A Meningitis B Table Top Exercise
“ The Santa Clara University Experience”

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and
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AGENDA

1. Table Top at SCU (Chris)

2. Meningitis at SCU: The Event (Jill & George)

3. Mass Vaccination Clinic (MVC): Logistical Set Up (Chris)

4. MVC Clinic 1.0: What Went Well/Lessons Learned Medical/Student Life (Jill & George) Communications/Operations (Chris & George)

5. Clinic 2.0: Lessons Learned Implemented & Data (Jill)

6. Q&A

7. Post Test
Table Top at SCU

- Weakness
- Exercise
- Goals
- Outcome
ICS at SCU
ICS at SCU
ICS at SCU
Purpose and Scope

• Purpose: To apply SCU’s emergency policies and procedures and allow Policy representatives to discuss the application of the Policy Group roles and responsibilities in a simulated emergency.

• Scope: This is a low-level exercise. The exercise will be a 90-minute long tabletop exercise focusing on strategic decision making in response to a public health emergency on campus.

• The Policy Group will be exposed to situations that will escalate, requiring input and feedback on how the Policy group may want to respond here at SCU.
Tabletop Exercise

• Simulates an emergency situation in an informal, stress-free environment.

• Participants gather around a table to discuss general problems and procedures in the context of an emergency scenario, each scenario escalates into greater issues and challenges.

• The focus is on training and familiarization with roles, procedures, or responsibilities.

• Tabletop exercises are considered the first level of formal exercise activity.
Ground Rules

• This is a no-fault environment...there are no wrong answers.

• This is a learning environment...designed so that you can interact with each other, discuss actions, disagree, and resolve problems

• Don’t fight the scenario

• Work with resources available to you now

• No hidden agenda or trick questions
Perception: What is the role of the Policy Group in this response graph?
Background

• SCU Infectious Illness Plan (2014) – handout
  • Clarifies roles and responsibilities for the primary stakeholders involved in managing an infectious illness outbreak on campus
  • “Outbreak” – defined as 3 or more illnesses from infectious disease (source – Santa Clara County Public Health).
• SCU Emergency Manager takes lead for coordinating overall SCU response (Chairs Infectious Illness Task Force) with Cowell Center serving as primary subject matter expert.
  • Defines Roles of major stakeholders.

• Crisis/Incident Management Org Chart (day-to-day emergencies)
Case #16 – Angela (Update)  
Day #10

• Female Sophomore, member of the Water Polo Team living in off-campus housing with the following symptoms:
  • Fever 102 degrees  
  • Body aches  
  • General malaise, weakness, and fatigue  
  • Nausea and vomiting

• Mom becomes concerned and transports daughter to O'Connor Hospital ER.
Case #16 – Angela (Update)  
Day #11  

- Female Sophomore, member of the Water Polo Team living in off-campus housing with the following symptoms:
  - Fever 102 degrees
  - Body aches
  - General malaise, weakness, and fatigue
  - Nausea and vomiting

- Angela becomes critical, develops a rash that look like small moles on her legs. Angela develops bleeding and nasal hemorrhaging at O'Connor Hospital. She lapses into a coma and is transferred to Santa Clara Valley Medical Center ICU (Isolation)
What are we dealing with?
Day #18

- Santa Clara County Health Department contacts Cowell Center, reports that 4 cases in the past 2 weeks have indicated positive for Type B Meningococcemia (Type “B” Bacterial Meningitis).

- Patient #17 (Kristine) appears to be the first fatality. The Coroner has completed lab tests and will release a report in 1-2 days.

- Santa Clara County, State Public Health, and CDC are enroute to the Santa Clara County Health Dept. EOC.

- County Health public press conference is scheduled for 10:00 am tomorrow morning.
Thoughts?

What level of EOC response (if any) is necessary to support this crisis?

What resources might be considered to support public information and crisis management?
Impact Assessment (Discussion):

Overview, Logistics, and Financial

• University of California Santa Barbara (2013-2014)
  • In 2013, UCSB, Princeton, and Drexel University (PA) experienced simultaneous infections with the same Type B Bacterial Meningitis strain.

• University of Oregon (2015)
UCSB Meningococcal Cases
November 2013

CASE #1

Male Freshman
UCSB Dorm 11/11/13

Other Sports Teams

Lacrosse Team

CASE #2

Male Sophomore
UCSB Suites 11/13/13

CASE #3

Female Sophomore
Sorority House 11/18/13

CASE #4

Male Freshman
Fraternity Private Dorm 11/28/13

Parties Sororities and Fraternities

(Prior Case 3/4/13)
Male Senior Fraternity Apartment
• a freshman UCSB lacrosse player had both feet amputated.
• **CDC note:** about one in 10 people diagnosed with a meningococcal disease will die, and about one in five survivors will have permanent disability.
• meningococcal meningitis killed a San Diego State University freshman in Oct 2014. (same variant that caused outbreaks at UC Santa Barbara, Princeton, and Drexel University - Pennsylvania)
Target Population Recommended For 2-Dose Vaccine (19,500)

- (19,25) All UC Santa Barbara undergraduates plus
- (200) University Immersion Program students (International Extension students)
- (25) Faculty, staff and graduate students who have certain specific medical conditions
- (6) Faculty or staff who live in University-owned dormitory-style residence halls
Collaboration

• Response to infectious disease is a time-intensive and resource intensive collaborative process

• Schools, health facilities, communities will need to work closely together to protect health
Vaccination Station Layout & Logistics
## Incident Management Roles

### Policy Group Role

Provides through the EOC (relayed to field commanders & staff):

- Policy
- Mission
- Direction
- Authority

May also be coordinating with VIP’s, elected officials, agency representatives at the local, county, state, and federal levels, plus alumni and student representatives.

### EOC Role

- Manages the Chaos
- Provides central “global” oversight of the emergency.
- Manages and collects all incident information, addresses rumor control.
- Keeps Management informed.
- Coordinates Management objectives, priorities, and directives
- Coordinates Public Information Release

### Incident Commander’s Role (Field)

- Directly manages the incident & personnel at the scene.
- Keeps the EOC Director informed on all important matters pertaining to the incident.
- Carries out directives issued by the EOC Director.

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To maintain the unity of command and safety of responders, the chain of command must NOT be bypassed.
Super Bowl Week; What Could Go Wrong
Meningitis at SCU

The Event
Meningitis at SCU Timeline: 
Sunday January 31
Day 1

7:10 am – A student (Student A) was transported to the ER for what was believed to be alcohol intoxication

8:00 am – Parents notified by university officials (OSL on-call personnel)

11:00 am – Hospital notifies parents that student has some sort of infection. Parents call SCU.

2:07 pm – Parents contact roommate to tell him Student A is being treated for meningitis

2:36 pm – Campus Safety (CSS) gets in contact with Student Life on-call personnel

2:47 pm – CSS got in touch with Santa Clara County Public Health Dept. (SCCPHD), O’Connor Hospital and the Cowell Center

- 5 students in ER that report they have been exposed to student
- ER is requesting a SCU point person
- Need help in determining who was actually exposed and needs antibiotics

Cowell Center contacts ER and speaks with the treating physician. Treating physician tells us Meningitis and that the Meningococcal disease is highly suspect.

Cowell Center contacts SCCPHD and works closely with them. SCCCPH recommends that SCU contact anyone who has had contact with student over past seven days

3:03 pm – 20 students in the ER

3:19 pm – University implements Infectious Disease Protocol
(University follows all directions of the SCCPHD)
Santa Clara County Public Health Department
Identifying Students Affected and Assessing Need

- Identified which students should receive antibiotic prophylaxis to prevent meningitis after being exposed (~several hundred students)
- Worked with local doctors, especially at O’Connor Hospital, to evaluate other suspected meningitis cases and facilitate rapid laboratory diagnosis
- Facilitated the laboratory confirmation of the meningitis cases, including which serogroup of meningitis they were, within 48 hours
Meningitis at SCU Timeline:  
Day 1 Continued

3:24 pm – 40 students in the ER

3:33 pm – Test confirms Student A is positive for Meningitis; waiting on test results to confirm the meningococcal disease.

3:38 pm – Emergency Planning Director for the University out of town. Via phone consults, Cowell Center is given lead as the Center follows the lead of SCCPHD

4:00 pm – Decision to open the Cowell Center

4:42 pm – All first responders had been treated for possible exposure

4:45 pm – EHS arranges for professional cleaning of Student A’s room

5:30 pm – Conference Call #1 with OSL, Cowell, Ops, CSS

6:00 pm – Cowell Center opens for patient care

6:28 pm – Restoration Management Company cleaned Student A’s room, all the

   floor bathrooms, stairwells, laundry room, common areas, etc.

9:00 pm – Cowell Center closes.

9:28 pm – Restoration work complete.

9:30 pm – Conference Call #2 Policy Group Conference Call with Chief of Staff, Provost, General Council, Vice Presidents, OSL, Cowell, Ops, CSS
Day 1 (Sunday) Highlights:

- Boots on the ground at the local hospital
- SCU in direct contact with students at ER, family of hospitalized students, and roommates
- SCU in direct contact with SCCPHD
- Cowell Center opens and serves 100+ students
- Two conference calls initiated, Emergency Management Plan Activated
- Work began on writing FAQs for the website
Meningitis at SCU Timeline:
Monday, February 1
Day 2

8:00 am  Policy Committee Meeting

8:30 am  Cowell Center opens for patients

3:00 pm  Policy Committee Meeting

Numerous students, including Student B, admitted to ER and later released

Highlights:

• Preliminary conversations about vaccination clinic, should that be required of SCCPHD

• Scheduled floor meeting and building wide meeting in residence hall of hospitalized student

• Worked closely with SCCPHD to identify students who may have been close contacts

• Decision to extend Cowell hours into the evening
  • 118 Students were seen.
    - 102 were given Post Exposure Prophylaxis (CIPRO)

• Identified a single phone line to receive incoming calls. Vice Provost’s office was kept apprised as new information became available in response to FAQ’s

• Website continued to be populated with new information

• Communications out to parents, students, faculty and staff
Wrote communications to SCU students, faculty, and staff regarding their risk of disease and advising them on what they should do.

Wrote communications to SCU’s community partners to assure them that SCU student volunteers did not pose a disease risk and reduce the stigma that SCU students were facing.

Created fact sheets, a website, and press releases; fielded calls from the public and parents.

Communicated regularly with SCU staff and the SCU policy group to make recommendations and update each other on the situation.
Meningitis at SCU Timeline: Tuesday, February 2
Day 3

4:55 am Various news vans arrives on campus
5:55 am Local hospital calls to say Student B needs to return to hospital
7:00 am Student B transported to hospital
7:35 am Live news broadcast from campus
8:30 am Cowell Center open to treat patients
11:00 am Policy committee meeting and conference call with SCCPHD: Serogroup B confirmed by SCCPHD and recommendation to implement mass vaccination clinic on Thursday and Friday (11:47 am to be exact!)
   SCCPHD recommended to give all students PEP
12:00 pm Restoration Management cleaned Student B’s room
1:00 pm Conference Call with SCCPHD, SCU with UC Santa Barbara
3:00 pm Policy Committee meeting
4:00 pm Logistics meeting for Mass Vax
6:00 pm Walkthrough of Leavey Center and confirmed logistics for MVC on Thursday and Friday
10:08 pm Two additional students transported to hospital
10:25 pm Local media confirm two cases of Type B Meningitis

Highlights:

- SCU working with families of hospitalized students—offered housing accommodations
- Cowell treated 108 students beyond routine appointments
   - 104 were given Post Exposure Prophylaxis (CIPRO)
Santa Clara County Public Health Department
Partnering with Mass Vaccination Clinic

- Consulted with experts at CDPH and the CDC to discuss recommendations regarding the outbreak
- Because the outbreak was identified as serogroup B, which almost no one has been vaccinated against (the vaccine was just FDA approved in 2015), we decided to hold mass vaccination clinics for the whole campus
- Worked with the California Department of Public Health (CDPH) and SCU to obtain thousands of doses of vaccine and vaccinate all students (~5000 showed up)
- Provided vaccinators and staff to monitor the vaccine and set up the clinics
- The time between lab confirmation of the outbreak and the first meningitis shots going into arms was less than 48 hours—a national record
Meningitis at SCU Timeline: Wednesday, February 3
Day 4

8:00 am  Logistics meeting with SCCPHD

8:17 am  Additional student transported with possible symptoms

8:30 am  The Cowell Center opened
62 Students were seen.
- 59 were given Post Exposure Prophylaxis (CIPRO)

10:30 am  Press Conference with SCCPHD

12:00 pm  Policy Committee Meeting

3:00 pm  Clinic Planning Meeting - Pointers from UCSB

8:15 pm  Hospital confirms third case, Student C

Highlights:
- Communication with students about clinics – email, social media, posters, flyers, etc.
- Implementing logistics for MVC
- Volunteer sign ups top 77
Meningitis at SCU Timeline: Thursday, February 4
Day 5

8:30 am  The Cowell Center opened
53 Students were seen.
- 51 were given Post Exposure Prophylaxis (CIPRO)

9:00 am  Mass Vac Clinic Meeting

11:00 am  Policy Committee Meeting

12:00 pm  SCCPHD Training for Clinic Volunteers
Restoration Management disinfects Student C’s room

2:00 pm  Mass Vac Clinic Opens

Highlights:

• Clinic is operational!

• Lines formed before clinic opened.

• By 11:31 am, all 98 volunteer shifts for Thursday & Friday were filled!

• Fast lane passes were given to students at the end of the line to come back Friday between 10 am – 1 pm

• A total of 1,485 vaccines given
Highlights:

- Volunteers from the community came to help from all over - American Red Cross, SCCPHD, Walgreens, Stanford, Family and friends, and Pfizer (they donated 6000 doses of Trumenba)

- Mass Vac Clinic opened for 2\textsuperscript{nd} day.

- 2,696 vaccines administered

- Decision to run Saturday and Monday clinics; gearing up for new locations

- 30 students were seen and administered Cipro

- Decision to open Cowell Center on Saturday and Sunday
**Highlights:**

- Open a small mass vac clinic
- Cowell Center opened – 1 student seen and given Cipro
- Every Room Flyered; Neighborhood Flyered
- 48 volunteer shifts for Saturday and Monday filled
- 250 vaccines administered
- 11:00 am conference call with SCCPHD; shifted Monday clinic under direction of SCU
- VMC and Walgreens donation of needles for weekend/Monday clinics

**Super Bowl Sunday:**

- Cowell Center opened noon to 4pm

**Monday Highlights:**

- Fourth clinic underway
- 492 vaccines administered for a total vaccines administered to date: 4,923!
Clinic Entrance at the Leavey Center
#1 Registration
#2 Screening
#3 Vac Station (5)
#4 Dr. Station (1)
#5 Break Area
#6 Staging
#7 Social Media

Station 3 - Vaccination Station Proposed Layout

Privacy Screen
Cot / Table 4 chairs
Privacy Screen
Cot / Table 4 chairs
Privacy Screen
Cot / Table 4 chairs
Privacy Screen
Cot / Table 4 chairs
Privacy Screen
Cot / Table 4 chairs

Station 4 (Dr. Station Proposed)

Privacy Screen (2)

Station 6 (Cot Staging)

Privacy Screen (2)
Registration/Dr. Station

Vaccination Stations

Cot Staging

Social Media
BRONCO MASS VACCINATION CLINIC
CLINIC 1.0

1. WHAT WOULD YOU DO AGAIN?

2. WHAT WOULD YOU DO DIFFERENTLY?
Lessons Learned:

- Understand or be aware of the laws/guidelines around what can and cannot be shared
- Define the event - Is this a County or SCU event?
- Bring in a lot of medical staff
- Try to gain a sense of how long staff can stay or how long you may need them for
- Try to make sure everyone gets trained at once
- Make sure you have a continuous flow of staff scheduled
- Keep the medical area clear
- Make sure information is clear to students
- Have medical personnel available as students are exiting facility
- Communicate what clothing not to wear
- Use EMTS more for pre-line and end of line
- Pre-populated as much data on the forms as possible
- Utilize CAPS staff to help calm students
- Some local medical facilities may not be able to help out
- Rebound cases may be reduced because of our quick response

What went well:

- Point of contact in the emergency room – ER doctor was available and two staff on the ground which helped to build relationships with hospital personnel
- 3:00 pm on Sunday - decision to open the Cowell Center. 6:00 pm the Center was open
- Sharing went well with HIPAA information
- CSS working with Cowell
- Community coming together – American Red Cross – nurses – county – volunteers
- County was able to just come in and do their job
- Adapted very well to any changes that needed to be made days 2 – 3 process and medical staff – EMT usage
Student Life

What went well:

• On-call process - persons were well trained
• Established relationships with O'Connor and Valley Medical Hospitals
• Jesuit serving as an Assistant Dean (On-call personnel)
• Ability to assist parents with housing accommodations
• Communication with professors
• Phone tree within OSL
• Dedicated Phone Line for Calls once 1st email went out
• Having boots on the ground in the ER on the first day
• Residence Life staff walked floor by floor in residence halls
• UCSB conference call
• Thorough FAQ’s
• Easily accessible website with current updates
• Residence Life helped to notify students about Saturday clinic
• Public TV monitors to message slide (IT helped)
• Staff walking the clinic line to keep the students focused and lowering anxiety
• Food and beverages

Lessons Learned:

• Make “No photos” signs larger
• Get volunteers for administrative roles
• Need for local address policy
• Make sure everyone understands their Emergency protocols
• Keep communications going on all forms of social media, especially Yik Yak
Communications

What went well:

• All university personnel sent forth consistent messages

• Single iconic look of all communication (Bucky)

• Social media updates and Social media station for photos

• FAQs up on the website and constantly being updated

• Making sure links were ready to go on the website

Lessons Learned:

• Get an acknowledgement message out to students and parents sooner

• Have a ready reserve of volunteers to help

• Make sure all departments have the same information - Who knew what? RL verses OSL versus Cowell and how are we sharing this information, which may be unique to that department

• Communicate to students what to wear and not wear to receive the shot

• Dedicated writer to assist with all messaging

• Have medical personnel write FAQ’s and not Media Services
Bucky Wants YOU to protect yourself

Get a FREE MENINGITIS B vaccination

On public tv monitors throughout campus

Sticker given to students after vaccination

Reminder of 2nd clinic

Second Dose Clinic Publicity
Social Media
Operations

What went well:

• Communication on Yik Yak was a plus
• June table-top exercise was helpful
• Policy group gathering in the President’s Office
• Notification timeline assignments
• Ops had the freedom to purchase necessary supplies
• Expanded Credit limits
• Food and procurement
• ICS strength was putting someone in charge
• Access to an appropriate facility to host the clinic
• Availability of pipe and drape, cots, etc.
• Standing meetings

Lessons Learned:

• Assign the freedom to push out a first message
• Get more assistance to take photos
• Set up A-Frames
• Get signs from the printer
• Examine Command structure and how it works (ICS) - Flexibility to make it SCU specific
• Have an immediate back-up or contact plan - Emergency Manager was in Southern California
• Consider establishing food venues - Bronco truck (Army runs on food)
• Procurement should check with the appropriate shop for available supplies
• Support staff were exhausted by Saturday’s clinic spreading out support
• WEBEOC didn’t work for this type of incident
Bronco Mass Vaccination Clinic
Clinic 2.0

A quick snapshot of how what we learned from Clinic 1.0 helped us with Clinic 2.0
LESSONS LEARNED IMPLEMENTED

**MEDICAL**

- We defined our event - Contracted out to Walgreens.
- Students were motivated to get through the process quickly
- We brought on sufficient medical staff based on students
- Length of stay for medical personnel
- We had a continuous flow of staff scheduled
- Medical area was kept clear
- Instead of having medical staff available as students exited, students were briefed more thoroughly by the pharmacists/nurses
- Communicated what clothing was best to wear
- Pre-populated as much data on the registration form as possible - VIS Date/ Vaccine information, Lot number, etc.

**STUDENT LIFE**

- Make “No photos” signs larger
- We asked for volunteers for administrative roles
- We communicated on all forms on social media, especially Yik Yak
LESSONS LEARNED IMPLEMENTED

COMMUNICATIONS

• Acknowledgement messages were sent out to students and parents frequently and appropriately
• We had a ready reserve of volunteers to help
• Departments were communicating as needed via department representatives and committee meetings
• Communications about proper attire went out to students
• The Cowell Center (and SCCPHD) consulted on messaging that went out to the community.
• Medical personnel wrote FAQ’s

OPERATIONS

• Someone was assigned to our photo booth
• A-Frames were strategically placed around the campus
• Signs were gotten from the printer
• Under this much more structured system, the university again provided food
• All procurement came from the appropriate vendors
• All duties and responsibilities were assigned
• We communicated via Google docs
Overall Clinic 2.0 Highlights

Clinic Day 1 - Friday, March 18, 2016
- 923 students registered
- 831 students vaccinated
- 90% turnout rate

Clinic Day 2 - Wednesday, April 6, 2016
- 1284 students registered
- 1072 students vaccinated
- 84% turnout rate

Clinic Day 3 - Thursday, April 7, 2016
- 1129 students registered
- 1009 students vaccinated
- 89% turnout rate

Clinic Day 4 - Friday, April 8, 2016
- 727 students registered
- 829 students vaccinated
- 114% turnout rate

Clinic 2.0 Highlights
- Total Registered 4063
- Total Vaccinated 3741 (~92% of students registered)
- 3741 (~76% of Clinic 1.0’s 4923 population vaccinated)

Clinic 1.0 Highlights
- Population Vaccinated 4,923
Questions & Comments
Questions / Post Test

1.) What University did Santa Clara use as its model when dealing with the outbreak?

2.) What other event ran concurrent with Santa Clara University’s outbreak event?

3.) What entity did the University rely on upon for guidance, logistical support and expertise?

4.) What University organization went through the training exercise that prepared the campus for the outbreak?

5.) Santa Clara University relied heavily on University staff for handling the crisis?

6.) How many clinics did Santa Clara University operate during both phases of the crisis to vaccinate the student population?

7.) Who provided the University the vaccines in support of the clinics?