are needed so the patient meets ESI level 5 criteria.