ANNE SPAULDING, MD, MPH; ASSOCIATE PROFESSOR OF EPIDEMIOLOGY

COVID MANAGEMENT: UPDATE ON SCREENING

5/15/2020
In the past 2 years, I have the following relevant financial relationships with a commercial interest:

1. Gilead Sciences: Grant support through Emory University; Participation on advisory board
2. National Sheriff’s Association: Consulting
3. Harris County TX: Consulting
4. NaphCare: Infectious Disease Consulting (until 2018)
OUTLINE—HOW DO YOU SOLVE THESE ISSUES

1. What are new challenges with reopening of states for business?
2. How has management changed with more test kits available for jails and prisons?
3. Screening for COVID-19 by symptoms *AND* possible exposure to COVID-19
4. How do layouts of correctional units help or hinder infection control?
UPDATE

1. What are new challenges with reopening of states for business?

- Jails *had* reduced populations a mean of 18%.
- Now intakes are climbing again.
- Not all prisons are accepting jail “graduates” yet
1. What are new challenges with reopening of states for business?

- Jails *had* reduced populations a mean of 18%.
- Now intakes are climbing again.
- Not all prisons are accepting jail “graduates” yet.

2. How has management changed with more test kits available for jails and prisons? Can’t screen just by symptoms anymore…

“[A prison is] Liable … for denying humane conditions of confinement … [when] knows that inmates face a substantial risk of serious harm and disregards that risk by failing to take reasonable measures to abate it.” Farmer v. Brennan 1994, on PrEA cases
The facility has a written exposure control plan that is approved by the responsible physician...

The responsible health authority ensures that:

- Surveillance to detect inmates with infectious and communicable disease is effective
- Inmates with contagious diseases are identified and, if indicated, medically isolated in a timely fashion.
From: NCCHC 2018 Jail Standards, J-B-02
Infectious Disease Prevention and Control

Standard—There is a comprehensive institutional program that includes surveillance, prevention, and control of communicable disease.

- The facility has a written exposure control plan that is approved by the responsible physician...
- The responsible health authority ensures that:
  - Surveillance to detect inmates with infectious and communicable disease is effective
  - Inmates with contagious diseases are identified and, if indicated, medically isolated in a timely fashion.
HOW INFECTIOUS OUTBREAKS START

- Correctional officers and staff are usually the individuals introducing disease into a jail populations
- Additionally, disease can be introduced by new admissions
SURVEILLANCE

- Where are your new cases of COVID-19 coming from: persons new in your house, exposure from others in facility
  ---Staff vs. other persons detained in/sentenced to your facility)

- What are the characteristics of those who are infected?
  --From cells? Dorms?
  --Multiple people in same housing block?

- How many cases of COVID-19?
CHALLENGES WITH BUILDING STRUCTURE LAYOUTS OF CORRECTIONAL UNITS

Dorms Without Dividers

Two-Person Cells

Open Door

Dorms With Dividers

One-Person Cells

Closed Door
A layout with all individuals sleeping close together in bunks is likely to increase transmission.
ANONYMOUS AUDIENCE SURVEY

After one individual is infected, what would you do with the remaining individuals in the dorm?

You are the health service administrator at a large jail building that is predominantly made up of multiple 30-bed dorms. Single cells with closed doors are at a premium—you have fewer than 100. When a SARS-CoV-2 infected persons is discovered in a dorm, and you remove them, place them in isolation, what would you do with the remaining individuals? Would you quarantine the rest in single cells or keep them in the dorm?

Answered: 100  Skipped: 0

- We would turn whole dorm into a quarantine unit
- We would put all of the exposed individuals in single cells, shut down dorm for deep cleaning
- We would start putting individuals in single cells only if more than one person from dorm diagnosed with COVID-19
- Other—such as depends on how many cases we have seen before (please explain)
GOOD HOUSING LAYOUT

Reassign bunks to provide more space between individuals.

Arrange bunks so that individuals sleep head to foot.

Ensure that bunks are cleaned thoroughly if reassigned.
Bed vacated by infected person—keep empty
Consider removing, testing those closest to infected person, send to quarantine if - / isolation if +

Bed vacated by infected person—keep

Consider removing, testing those closest to infected person, send to quarantine if - / isolation if +
Would you test everyone in the dorm by PCR?

Answered: 100  Skipped: 0

- Yes--test all the next day
- No--would test just the bunk mate and persons one bed away the next day, then remaining persons sometime in the second week of quarantine
- No--would test just the bunk mate and those one bunk away the next day. No further testing unless signs and symptoms.
- No--check twice daily for symptoms and fever, no testing unless signs and symptoms.
- Other (please specify)
If correctional officers were confirmed with COVID-19, what would you do?

You are working as a health service administrator and hear that a couple of correctional officers have taken leave because they have been diagnosed with COVID-19. What is the next step?

Answered: 100  Skipped: 0

- Determine on what housing unit they were assigned. Test staff and incarcerated persons there
- Encourage co-workers to get tested. Take no new action with the facility population other than daily symptom check
- Encourage co-workers to watch for symptoms

Bar chart showing the responses to the survey question.
Who else would you test for COVID-19?

When/if a person is diagnosed with COVID *in your population* (rather than at entry) who else would you test?

- [ ] Cell mate, only if cell mate symptomatic
- [ ] Cell mate, regardless of symptoms
- [ ] Cell mate, and anyone symptomatic in entire tier
- [ ] Cell mate, and entire tier regardless of symptoms
- [ ] Whole housing block

Answered: 100  Skipped: 0
CONSIDERATIONS FOR SCREENING

- Goal of testing: to find active infections.

- Limitations—Marion County 88% infected?
  —what does it mean? not all are active infections, some are resolved infection, as negative culture of the virus material indicates.

2,028/~2,300 (88%) prisoners in the Marion Correctional Institution, tested positive by PCR. Prison with ~2,500 older persons, pre-existing health issues. 95% asymptomatic

Wolfel et al. 2020
BEFORE TESTING…PLAN

Where will you put individuals, if

- 10 persons are positive?
- 50 are positive?
- 88% of your building has a +PCR?
STRATEGIES

- Test symptomatic—Isolate the infected, quarantine the exposed
- Test contacts
- Test entrants

- A Problem—run out of places to put the exposed?
  - If test turn around is fast, this shouldn’t be a problem.
CONCLUSION: PRINCIPLES FOR COVID-19 CONTROL IN CORRECTIONS

- Minimize opportunity for transmission from an infected to susceptible person.
  - reclassify risk of transmission as infection resolves.
- House incarcerated persons according to good custody practice.
- Improve capacity of the facility to identify infected persons, as resources permit.
- In times of COVID-19, need coordination of public health and the justice system.
- Keeping jails and prisons safe is possible.
QUESTIONS?

Anne C. Spaulding MD MPH
Associate Professor
Department of Epidemiology, Rollins School of Public Health
School of Medicine (Joint)
Emory University
Atlanta GA
ASPAULD@EMORY.EDU
EXTRA SLIDES
LAYOUTS OF CORRECTIONAL UNITS:
CORRECTIONAL OFFICER LOCATION

Stationed Positions.

Direct Supervision.