



*Association of Community Health
Nursing Educators*

Innovative Teaching Strategy (ITS)

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Directions: Provide the following information for your Innovative Teaching Strategy. The Appendix attached will assist you to complete items 3 through 7.

Be succinct in describing your strategy. Use of bulleted points is encouraged.

1. **Title of Teaching Strategy:** Using a mix of strategies to engage students in disaster preparedness
2. **Date of Submission:** May 1, 2019
3. **Topical Area:** (See Appendix) Disaster nursing/bioterrorism
4. **Public Health Nursing competencies and standards:** PHN competencies are inter-related, therefore more than one competency may be addressed by the ITS. Select the appropriate competencies and standards from the lists provided. (See Appendix)
 - **ACHNE Public Health Nursing Core Knowledge and Basic Competencies**
 1. Communication
 3. Community/population assessment
 4. Community/population planning
 7. Health promotion and risk reduction
 8. Illness and disease management
 - **ANA PHN Scopes and Standards of Practice**
 1. Assessment
 2. Population and Diagnosis
 4. Planning
 5. Implementation
 - 5a. Coordination of Care

5b. Health Teaching and Health Promotion

- **Standards of Professional Performance for PHN**

7. Ethics
8. Education
9. Evidence-based Practice and Research
11. Communication
13. Collaboration
15. Resource Utilization
16. Environmental Health

- **QUAD Council Competencies for Public Health Nurses (2018)**

1. Analytic and Assessment Skills
2. Policy Development/ Program Planning Skills
3. Communication Skills
4. Cultural Competency Skills
5. Community Dimensions of Practice Skills
6. Public Health Sciences Skills
8. Leadership and Systems Thinking Skills

5. **Learner Level(s):** Select all that apply (see Appendix) Undergraduate

6. **Learner Setting(s):** Select all that apply (see Appendix)

- Skills or simulation laboratories
- Online or web-based modules
- Classroom

The settings for this activity include online pre-simulation event learning activities (SALT Triage and FEMA IS-100.HCA modules), a one-hour classroom lecture prior to the simulation, and an on-campus shelter simulation and Stop the Bleed class.

7. **Strategy Type:** Select all that apply (see Appendix)

- Seminar/Simulation Exercise
- Case study
- Problem-based learning Activity

8. **Learning Goals/Objectives:** Written as SMART objectives (Specific, Measurable, Action oriented, Realistic/Relevant, Time-based). Reflects Bloom's Taxonomy- Action Verbs written at application, analysis, synthesis, and evaluation levels.

Upon completion of the activity students will be able to:

1. Identify the role of public health in disaster mitigation, preparedness and response.
2. Identify the role of the nurse in disaster preparedness.
3. Demonstrate planning for shelter set up and operation.
4. Demonstrate use of nursing process with shelter guests (case studies).

5. Apply principles of Sort, Assess, Lifesaving interventions, Treatment/Transport (SALT) triage.
6. Demonstrate wound packing and tourniquet application to stop bleeding.
7. Demonstrate the ability to use the medical evacuation sled.

9. **Estimated time** for the activity:

7.5 hours total

Federal Emergency Management Agency FEMA IS-100.HCa (online module) – 3 hours

SALT Triage (online module) – 30 minutes

Classroom: Lecture – 1 hour

Seminar/Simulation Activity– 4.5 hours

10. **Strategy Overview:** Brief description of the strategy.

Nursing 455: Population-Focused Nursing Practice is taken Fall semester of the senior year. The course promotes development of disaster preparedness competencies through seminar, online clinical modules and simulation. Students are expected to apply principles of SALT triage, plan and set up a shelter, conduct a shelter guest intake and health needs assessment, and use the medical evacuation sled in a seminar setting on campus.

11. **Detailed Strategy Directions:** Provide detailed steps to implement the strategy including faculty/student directions if available. (**Attach additional documents as necessary**-Be sure document title clearly identifies the content of the file)

The disaster preparedness clinical education includes classroom lecture, independent online learning and simulation. Online learning modules, SALT Triage and FEMA IS-100, are completed by students prior to the seminar/simulation day. The week prior to the activity (or the week of), students attend classroom lecture that includes the following objectives:

- Discuss the role of nurses in disaster preparedness and response at the population/public health level.
- Identify natural and human-made disasters and potential implications of each for human health.

- Discuss the role of nurses in disaster preparedness and response at the population/public health level.
- Describe the phases of disaster management and the role of the nurse in each.
- Discuss the role of each agency in disaster preparedness and response: FEMA, Red Cross, Homeland Security, CDC, State and local Health Departments.

The 4.5 hour simulation includes:

- Completion of “Stop the Bleed” course which includes wound packing and tourniquet application skills demonstration.
- Demonstration of evacuation of a victim down a staircase using a Med Sled.
- Demonstration of triage competency using patient triage training cards.
- Tour of the Physical Activities Center (a Red Cross designated shelter) and development of a shelter set up plan.
- Use of case studies with Red Cross shelter forms.

The class has an average of 50 students. All students complete the Stop the Bleed training together. The group is then divided in two. Half of the students begin with the shelter planning and case study activities, while the other half are practicing triage and Med Sled skills. One faculty member leads the shelter planning, one leads the triage activities and a third manages the Med Sled evacuation demonstration.

Students are divided into groups of 4-5 for the shelter planning/case study activities.

Students are taken on a tour of the Physical Activities Center (PAC) for an assessment of the facility to use in shelter planning: placement of entry/registration; secure medication and supply storage; medical treatment area; feeding/dining area; volunteer rest areas; recreation areas; and guest shelter cot layout. They use a laminated floor plan with dry erase markers to work with their small group in planning the shelter layout. Groups share their plans with peers after about

20 minutes of planning time. These students are then assigned a case study (see Attachment A for cases). One student volunteers to play the role of the shelter guest, and the rest of the students must assess the guest using the American Red Cross shelter registration and C-MIST forms. As the students are working on the guest assessment, the faculty distributes “zingers” to each group on an index card. The group must then act to address the condition that is presented on the card, which is a realistic issue that may present in a shelter population. “Zingers” include possession of a firearm, signs of intimate partner violence, and bedbugs. The full list is included in Attachment B.

The other half of the class rotates between practicing use of the MedSled (with a mannikin) down and up a staircase. About four students practice this activity as a team. The others are reviewing the MESH Coalition Triage cards and discuss how they would “tag” the case. Students are given construction paper cards that reflect the triage options (green, yellow, red, black) that they hold up in response the card that is projected in front of the room. Discussion about the decisions (and lack of concurrence at times) occurs.

The students then switch groups to fully complete all activities. A debriefing wraps up the activity.

- a. **Strategy Materials/Resources:** Materials needed to implement the strategy (e.g., PowerPoint files, computer lab, index cards, large paper, videos, etc.)
Adult patient triage cards with construction paper for the level of sorting. (MESH Coalition \$115 for adult cards)
Medical evacuation sled
Mannikin full body
Blanket
Wheelchair
Red Cross Shelter Registration and C-Mist forms
Shelter floor plans
Erasable markers and erasers
Mannikin with wounds
Gauze for packing
Tourniquets
Case studies

b. **Website Links:** Provide a description of how to use the website in the strategy. Note time needed as appropriate.

C-MIST Worksheet – used to assess needs

<http://drc-group.com/wp-content/uploads/2012/01/OSC-CMISTWorksheet.pdf>

FEMA IS-100.HCa (online module) – 3 hours

<https://training.fema.gov/is/courseoverview.aspx?code=IS-100.c>

Med sled training for healthcare – 7 minutes

<https://www.youtube.com/watch?v=eZGOoyNwsHA>

SALT Triage (online module) – 30 minutes

<http://register2.ndlsf.org/mod/page/view.php?id=2056>

Shelter dormitory registration – intake form for registration

<http://drc-group.com/wp-content/uploads/2012/01/OSC-ShelterRegistrationForm.pdf>

Stop the bleed – 1 hour practicing techniques

<http://www.bleedingcontrol.org/>

c. **Methods for evaluating student learning:** Examples include but are not limited to: Grading rubric, papers, projects, exam/quiz items, clinical conference discussion questions, Student evaluation tool to rate experience.

Debriefing and Evaluation:

- About 15 minutes at end of session.
- Evaluate learning outcomes.
- Discuss what worked well, and what did not work well.

12. **Comment on overall success of this teaching strategy**

A mix of educational strategies was used to prepare senior level nursing students for response

during a disaster. Students demonstrated the ability to apply the principles of SALT triage, plan

and set up a shelter, conduct a shelter guest intake and health needs assessments, and use the

medical evacuation sled. Students were actively engaged, and learning occurred through the

simulation.

13. **Additional References:** Used in the development of the strategy.

American College of Surgeons (2015-2016). Stop the bleed. Retrieved from

<http://www.bleedingcontrol.org/>

American Red Cross. (2017). C-Mist worksheet. Retrieved from

<http://drc-group.com/wp-content/uploads/2012/01/OSC-CMISTWorksheet.pdf>

Disaster Resistant Communities. (2016). Shelter dormitory registration. Retrieved from

<http://drc-group.com/wp-content/uploads/2012/01/OSC-ShelterRegistrationForm.pdf>

Federal Emergency Management Agency. (2018). IS-100.C: Introduction to the incident command system, ICS 100. Retrieved from

<https://training.fema.gov/is/courseoverview.aspx?code=IS-100.c>

Med Sled Evacuation. (2009). Med sled training: Healthcare. Retrieved from

<https://www.youtube.com/watch?v=eZGOoyNwsHA>

MESH Coalition (n.d.). Adult patient triage cards. Retrieved from

<http://www.meshcoalition.org/products/patient-triage-cards>

National Disaster Life Support Foundation (2015). SALT mass casualty triage on-line training.

Retrieved from <http://register2.ndlsf.org/mod/page/view.php?id=2056>

Innovative Teaching Strategies
St. Clair and Connerton
Attachment A-Case Scenarios

1. George is a 68 year old white male. He is legally blind. He comes to the shelter in a wheelchair accompanied by his home health aide. He states that he stays in the wheelchair because he has trouble breathing when he tries to walk. He brings no medicines, clothes, or toiletries. He needs help maneuvering the wheelchair because of his limited vision. He does not want to be at the shelter but there is no electricity at his apartment. His aide reports that she is in his apartment 4 hours a day.
2. Anna K is a 58 year old black female. She is accompanied by her 60 year old husband, her 30 year old daughter and two grandchildren, a 6 year old male and a 12 year old female. She has asthma. Her husband is scheduled for dialysis tomorrow but doesn't know how he can get there. They arrive with some clothes and the children's school bags. The 6 year old states that his ear hurts, and the adult daughter says that she can't take this anymore and her head hurts.
3. Charles is a 70 year old male. He arrives with a walker, his Lasix (but he doesn't want to take it because he will then need to use the bathroom every few minutes), and Lisinopril. He really doesn't want to be a burden. He can't get to the dining area by himself. There is a patch over one eye. His family all lives in Florida and he has only been in this community for less than a year. He has a doctor's appointment scheduled 3 days from now for surgery on his groin. He also thinks that he has an appointment sometime soon with his heart doctor.
4. Mary is a 72 year old white female who tells you that she needs oxygen all the time. She has a machine at home, but the family didn't bring it when they left her off at the shelter. There is no electricity in home, but her son and his family are staying the home to "keep it safe." She is very quiet, and you must drag every word out of her. She is seated in a wheelchair. She stays in bed most of the time. She doesn't remember what medications she takes, but she does remember that there are a lot of pills.
5. Judith is a 19 year old female, 10 days postpartum. She is accompanied by her infant daughter who is bottle fed and her 17 year old husband. She has no baby supplies with her.
6. Erik is a quadriplegic veteran accompanied by his paraplegic wife, also a veteran. They arrive by van from their home, which, while undamaged has no electricity. They have home health daily for 6 hours a day. He has an indwelling catheter, an electric wheelchair. She has an electric wheelchair and needs to be transferred to the toilet where she credes her bladder 8 times a day. Both smoke and want the freedom to go outside.

Innovative Teaching Strategies
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Attachment B- "Zingers"

1. Has bedbugs.
2. Has headlice.
3. Has a handgun to protect family.
4. Has a rash, cough, runny nose, red eyes, fever and not immunized.
5. Has MRSA.
6. Bruises on neck-possible intimate partner violence.
7. Track marks noted in antecubital area.

**Nursing 455: Population Focused Nursing Practice
Disaster Preparedness Simulation
Pre-Activity Assessment**

Please select the response that is most appropriate regarding your perception on your ability related to the disaster preparedness simulation.

Ability to:	Strongly Disagree	Disagree	Agree	Strongly Agree
Apply the principles of SALT (Sort, Assess, Lifesaving Interventions, and Treatment/Transport) triage.	1	2	3	4
Set up a shelter for a disaster.	1	2	3	4
Assess the health needs of a disaster victim in a shelter using the cot assessment.	1	2	3	4
Demonstrate the use of the medical evacuation sled.	1	2	3	4

**Nursing 455: Population Focused Nursing Practice
Disaster Preparedness Simulation
Post-Activity Assessment**

Please select the response that is most appropriate regarding your perception on your ability related to the disaster preparedness simulation.

Ability to:	Strongly Disagree	Disagree	Agree	Strongly Agree
Apply the principles of SALT (Sort, Assess, Lifesaving Interventions, and Treatment/Transport) triage.	1	2	3	4
Set up a shelter for a disaster.	1	2	3	4
Assess the health needs of a disaster victim in a shelter using the cot assessment.	1	2	3	4
Demonstrate the use of the medical evacuation sled.	1	2	3	4