

# Introducing Disaster Nursing to Nursing Students

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*Thrive.*





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## Objectives

- Define the term disaster and discuss the impact nursing education can have on community response
- Describe the use of Bloom's Taxonomy to enhance teaching techniques in a disaster simulation setting
- Share the process of creating a disaster simulation experience that exposes students to facts, procedures and practices related to cyanide poisoning

## Disaster

- Webster says “A sudden calamitous event bringing great damage, loss, or destruction”
- Can be classified two ways: natural or man-made



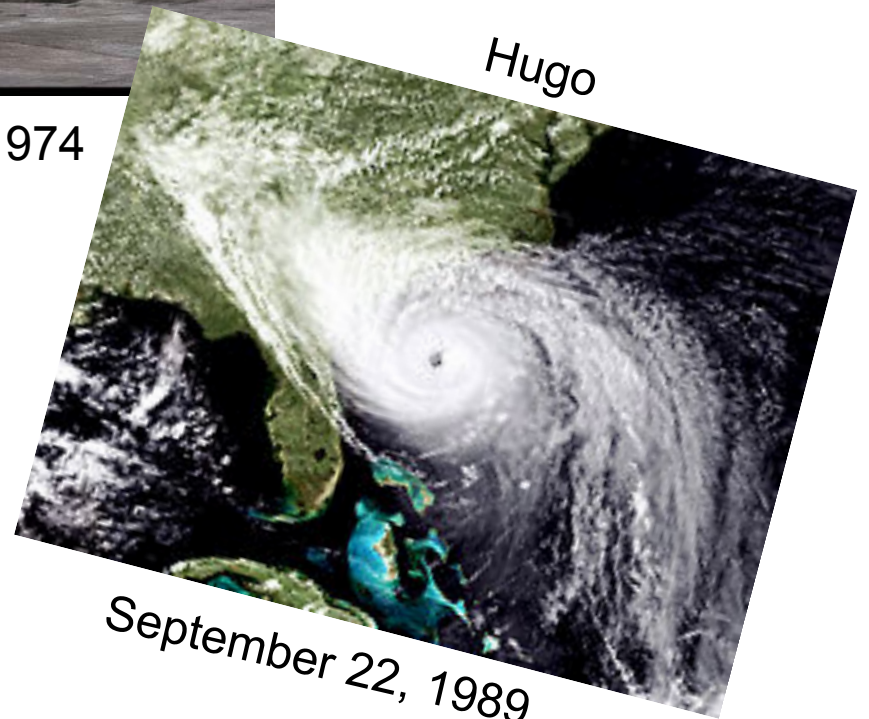
Eastern  
212

September 11, 1974

Photo Copyright AirPhoto.com



May 27, 1925  
Coal Glen, NC



Hugo

September 22, 1989

## Disaster cont.

- Legg (2009) urges nurses to identify disasters not by property damage or lives lost
- He wants us to define a “disaster as involving multiple persons and requiring resources of a healthcare system to a point that these resources have either been exhausted or are in threat of being exhausted and/or, requiring additional assistance beyond what a given healthcare organization is capable of providing.”(Legg, 2009)

## Nursing Education

- TCU professors describe how “schools of nursing can play a vital role in enhancing the general public's self-care ability following a disaster...this article describes a clinical learning experience that involved nursing students in a health education project related to one community's desire to better prepare themselves for future disasters” (Adams, 2008)

## Nursing Education cont

- TCU Harris College of Nursing and Health Sciences assisted in organizing schools, communities, mosques and churches in response to Katrina devastation
- They have now incorporated a community health course directed at disaster preparedness into their program

(Adams and Canclini, 2008)



## Nursing Leadership

- In 2008, the ANA stated that it is the responsibility of every RN to maintain a state of readiness for disasters, including bioterrorism preparedness
- Schools of nursing in general and simulation labs in specific are in a unique position to fill this mandate

## Our Objective

- Why we chose to do this
  - Recent world events
  - Needed a situation where graduating seniors were given an opportunity to practice leadership skills in a clinical setting
  - Limited availability of multiple patient scenarios
  - A unique and challenging learning experience to close out their time in PSL



## Development

- Discussed activity with course leaders, lab staff and Chair
- Decision made that there would be no facilitator at bedside
- Lab staff would be responsible for preconference as well as debriefing
- Lab will be held simultaneously with students' preceptorship
- Teams limited to 3 students per patient for total of 6 each experience

## Development cont.

- Reviewed scenarios in PNCI
- Noted Smallpox and Pediatric Cyanide Poisoning
- Decided to adapt the pediatric scenario to include mother
- Changed plot to include a park visit and contaminated drinking water system
- Programmed in appropriate adult responses into Adult ECS software



## Development cont.

- Developed objectives and particular set of preparation questions for students
- Did a lot of research on our own regarding regional processes of response and notification

## Development cont.

- Bloom's Taxonomy categorizes cognitive levels from lower-order thinking to higher-order
- Some of the more basic levels such as remembering, understanding & applying will be confirmed via simulation worksheets, preconference and the actual simulation experience
- Higher-order processes such as analyzing and evaluating are expected to take place during debriefing



Scenario: Terrorism by Chemical Agent, Care of Adult

Simulated Clinical Experience Overview

Scenario: Terrorism by Chemical Agent, Care of Adult
Overlay on: Stannette

Location: Emergency Department

Synopsis: Mrs. Patty Carrier and her 6 year old son, Brandon, enjoyed a day off from school by spending the morning at the local park. Shortly after returning home for lunch each began experiencing symptoms of nausea, vomiting, headache and weakness.

Doctor's Orders
Cardiac monitor
Pulse Oximeter
O2 to keep oxygen saturation greater than 95%
Cardiac monitor
Pulse Oximeter
O2 to keep oxygen saturation greater than 95%



Learning Objectives / Questions

- 1-Recognizes the need for isolation precautions to be initiated based on history.
2-Identifies the appropriate personal protective equipment (PPE) for the healthcare provider.
3-Conducts as appropriate physical assessment of the patient exposed to cyanide poisoning.
4-Demonstrates techniques that help to alleviate anxiety, fear, and panic.
5-Identifies all appropriate community agencies needing to be notified about the emergency situation.

Questions to prepare the learner in preconference:

- 1-Identify and describe the following types of isolation. What precautions must the nurse take with each?
2-What personal protective equipment should a nurse use when providing care for each of the isolation types?
3-What are the different types of cyanide poisoning? Describe ways in which a person might be exposed to cyanide.
4-Describe cyanide poisoning. What is the pathophysiology, signs and symptoms, treatments, and complications associated with this poisoning?
5-What agencies should be notified when a person is suspected to be a victim of biological or chemical agent exposure? Are there privacy related concerns when an outside organization is notified of a patient's condition?

## Scenario Objectives

- Recognizes the need for isolation precautions to be initiated based on history.
- Identifies the appropriate personal protective equipment (PPE) for the healthcare provider.
- Demonstrates appropriate use of PPE.
- Conducts as appropriate physical assessment of the patient exposed to cyanide poisoning.
- Demonstrates techniques that help to alleviate anxiety, fear, and panic. Develops a developmentally appropriate care plan for bioterrorism victim.
- Identifies all appropriate community agencies needing to be notified about the emergency situation.

## Prep Questions

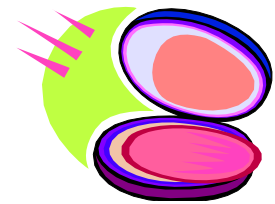
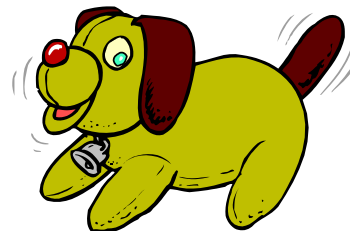
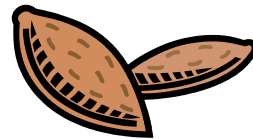
- Identify and describe the following types of isolation. What precautions must the nurse take with each?  
a. Airborne b. Droplet c. Contact
- What personal protective equipment should a nurse use when providing care for each of the isolation types?
- What are the different types of cyanide poisoning?

## Prep Questions cont.

- Describe ways in which a person might be exposed to cyanide. Describe cyanide poisoning. What is the pathophysiology, signs and symptoms, treatments, and complications associated with this poisoning?
- What agencies should be notified when a person is suspected to be a victim of biological or chemical agent exposure?
- Are there privacy related concerns when an outside organization is notified of a patient's condition?

## Creativity

- Created Simulation Reality
  - Female adult with wig and female “accessories”
  - Almond scented breath
  - Wet bed for child
  - Seizure activity, tongue blade at bedside
  - Fluffy
  - Cyanide Anti-dote Kit
  - Flushed skin





## Implementation

- Sign up sheets placed and students were required to self schedule
- All prep work expected to be done
- Proper clinical attire
- 30 minute preconference
- 20-30 minute scenario
- 1 hour debriefing as needed

# Challenges

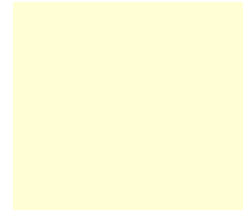
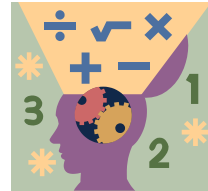
- Senioritis
  - Wait to last minute to sign up
  - Missing scheduled time
  - Unprepared
  - Inappropriate attire
  - Not taken seriously
    - Late
    - Giggles
    - Attitude





## Challenges cont.

- Med Administration
  - Lack of experience with IVs, injections
  - Med math deficiencies
- Communication within scenario
  - Two patients
  - Physician/I-SBAR-R
- Student difficulty taking independent responsibility for decisions and actions
  - could not cut the cord





## Evolution

- No nonsense attitude
- Mandatory paperwork
- Must be in uniform
- Must be on time
- Minimized co-dependency
- Reviewed med math prior to simulation and injection protocol





## Future

- Utilization of different catastrophic scenarios
  - OGP
  - Smallpox
  - Natural Disasters
    - Flooding
    - Hurricanes
    - Tornados
- Unexpected situations
  - <http://www.youtube.com/watch?v=5Fw1qiAld2U>

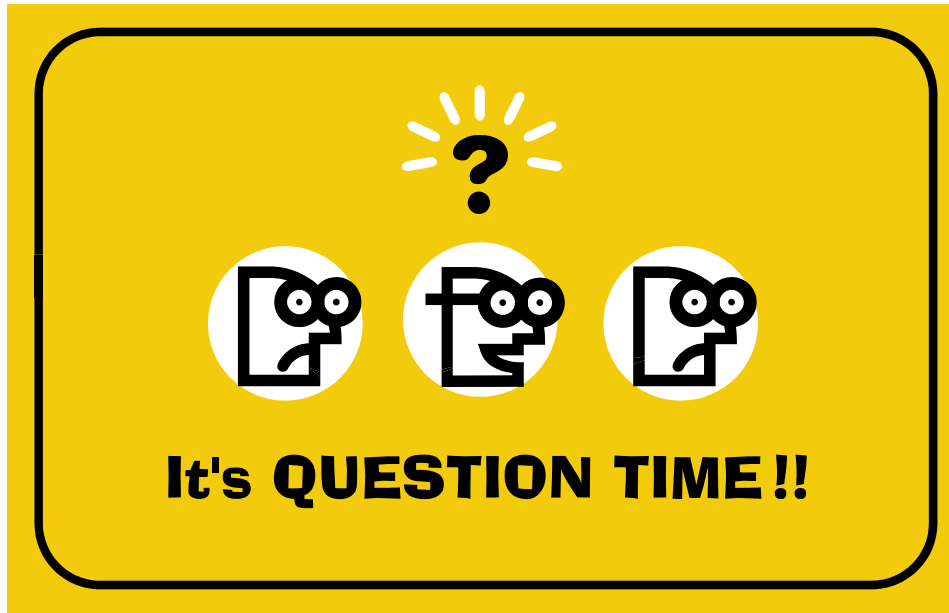




The mind is not a vessel  
to be filled, but a fire to  
be ignited.



Plutarch



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