Candidate Study Guide for the
Illinois Trauma Nurse Specialist (TNS) Examination

The following information is intended to help you prepare for the Illinois Trauma Nurse Specialist (TNS) Examination. Part I of this study guide contains general information about the profession and testing procedures. Part II provides a content outline that lists the competencies covered in this examination, identifies abbreviations that may appear in the TNS exams, and provides reference norms for the test. Part III includes sample questions to help you prepare for this test.

Part I  General Information

PURPOSE OF THE EXAMINATION
This examination has been developed in collaboration with Illinois Department of Public Health (IDPH) and the Trauma Nurse Specialist (TNS) Course Coordinators. Certification is granted only to candidates who demonstrate sufficient knowledge of the Illinois TNS Curriculum.

TEST VALIDITY
The time limit for this examination is 2½ hours. This examination has been developed to meet strict standards of test fairness and validity to protect the health and safety of the public. A committee of TNS course coordinators has validated each question that appears in this study guide and all TNS exams that are administered in behalf of the Illinois Department of Public Health.

PHOTO ID
Each candidate must present a current and valid photo ID to be admitted to an examination. Only a valid Driver's License, Secretary of State ID card, consular ID or current passport is acceptable as photographic identification. If the name on the photo ID does not match the name on the scheduled appointment, proof of legal name change also must be presented before the candidate can be admitted to the test.

SPECIAL ACCOMMODATIONS
Any candidate who needs special accommodations in test-taking procedures because of a disabling condition must communicate that need in writing with his or her application. No accommodations can be arranged on the day of a test.

SCORING THE EXAMINATION
Candidates who pass this examination and meet licensing criteria will receive their license as Trauma Nurse Specialist from IDPH.

MISSING AN EXAMINATION
There are no "make-up" examinations. You may re-register when you receive your score report from CTS stating "consent" and pay any additional required fees.

RE-EXAMINATION
Candidates who fail TNS exam will receive information to help them identify content areas on which they need to improve their performance to pass on a subsequent attempt. Candidates must register to take the test again. Candidates are limited to three (3) attempts within one (1) year after completing the TNS education program.

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TNS CHALLENGE EXAMINATION

Candidates must register for this exam through a TNS Coordinator. Only one attempt on the TNS Challenge Exam is permitted. Candidates who fail must take the TNS course.

SCHEDULING

After CTS approves your application, you must schedule a test date within 90 days at an approved PSI Test Center. You may schedule a test using PSI’s online system at www.psiexams.com or by calling PSI at 1-800-733-9267. All regular testing appointments must be scheduled at least two business days prior to the desired test date. You must reapply and pay a new test fee if you do not test within the 90-day window.

Locations of Approved PSI Centers

PSI Test Centers in Carbondale, Champaign, downtown Chicago, East Peoria and Peoria, Galesburg, Glen Ellyn, Springfield, Westmont and Evansville, IN, are proctored by onsite personnel. Other locations use remotely proctored testing stations that monitor candidates with three digital cameras, an on-screen chat window and a sensitive built-in microphone. Proctors in these locations communicate with candidates on-screen during the test and pause the exam whenever unauthorized persons or activity appear on video monitors or in audio recordings. The proctor will pause the exam whenever a candidate leaves the testing station or an interruption occurs. The proctor may end the test if an interruption is not corrected appropriately. Each remotely proctored test station also is equipped with noise-cancelling headphones to help candidates screen out distractions if they wish to use them. All other rules are the same for examinations in on-site proctored and remotely proctored locations.

Directions and other information about each test location follow and are available on the PSI website. Testing locations are subject to change. Candidates should verify the location of each test center in their admission notice after they schedule an examination.
Remotely proctored test centers are indicated. All others are proctored by on-site personnel.

<table>
<thead>
<tr>
<th>City/State</th>
<th>Address</th>
<th>Driving Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbondale, Illinois</td>
<td>Southern Illinois University, 605 Agriculture Dr., MC 4722 Room 781 (7th floor)</td>
<td>Morris Library is in the center of campus. More information about parking for the new center in Morris Library is available online at <a href="http://lib.siu.edu/directions">http://lib.siu.edu/directions</a>.</td>
</tr>
<tr>
<td>Champaign, Illinois</td>
<td>Parkland College 2400 W Bradley Ave, U203</td>
<td>From I-72 East, take N Country Fair Drive. Turn left onto W Bradley Ave. RM U203</td>
</tr>
<tr>
<td>Chicago, Illinois</td>
<td>Chicago State University, 9501 S. Martin Luther King Drive</td>
<td><strong>One remotely proctored test station.</strong> Chicago State University is located at 9501 South Martin Luther King Drive in Chicago. The testing station is located in Room 202 on the 2nd floor Quiet Study Area of the New Library. Park on campus for $5. Nearest CTS Station: 0.6 miles from 95th Street Station on Red Line; numerous bus routes to campus.</td>
</tr>
<tr>
<td>Chicago Heights, Illinois</td>
<td>Prairie State College 202 S. Halsted Street Room 3211</td>
<td><strong>One remotely proctored test station.</strong> Prairie State College is located at South Halsted Street and Vollmer Road in Chicago Heights. The campus is about three miles south of Interstate 80 on Halsted. Testing is in room 3211 of the main building</td>
</tr>
<tr>
<td>Galesburg, Illinois</td>
<td>Carl Sandburg College 2400 Tom L Wilson Blvd</td>
<td>Exit Interstate 74 onto Hwy 34 West (toward Monmouth). Proceed to Hwy 150 West (Carl Sandburg College Exit toward Alpha). Turn left at stoplight onto South Lake Storey Road. 1 mile to CSC entrance on the left. The entrance to Carl Sandburg College will be to your left. Turn left onto Tom L. Wilson Blvd. Upon entering campus from Lake Storey Rd, turn right at the electronic marquee sign. Enter the door with the large B above it. Once in the lobby, turn right and go through glass door. The Testing Center check-in is immediately located to the right in room B-07.</td>
</tr>
<tr>
<td>Niles, Illinois</td>
<td>Real Estate Institute 6203 W Howard Street Exam Room</td>
<td><strong>Two remotely proctored test stations.</strong> REI is located at the corner of Howard Street and Merrimac Avenue in Niles, between Caldwell and Lehigh.</td>
</tr>
<tr>
<td>Oak Forest, Illinois</td>
<td>South Suburban College - Oak Forest Center 16333 S. Kilbourn Avenue, Room 5130</td>
<td><strong>One remotely proctored test station.</strong> Exit I-57 on 167 East to Kilbourn Avenue. Turn left on Kilbourn and drive three blocks to South Suburban College campus. Park in front of building. The campus also is served by bus routes 364-159th Street and 354 Harvey-Oak Forest Loop.</td>
</tr>
<tr>
<td>Rockford, Illinois</td>
<td>ROCKFORD OSF Center For Health, 5510 E. State St, Room 284 (back of the building)</td>
<td><strong>One remotely proctored test station.</strong> From I-90 W, take the US-20 Bus/State St exit. Merge onto US-20 Bus W/E State St toward Rockford. The building is on the righthand side after passing the main hospital.</td>
</tr>
<tr>
<td>Schaumburg, Illinois</td>
<td>Schaumburg - Harper College Professional Center, 650 E. Higgins Road Suite 2W</td>
<td><strong>Two remotely proctored test stations.</strong> North side of Higgins Rd, between Roselle and Plum Grove, just west of the McDonalds. When you enter the drive, turn right and park. Our new Suite 2W is on the northeast end of the building.</td>
</tr>
</tbody>
</table>
Remotely proctored test centers are indicated. All others are proctored by on-site personnel.

<table>
<thead>
<tr>
<th>City/State</th>
<th>Address</th>
<th>Driving Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skokie, Illinois</td>
<td>Oakton Community College 7701 North Lincoln Avenue Room A135</td>
<td>One remotely proctored test station. Oakton Colleges Skokie campus is between Howard and Niles Center Road on Lincoln in Skokie. Park in student lot in front of campus. Test center is Room A135.</td>
</tr>
<tr>
<td>Springfield, Illinois</td>
<td>PSI Springfield 3223 South Meadowbrook Road, Suite B</td>
<td>Follow I-55 south to I-72 toward Jacksonville, exit at IL 4 (Veterans Parkway) and go north to Wabash and turn Left on Wabash and then Left again on S. Meadowbrook Rd.</td>
</tr>
<tr>
<td>COLLEGE OF DUPAGE TEST CENTERS (4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carol Stream, Illinois</td>
<td>College of DuPage Carol Stream Campus 500 N Kuhn Road</td>
<td>One remotely proctored test station. Center is on the west side of Kuhn Rd, north of North Ave and south of Lies Rd. From North or South: Exit from I-355 at Route 64/North Ave, and head west to Kuhn Rd (second stoplight past Gary Ave.) Turn right on Kuhn Rd north to the center on the west side of the street. From East or West: Exit from I-88 at Route 59 and go north to Route 64/North Ave. Turn right on Route 64/North Ave heading east to Kuhn Rd (next stoplight past County Farm Rd). Turn left heading north to the center located on the west side of the street. The center is also accessible from I-88 via I-355 North. Follow north/south directions above after exiting from I-88 to I-355 North.</td>
</tr>
<tr>
<td>Glen Ellyn, Illinois</td>
<td>College of DuPage Glen Ellyn Campus 425 Fawell Blvd, BIC 2A08</td>
<td>Enter the College of DuPage Main Campus on Fawell Blvd. Enter the Student Services Center (SSC) Building. Please go to the Berg Instructional Center (BIC) Specialized Testing Services - Room 2A08. The SSC and BIC buildings are attached.</td>
</tr>
<tr>
<td>Naperville, Illinois</td>
<td>College of DuPage Naperville Campus 1223 Rickert Drive</td>
<td>One remotely proctored test station. Naperville Center is located on the south side of Rickert Drive. Rickert Drive is accessed by turning north from 75th Street two miles west of Washington Street. From Route 59, travel east on 75th Street to Rickert Drive and turn north.</td>
</tr>
<tr>
<td>Westmont, Illinois</td>
<td>College of DuPage - Westmont Center 650 Pasquinelli Drive</td>
<td>Westmont Center is located on the west side of Pasquinelli Drive. Pasquinelli Drive is accessed by turning north from Ogden Ave one block west of Rout 83. The center entrance is immediately north of the bank.</td>
</tr>
<tr>
<td>COLLEGE OF LAKE COUNTY TEST CENTERS (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grayslake, Illinois</td>
<td>College of Lake County Grayslake Campus, 19351 West Washington Street Room B150</td>
<td>One remotely proctored test station. The Testing Center is located in Room B150 on the first floor of the Grayslake Campus.</td>
</tr>
<tr>
<td>Waukegan, Illinois</td>
<td>College of Lake County Waukegan Campus 33 N. Genesee Street</td>
<td>One remotely proctored test station. Take Belvidere (Route 120), Grand or Washington east to Genesee Street. The CLC Lakeshore Campus is on Genesee north of Washington and west of Sheridan Road. 2nd floor room N203.</td>
</tr>
<tr>
<td>City/State</td>
<td>Address</td>
<td>Driving Directions</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>ILLINOIS CENTRAL COLLEGE TEST CENTERS (2)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>JOLIET JUNIOR COLLEGE TEST CENTERS (2)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joliet,</td>
<td>Joliet Junior College 1215 Houbolt Road</td>
<td><strong>One remotely proctored test station.</strong> Exit I-55 onto Route 52 East (Exit 253) to Houbolt. Turn right (South) to college entrance. Report to Academic Skills Center in A-1138.</td>
</tr>
<tr>
<td>Illinois</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romeoville,</td>
<td>Joliet Junior College (Romeoville Campus) 1125 W 135th Street</td>
<td><strong>One remotely proctored test station.</strong> The testing center is located in the Resource Center, room NC 80.</td>
</tr>
<tr>
<td>Illinois</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PSI TEST CENTERS OUTSIDE ILLINOIS (2)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Louis,</td>
<td>PSI Test Center 11100 Mueller Road Suite 7 &amp; 8</td>
<td><strong>One remotely proctored test station.</strong> From St. Ann: Drive I-270 South and exit onto MO-21 (Tesson Ferry Rd). Drive east for about one and a half miles. From Tesson Ferry Rd, turn right onto US-50 (Lindbergh Blvd) for approximately a quarter mile. From Lindbergh Blvd, turn left onto Mueller Rd. The building is located behind McDonald's and a Mobile gas station.</td>
</tr>
<tr>
<td>Missouri</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evansville,</td>
<td>Ivy Technical Community College, 3401 N First Ave</td>
<td>Testing is in the Workforce Certification and Assessment Center. From Kentucky (South): Take Hwy 41 N to the Diamond Ave exit. Exit, going West to First Avenue turn right going North. You will travel through 2 stoplights before reaching Wendy's restaurant. Turn right at Wendy's; our parking lot is immediately to the left. From the airport: Take a left on Hwy 57 To Hwy 41. Go left going South on Hwy 41 to the Diamond Avenue Exit, going West to First Avenue turn right going North.</td>
</tr>
<tr>
<td>Indiana</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Instructions for scheduling a test using PSI’s 800 number

PSI provides an automated system to schedule your test via the telephone without having to speak with a Customer Service Registrar.

1. Call 800-733-9267, then Press 5
2. Stay on the line until the you hear the system begin (about 30 seconds)
3. You will be asked what you want to do: schedule, confirm, or retake a test
4. You will be asked if you know your ID# (this is your social security number)
5. The system will find your record and confirm the first few letters of your last name
6. The system will confirm the test
7. You will be asked what you want to do: schedule or request a bulletin
8. The system will use your zip code to find the closest test center
9. You will be given the closest test center
10. You will be given the available dates and times when you could take the test
11. You will select the date and time and the system will schedule you
12. You will be emailed a confirmation including the date and time of your testing appointment; the email includes directions to the PSI Test Center

If you prefer to speak to a Customer Service Registrar, they are available Monday through Friday, between 6:30 am and 7:00 pm and Saturday, between 10:00 am and 4:00 pm, Central Time.

- Call 800-733-9267, Select 5, then select * (star).
- A PSI staff member will answer to help you schedule your CTS exam.

Instructions for scheduling a test online at www.psiexams.com


If you are a new user at PSI, click on “Create an Account”.

If you have already created an account in the PSI system, type in your email address and password.

**VERY IMPORTANT STEP** You must enter your email address, your password and the spelling of your name in these screens EXACTLY as you submitted them on your application to CTS because that is what CTS sent to PSI.
2. If you already have an account in the PSI system, check the box “Check here to attempt to locate existing records for you in the system”.

3. Complete the following steps as shown below.

Select Government/State Licensing Agencies under Select Organization.

Select Illinois in Select Jurisdiction.

Select IL Department of Public Health in the box marked Select Account.

Enter your Social Security Number.

Click on Submit.
4. You are now ready to schedule. Click on *Schedule for a test.*

If there are no activities displayed on this page, please click the button below to provide additional information so that we can locate your records:

Find My Records

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Portion Name(s)</th>
<th>Sponsor</th>
<th>Eligibility Expires</th>
<th>Tasks Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>IL Trauma Nurse (TNS)</td>
<td>IL Trauma Nurse (TNS)</td>
<td>ILLINOIS DEPARTMENT OF PUBLIC HEALTH</td>
<td>Schedule for a test</td>
<td></td>
</tr>
</tbody>
</table>

**Scheduled records**

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Sponsor</th>
<th>Portion Name(s)</th>
<th>Schedule Date / Start Time</th>
<th>Confirmation No.</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>NO ACTIVITIES FOUND</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Past activity (last 10 records)**

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Sponsor</th>
<th>Tested Date</th>
<th>Portion (Result)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>NO ACTIVITIES FOUND</td>
<td></td>
</tr>
</tbody>
</table>

5. Enter your zip code or the city where you live. Click on the Search button.

You will see a list of the testing sites, starting with the one that is closest to you. Select the *Test center* you prefer from the list, then click on *Continue.* If you want to select a center that is not shown, enter the name of the city or the zip code where that test center is located.
You will now see a list of available test dates and times based on your eligibility expiration date. Click on the date and time of your choice and select Schedule.

- If there are no dates available, please call 800-733-9267 for assistance.

<table>
<thead>
<tr>
<th>Test Center</th>
<th>Available Date</th>
<th>Start Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHICAGO (ROOM A), Illinois</td>
<td>08/17/2013</td>
<td>8:30 AM</td>
</tr>
<tr>
<td>CHICAGO (ROOM A), Illinois</td>
<td>09/03/2013</td>
<td>12:30 PM</td>
</tr>
<tr>
<td>CHICAGO (ROOM A), Illinois</td>
<td>09/03/2013</td>
<td>3:00 PM</td>
</tr>
</tbody>
</table>

6. A confirmation will appear that you can print by clicking on the Print Details button. This message also includes directions to the test center.

Exam: IL Trauma Nurse (TNS)
Sponsor: ILLINOIS DEPARTMENT OF PUBLIC HEALTH
Confirmation Number: C6062003
Test Center: CHICAGO (ROOM A)
Address: CHICAGO (ROOM A)
332 S. Michigan Avenue,
Suite 410,
Chicago,
Illinois,
USA
Test Schedule Date: 09/03/2013
Test Schedule Time: 3:00 PM

You must arrive at the test center 30 minutes before the start of your schedule time or you forfeit your examination fees and will not be allowed to take your scheduled examination.

Directions to Test Center: Take US-41S which becomes I-94E. Take the W Jackson Blvd exit (51F). Turn left on W Jackson Blvd. Turn right on S Michigan Ave.

7. You also will receive an email from PSI to confirm the test center, date and time you have selected to take your test.
PSI CONFIRMS BY EMAIL

PSI sends each candidate an email to confirm the date and time of his/her testing appointment; the email includes directions to the PSI Test Center.

RESCHEDULING

A testing appointment may be rescheduled up to two business days before the scheduled test date. Candidates who fail this examination must reapply after complying with the requirements for retesting based on the number of their prior attempts.

MISSING AN APPOINTMENT

Candidates who miss a testing appointment forfeit all fees and must reapply before they are eligible to schedule a new test date.

TEST SCORES

Candidates at on-site proctored test centers will receive an unofficial score report before they leave the PSI Test Center. Candidates in all other test centers will see their results on-screen at the end of the test. None of these score reports can be used to apply for a license or certificate. All candidates will receive their official score reports from CTS by mail after their test date. Candidates who pass will receive an application to apply for licensure with their CTS score report. Candidates who fail will receive a diagnostic report in their CTS score report indicating content areas in which they need to improve their scores.
Part II  Testing Procedures

YOU WILL NOT BE ALLOWED TO TAKE THE EXAM IF YOU DO NOT HAVE ONE OF THESE FORMS OF ID. ALL CANDIDATE IDs ARE SUBJECT TO SECURITY SCREENING TO VERIFY THEIR AUTHENTICITY.

- A valid US Driver’s License or State ID issued by one of the 50 states or US Territories.
- A valid US Passport or Military Active Duty ID.
- A valid consular ID

All candidates must agree to abide by PSI Test Center Rules:
- Video monitoring of each candidate occurs throughout the test.
- Video tapes may be reviewed if suspicious behavior occurs during a test.
- Name and address on the candidate ID must match the CTS application and PSI candidate registration records.
- **ALL NAME OR ADDRESS CHANGES MUST BE SUBMITTED TO CTS IN WRITING AT LEAST 10 DAYS BEFORE THE TESTING APPOINTMENT.**

No candidate may take this test if he/she:
- Does not present required photo ID when asked
- Refuses to sign the PSI Examinee Agreement
- Does not follow all PSI Test Center rules
- Tries to use prohibited items, including but not limited to books, notes, cell phones, cameras, pagers or other electronic devices during a test
- Gives or receives help during a test or test breaks
- Tries to record or copy any test questions
- Fails to follow PSI Test Center staff instructions
- Disrupts testing for other candidates

Test Center check-in procedures include:
- Cell phones, pagers or other electronic devices are **NOT PERMITTED** in the testing room.
- Personal items (purses, coats, etc.) MUST be secured outside the testing room.
- A digital photograph and a digital fingerprint will be taken during check-in.
- Candidates must sign in and out of the test center for all personal breaks during testing.
- The test timer continues during any candidate’s personal breaks.

Before you start the test, you will be asked to enter your social security number. It must be identical to the social security number you submitted in your application to take this examination.
You will be required to read and agree to the security agreement before the test will begin.

### PSI SECURITY AGREEMENT FOR EXAMINATIONS

<table>
<thead>
<tr>
<th>Test Center Location:</th>
<th>State:</th>
</tr>
</thead>
</table>

**SECURITY AGREEMENT:**

I HAVE READ THE FOLLOWING PSI SECURITY AGREEMENT AND CONSENT TO TAKE THE LICENSING EXAMINATION UNDER THE CONDITIONS STATED HEREIN:

- I will not give or receive assistance while taking the test, including the use of unauthorized study materials or unauthorized notes. I acknowledge that I have not taken any unauthorized study material or unauthorized notes into the testing area.
- I will maintain the confidentiality of the test.
- I will not have in my possession a cell phone, pager, or other unauthorized materials.
- I will inform the proctor when needing to use the restroom, but I understand that leaving the building at any time before completing the exam is prohibited.
- I understand that violating the confidential nature of the licensing test can result in severe civil or criminal penalties, invalidation of test scores, reports to the authorized agency.

Note: If a candidate refuses to consent to the conditions of this PSI Security Agreement, the proctor will notify the candidate that he/she will not be authorized to take the examination. PSI headquarters will be so informed. This form is retained as a permanent part of the candidate file.

[AGREE][DISAGREE]

You will be asked to confirm your name, social security number and the examination for which you are registered before you can begin.

**Before you start your examination, an introductory tutorial to the computer will be available on the computer screen. The time you spend on this tutorial DOES NOT count as part of your examination time. Candidates may repeat the tutorial as many times as they like until they are ready to start the test.**

**Examination Screen**

![Examination Screen](image-url)
The Status Bar

The Status Bar at the top of the examination screen gives the status of the test.
- “Question 3 of 40” indicates that you are on QUESTION 3 out of 40 total questions.
- “Answered” and “Unanswered” indicate that you have answered 2 questions and left one question unanswered.
- “Marked” means that you have marked 0 questions to review later.
- “View” indicates that all questions on the test are available to you for VIEWING. (See GOTO Button)
- “Time Left” indicates how many minutes the candidate has remaining on this exam.

The Item or Question

Each question or test item appears on the screen ONE ITEM AT A TIME.

Choosing an Answer

Use the mouse to click on the option you believe is the best answer to the question. The answer you select will show a check mark or a filled button. Your answer is recorded when you click on NEXT. The computer then moves you to the next question. Since there is no penalty for wrong answers, you should answer every question by choosing what you think is the best response.

Calculator Button and Calculator

An on-screen calculator is available to perform simple calculations. Use the mouse to click on numbers and symbols.
Mark Button

The candidate may choose to mark a question to review later with the Mark button above the Status Bar. The candidate can review marked items by clicking on the GoTo button.

Comments Button

The Comments button offers the option to give a comment or feedback about the question in the screen that appears below.

GoTo Button

The GoTo Button takes the candidate to the following screen.

The candidate may use this screen to find:
- Marked questions
- Unanswered questions
- All questions
- A specific question identified by question number

View on the Status Bar will change to indicate which questions the candidate is viewing: For example, if the candidate chooses Marked Questions on the GoTo screen, the status will change to View: Marked.
Help Button

The HELP Button provides summary of each button’s functions. The candidate can click on HELP at any time.

Practice Questions or Sample Test

The Sample Test provides a few questions to help the candidate confirm how to mark answers to questions on the test. Sample Items are not scored and do not count toward the final result. They are provided for the candidate to become familiar with the computer prior to starting the scored portion of the exam.

On the last Sample Question, the candidate will see a series of messages.

Click **Next** to continue to the full exam or **Back** to return to sample questions.

The third screen confirms that the candidate is ready to begin the full exam.
Ending the Exam

The **End** button starts the sequence for ending either the sample items or the full exam.

Candidates will see the following screens at the end of the examination.

Survey Items

A short survey of your exam experience appears onscreen at the end of these to provide feedback about the test center and the exam.

Score Reports

Candidates who achieve a score of 80 or higher receive a preliminary report at the test center. An official CTS letter will confirm the candidate’s test results and provide further instructions for obtaining TNS certificate from the Illinois Department of Public Health.

Candidates who achieve a score below 80 will receive a preliminary report at the test center. An official CTS letter will confirm their test results and provide further instructions about scheduling future attempts to take the TNS examination.
Part III    Test Content & Reference Information

This examination was developed in collaboration with a committee of TNS course coordinators from and staff from the Illinois Department of Public Health. Content areas on the test are outlined below. Each subtopic is a module in the TNS curriculum.

### Trauma Nurse Certification (TNS)

1. **Professional Issues and Pathophysiology** *(24 questions)*
   - A. EMS/Trauma systems development  
     3 questions
   - B. Cardiac anatomy and physiology  
     5 questions
   - C. Fluids and electrolytes  
     6 questions
   - D. Neurological anatomy and physiology  
     5 questions
   - E. Respiratory anatomy and physiology  
     5 questions

2. **General Assessment and Management** *(41 questions)*
   - A. Airway access  
     8 questions
   - B. Arterial blood gases (ABGs) and acid base  
     3 questions
   - C. Patient assessment and management  
     13 questions
   - D. Shock and complications of post shock and trauma  
     13 questions
   - E. Kinematics  
     4 questions

3. **Head, Neck and Spine Trauma** *(30 questions)*
   - A. Traumatic brain injury  
     11 questions
   - B. Ocular and oral maxillofacial trauma  
     8 questions
   - C. Spinal cord injury  
     11 questions

4. **Torso and Extremity Trauma** *(29 questions)*
   - A. Abdominal trauma  
     7 questions
   - B. Genitourinary (GU) trauma  
     4 questions
   - C. Musculoskeletal, vascular and soft tissue trauma  
     8 questions
   - D. Thoracic trauma  
     9 questions
   - E. Zonal injuries of the neck  
     1 question

5. **Thermal Trauma** *(11 questions)*
   - A. Burns  
     8 questions
   - B. Cold injury  
     3 questions

6. **Pregnancy, Pediatric & Bariatric Trauma** *(15 questions)*
   - A. Trauma in pregnancy  
     4 questions
   - B. Pediatric trauma  
     9 questions
   - C. Bariatric trauma  
     2 questions
### Abbreviations

The following abbreviations may appear in the Trauma Nurse Specialist (TNS) Examinations.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AAA</td>
<td>abdominal aortic aneurism</td>
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<tr>
<td>ABCs</td>
<td>airway, breathing/ventilation, circulatory status</td>
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<tr>
<td>ABG</td>
<td>arterial blood gases</td>
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<tr>
<td>ACE</td>
<td>angiotensin-converting enzyme</td>
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<td>ACS</td>
<td>acute coronary syndrome</td>
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<tr>
<td>ADA</td>
<td>Americans with Disabilities Act</td>
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<tr>
<td>ADH</td>
<td>antidiuretic hormone</td>
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<tr>
<td>AED</td>
<td>automated external defibrillator</td>
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<td>AIDS</td>
<td>acquired immune deficiency syndrome</td>
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<td>AIVR</td>
<td>accelerated idioventricular rhythm</td>
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<td>ALS</td>
<td>Advanced Life Support</td>
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<tr>
<td>AMA</td>
<td>against medical advice</td>
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<td>AMI</td>
<td>acute myocardial infarction</td>
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<td>AMS</td>
<td>altered mental status</td>
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<tr>
<td>APGAR</td>
<td>appearance, pulse, grimace, activity, respirations</td>
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<tr>
<td>A&amp;O</td>
<td>alert and oriented</td>
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<tr>
<td>AP</td>
<td>anteroposterior</td>
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<td>ARDS</td>
<td>adult respiratory distress syndrome</td>
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<td>aspirin</td>
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<td>ATN</td>
<td>acute tubular necrosis</td>
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<tr>
<td>ATP</td>
<td>adenosine triphosphate (body’s energy source)</td>
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<tr>
<td>AV</td>
<td>atrioventricular</td>
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<tr>
<td>AVPU</td>
<td>Mental status responsiveness check: alert, responds to verbal or painful stimuli, unresponsive</td>
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<td>BID</td>
<td>two times per day</td>
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<td>BLS</td>
<td>Basic Life Support</td>
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<tr>
<td>BP or B/P</td>
<td>blood pressure</td>
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<td>beats per minute</td>
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<td>BSA</td>
<td>body surface area</td>
</tr>
<tr>
<td>BSI</td>
<td>body substance isolation</td>
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<tr>
<td>BUN</td>
<td>blood urea nitrogen</td>
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<td>BVM</td>
<td>bag valve mask</td>
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<tr>
<td>°C</td>
<td>degrees Centigrade</td>
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<td>CAD</td>
<td>coronary artery disease</td>
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<td>chief complaint</td>
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<td>c-collar</td>
<td>cervical collar</td>
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<td>CDC</td>
<td>Center for Disease Control and Prevention</td>
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<td>CHF</td>
<td>congestive heart failure</td>
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<td>CISD</td>
<td>critical incident stress debriefing</td>
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<td>CISM</td>
<td>critical incident stress management</td>
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<td>cm</td>
<td>centimeter</td>
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<td>CN</td>
<td>cranial nerve</td>
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<td>central nervous system</td>
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<td>c/o</td>
<td>complains of or complaining of</td>
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<td>carbon monoxide</td>
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<td>CO₂</td>
<td>carbon dioxide</td>
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<tr>
<td>COBRA</td>
<td>Consolidated Omnibus Budget Reconciliation Act (federal legislation providing for EMTALA and continuation of health insurance)</td>
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Abbreviations  (continued)

COPD  chronic obstructive pulmonary disease
CPAP or C-PAP  continuous positive airway pressure
CPR  cardiopulmonary resuscitation
CQI  continuous quality improvement
CSF  cerebral spinal fluid
c-spine  cervical spine
CT  computed tomography
CVD  cardiovascular disease
CVP  central venous pressure
D₃W  5% dextrose in water
D₅₀W  50% dextrose in water
DAI  diffuse axonal injury
D/C  discontinue
DCAP-BTLS  deformities, contusions, abrasions, punctures/penetrations, burns, tenderness, lacerations, swelling
DCFS  Department of Children and Family Services
DI  diabetes insipidus
DIC  disseminated intravascular coagulation
DKA  diabetic ketoacidosis
dl or dL  deciliter
DNR  do not resuscitate
DPL  diagnostic peritoneal lavage
DOA  dead on arrival
DOE  dyspnea on exertion
DT  delirium tremens
DOT  Department of Transportation
Dx  diagnosis
ECG or EKG  electrocardiogram
ECRN  Emergency Communications Registered Nurse
ED  emergency department
EDD  esophageal detector device
EEG  electroencephalogram
EMS  Emergency Medical Services
EMS MD  Emergency Medical Services Medical Director
EMTALA  Emergency Medical Treatment and Labor Act
EOMs  extraocular movements
mEq/L  milli-equivalents per liter
ET  endotracheal
EtCO₂  End tidal CO₂
ETOH  alcohol
ETT  endotracheal tube
°F  degrees Fahrenheit
FAST  focused abdominal sonography
FB  foreign body
FFP  fresh frozen plasma
FiO₂  fraction of inspired oxygen (oxygen percentage delivered)
Fr  French (suction, urinary or chest tube catheter diameter)
Fx  fracture
GCS  Glasgow Coma Score
GI  gastrointestinal
Abbreviations  (continued)

gm  gram
GSW  gunshot wound
gtts/min  drops per minute
GU  genitourinary
h  hour
H  hydrogen
H₂O  water
Hazmat  hazardous materials
HCO₃  bicarbonate
HCT, Hct  hemocrit
HEENT  head, eyes, ears, nose and throat
HEPA mask  high efficiency particulate airborne mask
HHN  hand held nebulizer
HHNC  hyperglycemic hyperosmolar nonketotic coma
HHNK  hyperglycemic hyperosmolar nonketotic
HHNS  hyperosmolar hyperglycemic nonketotic syndrome
HIPAA  Health Insurance Portability and Accountability Act
HIS  common bundle bridging AV node to bundle branches
HIV  human immunodeficiency virus
HR  heart rate
HTN  hypertension
Hx  history
ICP  intracranial pressure
ICS  incident command system
ICU  intensive care unit
IDPH  Illinois Department of Public Health
ILS  Intermediate Life Support
IM  intramuscular
IMS  incident management system
IN  intranasal
IO  intraosseous
IR  intrarectal
IV  intravenous
IVP  intravenous push
IVPB  intravenous piggy back
IVR  idioventricular
J  joules
JVD  jugular venous distension
KED  Kendrick extrication device
kg  kilogram
L  liter
lbs  pounds
LLQ  lower left quadrant
LMA  laryngeal mask airway
LMP  last menstrual period
L/min or lpm  liters per minute
LOC  level of consciousness
LR  lactated Ringers solution
LUQ  left upper quadrant
Abbreviations  *(continued)*

mA  milliamps
MAP  mean arterial pressure
mcg  microgram
mcggt  microdrops
MCI  multiple casualty incident
MDI  metered dose inhaler
mEq  milli-equivalents
MERCI  Medical Emergency Radio Communications of Illinois
mg  milligram
MI  myocardial infarction
min  minute
mL or ml  milliliters
MMF  maxillo-mandibular fixation
mmHg  millimeters of mercury
MODS  multi-system organ dysfunction syndrome
MOI  mechanism of injury
mph  miles per hour
MVC  motor vehicle collision or crash
NaCl  sodium chloride
NC  nasal cannula
NIH  National Institutes of Health
NOE  nasal-orbital-ethmoid
NPA  nasopharyngeal airway
NPO  nothing by mouth
NRB  non-rebreather mask
NS  normal saline
NSAID  nonsteroidal anti-inflammatory drug
NSR  normal sinus rhythm
NTG  nitroglycerin
N/V  nausea/vomiting
O 2  oxygen
OB  obstetric
OG/NG tube  orogastric/nasogastric tube
OPA  oropharyngeal airway
OPQRST  onset, provokes, quality, radiation, severity, time
OR  operating room
Oriented X 1  oriented to person
Oriented X 2  oriented to person and place
Oriented X 3  oriented to person, place and time
Oriented X 4  oriented to person, place, time and event
OSHA  Occupational Health and Safety Administration
P  pulse
PAC  premature atrial contraction
Palp  palpation
PALS  pediatric advanced life support
PaO 2  partial pressure of oxygen (arterial blood)
PASG  pneumatic anti-shock garment
PCA  Patient Controlled Analgesia
PCO 2  partial pressure of carbon dioxide
PCR  patient care report
Abbreviations (continued)

PE  pulmonary embolism
PEA  pulseless electrical activity
Peds  pediatrics
PEEP  positive end-expiratory pressure
PERRL  pupils equal and round, regular in size, react to light
pH  partial pressure of hydrogen (hydrogen ion concentration)
PHRN  Prehospital Registered Nurse
PICC  peripherally inserted central catheter
PID  pelvic inflammatory disease
PO or po  orally or per os (by mouth)
PO₂ or pO₂  partial pressure of oxygen
POD hospital  designated lead hospital in a region for disasters
PPE  personal protective equipment
PR or PRI  P-R interval
PRBCs  packed red blood cells
prn  pro re nata or as needed
psi  per square inch
PSVT  paroxysmal supraventricular tachycardia
Pt  patient
PTH  parathyroid hormone
PL  Pharyngo-tracheal lumen airway (dual lumen airway)
PT/PTT/INR  prothrombin time/thromboplastin time/International Normalized Ratio
PVC  premature ventricular contraction
q  every
QRS  ECG wave representing ventricular depolarization
QT or QTI  QT interval
R  respiration
RA  room air
RBC  red blood cell
Rh  rhesus factor (blood + or -)
RLQ  right lower quadrant
RN  Registered Nurse
R/O  rule out
ROSC  return of spontaneous circulation
RPF  renal plasma flow
RR  respiratory rate
Rt  right
RTS  revised trauma score
Rule of nines  Each 9%  Whole head, chest, abdomen, anterior each leg, posterior each leg, upper back, lower back/buttocks, whole arm
  1%  Perineum
RUQ  right upper quadrant
S&S  signs and symptoms
SA  sinoatrial
SAH  subarachnoid hemorrhage
SAMPLE  symptoms, allergies, medications, past medical history,
  last oral intake/last menstrual period, events surrounding the incident
SBP  systolic blood pressure
SCI  spinal cord injury
SIADH  syndrome of inappropriate ADH
SIRS  systemic inflammatory response syndrome
Abbreviations (continued)

SL  sublingual
SOB  shortness of breath
SOMI  Sternal Occipital Mandibular Immobilizer
SpO₂  pulse oximetry
S-T  or ST  S-T segment
START  simple triage and rapid treatment
STD  sexually transmitted disease
Sub-q  subcutaneous
SVT  supraventricular tachycardia
T or Temp  temperature
TBI  traumatic brain injury
TBSA  total body surface area
TENS  transcutaneous electrical nerve stimulation
TID  three times per day
TKO  to keep open
TPN  total parenteral nutrition
TSH  thyroid-stimulating hormone
TT  tetanus toxoid
Tx  treatment
U  unit
URI  upper respiratory infection
UTI  urinary tract infection
VAP  ventilator associated pneumonia
V-fib or VF  ventricular fibrillation
Vₐ/Q  ventilation (alveolar)/perfusion
VS  vital signs
V-tach or VT  ventricular tachycardia
WAP  wandering atrial pacemaker
WMD  weapons of mass destruction
WNL  within normal limits
w/o  without
WOB  work of breathing
y/o  year old

Reference Norms

Intrinsic pacing rates  SA node  60-100
AV node  40-60
Ventricles  20-40
PR interval  0.12 – 0.20 seconds
QRS duration  0.04 – 0.10 seconds
Carotid pulse = minimum systolic BP of 60 mmHg
Femoral pulse = minimum systolic BP of 70 mmHg
Radial pulse = minimum systolic BP of 80 mmHg
Upper limits of pacing mA = 200

Airway treatment questions reference AHA 2005 ACLS Guidelines
Peds fluid resuscitation volumes are calculated at 20 mL/kg
1 lb = 2.2 kg
Part IV  Sample Questions

All questions on this examination are multiple-choice with one correct answer. Each question is supported by the Trauma Nurse Specialist Program that is used to train TNS candidates. The answer key appears after these questions.

1. Based on the Illinois trauma center rules, which provider met the Level II requirements?

   An adult presents with an epidural hematoma and open femur fracture. The trauma surgeon declares these to be isolated injuries, consults orthopedics and neurosurgery for immediate operative intervention and signs off the case. Orthopedics arrives 55 minutes after being contacted and determines that he will repair the femur concurrently with the neurosurgical case. Anesthesia is tied up in surgery and asks that they be given an extra 60 minutes to locate a second anesthesiologist. The neurosurgeon arrives in the OR in 90 minutes. Both the craniotomy and femur repair are started 2½ hours later.

   A. Neurosurgeon  
   B. Trauma surgeon  
   C. Anesthesiologist  
   D. Orthopedic surgeon

2. What does a central venous pressure of 2 mmHg reflect in an adult with multiple trauma?

   A. Pulmonary edema or ARDS  
   B. High right atrial or vena caval pressures  
   C. Hypovolemia and need for fluid resuscitation  
   D. Myocardial ischemia from low aortic root pressures

3. Which IV solution is isotonic?

   A. LR  
   B. D_{50}W  
   C. Mannitol  
   D. 3% NaCl

4. Which of these would cause vasodilation of cerebral blood vessels?

   A. pO_{2} 45 mmHg  
   B. pO_{2} 90 mmHg  
   C. pCO_{2} 30 mmHg  
   D. pCO_{2} 40 mmHg
5. Which of these conditions increases anatomic dead space?
   A. Upper airway obstruction
   B. Pulmonary embolism
   C. Atelectasis
   D. Epiglottitis

6. Which of these definitive airway access methods is indicated for an awake adult who presents with massive facial trauma, no detectable nasal or oral openings, and extremely labored ventilations with loud gurgling sounds?
   A. Repositioning of the mandible and oropharyngeal airway
   B. In-line orotracheal intubation
   C. Nasotracheal intubation
   D. Cricothyrotomy

7. An adult presents to the ED after being struck in the abdomen with a baseball bat. FAST exam shows a massive splenic hemorrhage. ABG results: pH 6.9, pCO₂ 42, pO₂ 80, HCO₃ 18. Base deficit – 12 mEq/L. VS: BP 94/60, P 130. What is the definitive intervention for this patient?
   A. Surgery to stop the hemorrhage
   B. Administration of blood products
   C. Drug assisted intubation and hyperventilation
   D. Administration of a large volume of 0.9 NS IV fluid

8. Which of these is included in the primary survey?
   A. Percussing the abdomen
   B. Obtaining a SAMPLE history
   C. Maintaining cervical spine control
   D. Checking extra-ocular eye movements

9. Which of these is included in the secondary survey?
   A. Assessing level of consciousness
   B. Palpating the abdomen
   C. Establishing IV access
   D. Opening the airway

10. Which condition should the TNS be alert for after an older patient is injured in a fall?
    A. Epidural hematomas
    B. Subarachnoid bleeds
    C. Intracerebral bleeds
    D. Subdural hematomas
11. Which of these is associated with an anterior compression injury to the abdomen?

A. Ruptured diaphragm  
B. Small bowel tear  
C. Renal laceration  
D. Aortic tear

12. An adult presents with a GCS of 4 and unilaterally dilated pupil following head trauma. VS: BP 94/58, P 146, R 12 and irregular. The patient is positioned supine with head elevated on two pillows. The airway is patent and O₂ was given at 6L/NC. An IV of LR was started and 2 L infused. A bolus of 250 mL of 7.5% NaCl with Dextran was given to improve BP and reduce cerebral edema. VS and LOC were assessed and recorded hourly using the GCS. Which of these complied with the Brain Trauma Foundation Guidelines?

A. Positioning  
B. Fluid resuscitation  
C. Airway and ventilatory support  
D. Continued monitoring and documentation

13. Which facial fracture is most likely to have an associated CSF leak?

A. Maxillary ridge  
B. Orbital blowout  
C. LeFort III  
D. Zygoma

14. A patient with a spinal cord injury presents with no movement in the feet or legs, no sensation over the chest or abdomen, and weak flexion of the elbows. At what level is the disruption?

A. Cervical  
B. Thoracic  
C. Lumbar  
D. Sacral

15. A spinal cord injury patient has been positioned on a backboard for the past 6 hours while being transferred to the specialty center. Which complication is the patient at HIGHEST risk to develop?

A. Skeletal dysreflexia  
B. Aspiration pneumonia  
C. Malignant hypertension  
D. Skin breakdown on bony prominences
16. Which of these interventions is indicated for an adult with penetrating abdominal trauma, hypotension and frank rectal bleeding?

A. Serial FAST exams  
B. Emergency colonoscopy  
C. Exploratory laparotomy  
D. Abdominal CT with contrast

17. Which of these is the most common MOI for anterior urethral tears in a male?

A. Self-instrumentation  
B. Straddle injury  
C. Stabbing  
D. GSW

18. An adult sustained a crush injury to the lower leg two hours ago and is now c/o intense throbbing pain in the calf. The pain worsens when the great toe is passively extended. Which intervention is most appropriate?

A. Prepare for a fasciotomy.  
B. Administer more pain medication.  
C. Elevate the leg and apply cold packs.  
D. Apply warm moist towels to enhance local tissue perfusion.

19. An adult with a flail chest develops increasing dyspnea and dropping pulse oximetry values. Initial blood gases show respiratory alkalosis. Chest x-ray reveals generalized haziness over all lung fields. What should a TNS suspect?

A. Septic shock  
B. Pleural effusions  
C. Bilateral pneumothoraces  
D. Pulmonary contusion and ARDS

20. An adult female from a MVC is conscious but confused, pale, and diaphoretic. Her airway is patent but she complains of severe dyspnea. She has a large contusion of the left chest with absent breath sounds on the left, JVD, a LUQ abdominal contusion, and pain on pelvic compression. VS: BP 70/40; rapid weak & thready femoral pulse; R 32. Which intervention is indicated?

A. PASG; inflate all compartments  
B. Needle thoracostomy to left chest  
C. 2 large bore IVs and LR infused at a wide open rate  
D. 100% O₂ per NRM, stat chest x-ray, and chest tube insertion
21. Which of these is most important when evaluating a penetrating injury to the neck?
   A. Esophagrams
   B. Color flow Doppler
   C. Physical examination
   D. Lateral cervical spine x-ray

22. What is the most accurate indicator in the first 24 hours of effective fluid resuscitation and restored peripheral perfusion in a severely burned patient?
   A. Hematocrit
   B. Hourly vital signs
   C. Hourly urine output
   D. Trends in SpO\textsubscript{2} reading

23. Which intervention is indicated for an adult with a core temperature of 88°F (31°C) and a perfusing bradycardia at 40 bpm?
   A. Rewarming and volume replacement with NS
   B. CPR with compressions at 100/minute
   C. External transcutaneous pacing
   D. Atropine up to 3 mg IVP

24. Which of these is an indication for an emergency caesarean section?
   A. Fetal demise at 12 weeks gestation
   B. After fetal heart tones have been confirmed
   C. Post-mortem within 20 minutes of maternal death
   D. Uterine size prevents adequate treatment of an unstable mother

25. Which of these is most useful in assessing for adequate tissue perfusion in children?
   A. Signs of blood loss
   B. Urinary output
   C. Temperature
   D. SBP
Answers for TNS Sample Questions

<table>
<thead>
<tr>
<th>Content Area</th>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>1. Professional Issues &amp; Pathophysiology</td>
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<tr>
<td></td>
<td>2</td>
<td>C</td>
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<td>5</td>
<td>B</td>
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<td>2. General Assessment &amp; Management</td>
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<td>11</td>
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<td>3. Head, Neck &amp; Spine Trauma</td>
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<td>4. Torso &amp; Extremity Trauma</td>
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<td>5. Thermal Trauma</td>
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<td>A</td>
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<td>6. Pregnancy &amp; Pediatric Trauma</td>
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