



STREET MEDICINE PRACTICE during the COVID19 PANDEMIC

March 19, 2020

We are erring on the side of communicating quickly, rather than perfectly. Please check back for updates and corrections as our knowledge of best practices evolves.

The Street Medicine Institute Board of Directors

Summary

People experiencing unsheltered homelessness are at high risk of dying from COVID19.

Prior to COVID19, people experiencing unsheltered homelessness (rough sleepers) were about 10 times more likely to die than the general population and three times more likely to die than people living in shelters. While people sleeping in shelters are at increased risk due to the impossibility of physical distancing, most people experiencing homelessness have chronic severe medical conditions (including cardiopulmonary disease, diabetes, HIV, and other immune-impairing illnesses, malnutrition, and substance use disorders) that place them at high risk of death from COVID19. This document offers guidance for safety, scarcity of supplies, and special considerations for street medicine teams caring for rough sleepers.

Our priority recommendations are:

- Focus on safety for both your staff and your rough sleeping patients
- Identify and coordinate with key community planners; secure a seat at the table to serve as an expert advocate for the rough sleeping homeless
- Reduce your outreach team to essential personnel
- Take extra care in preparing for and approaching campsites
- In many cases, it may be safer for both the patient and the public for the rough sleeper(s) to remain quarantined in the camp location
- Identify camp site members (preferably with a cell phone) who may serve as intermediaries between the site and your team in monitoring the state of affairs within the camp
- Manage non-COVID19 disorders to prevent unnecessary ED visits
- Quarantine, substance-abuse, transport and isolation require special consideration in caring for rough sleepers (*please read these sections in detail*)
- Tap into local student organizations for assistance with advocacy and other behind-the-scenes tasks
- Remember: we are one of the few groups advocating for the special needs of our rough sleeping friends - please advocate!

This quick reference for providers of Street Medicine was created specifically to guide the treatment of rough sleeping homeless persons. It is not intended to be comprehensive, and its recommendations are not a prescriptive protocol. Clinicians must exercise their own clinical judgement in the treatment of any particular patient.

Purpose Statement

The purpose of these Street Medicine Institute (SMI) recommendations is to help street medicine teams mitigate the spread, morbidity and mortality of the SARS-CoV-2 novel coronavirus (COVID-19) within staff and patients. These recommendations are specifically intended for teams caring for rough sleepers by practicing [street medicine](#) on the streets: in encampments, abandoned buildings, outdoor clinics, and similar locations. While some recommendations may be applicable to homeless shelter settings, this is not the intended focus of the document. Shelter-specific references can be found here ([NHCHC](#)).

Rough sleepers are particularly vulnerable to infection of COVID-19 in a widespread outbreak - as well as to poor health outcomes - for the following reasons:

- Higher mortality rates than the sheltered and housed populations [1]
- Higher prevalence of conditions likely to result in poor outcomes such as heart disease, lung disease and diabetes [2]
- Medical ages exceeding biological ages [3]
- Environmental factors placing them at increased risk for infection including lack of access to basic sanitation and hygiene, such as water for washing hands and crowded encampments.
- Less likely to access traditional medical care

These complex individual, environmental and structural factors result in rough sleepers having a higher risk for transmission and widespread outbreak as well as poor outcomes.

[1] Roncarati JS, Baggett TP, O’Connell JJ, et al. Mortality Among Unsheltered Homeless Adults in Boston, Massachusetts, 2000-2009. *JAMA Intern Med.* 2018;178(9):1242–1248.

doi:10.1001/jamainternmed.2018.2924

[2] Center for Disease Control and Prevention. (2020) Coronavirus Disease 2019. CDC Online. Retrieved March 18, 2020, from <https://www.cdc.gov/coronavirus/2019-ncov/index.html>

[3] Brown, R.T., Hemati, K., Riley, E.D., et al. Geriatric conditions in a population-based sample of older homeless adults. (2017). *Gerontologist*, 57(4), 757-766. doi:10.1093/geront/gnw011. (n/u)

Overview of COVID19 Pandemic

Unfortunately, most of the world is moving rapidly from the context of containment to one of mitigation of the spread of the COVID-19 pandemic. As such, the logical emphasis must be on the reduction of spread of the pandemic while still providing the best medical care possible to the rough sleeping population. The recommendations we currently offer are informed by those generally offered to the medical community and applied to the reality of the streets by experts in street medicine. They are to be viewed with the following recommendations in mind:

- Careful assessment of risk/benefit ratio in each unique situation through the lens of harm reduction
- Care and interventions are made with a trauma-informed approach protective of civil liberties
- Rough sleepers are less likely to access traditional medical care making the role of street medicine providers essential for screening and identification of early cases to contain outbreak and prevent poor patient outcomes
- Specific recommendations regarding duration of quarantine/ isolation and other COVID-19 testing and treatment recommendations are NOT included in this document. The most updated guidance for healthcare professionals from the Centers for Disease Control and Prevention (CDC) can be found here: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/index.html>.

This document includes recommendations on the following topics:

- Coordination strategies within your community
- Safety for staff
- Outreach strategies
- Preparing for outreach
- Approaching a campsite
- Street medicine assessment
- Transportation
- Quarantine considerations
- Managing non-COVID-19 physical, mental, and addictive disorders in the setting of the coronavirus pandemic
- Considerations for social isolation among rough sleepers
- If your local COVID-19 epidemic reaches a crisis level
- Advocacy for our unsheltered friends
- Suggestions / guidelines for student-led street medicine groups
- Lessons learned
- Other resources

Coordination Strategies

It is essential that street medicine groups seek out and coordinate with their local COVID-19 task forces or Pandemic Command Center and critical partners such as the Health Department, EMS services, safety net hospitals, Health Care for the Homeless (HCH) and other homeless healthcare agencies. Proper screening, reporting and referral protocols should be agreed upon within your community with every effort made to work in concert with the larger public health effort of your community.

The Street Medicine Institute recommends the following strategies:

- Assign staff to focus specifically on keeping up to date on the efforts of relevant agencies in your community and to coordinate efforts with them. This point person should update other members of your organization. Examples of coordination tasks might include:
 - intense efforts to get highly vulnerable people (elderly, those with respiratory illnesses, immunocompromised individuals, those with diabetes and HIV, etc) into whatever off-street individual apartments that are available.
 - identifying community health providers that will continue to operate such as specialty clinics, mental health providers, methadone clinics and buprenorphine providers, if those services are not included as a part of your street medicine team.
 - identify other community resources that are open including food banks, soup kitchens, and pharmacies.
- Coordinate with local hospitals, health clinics that provide services for people experiencing homelessness, transportation services, respite programs, needle exchanges.
- As health experts on working with rough sleepers in your community, It is essential to “be at the table” with community leaders planning for and managing the homeless population during this crisis. You may be the most knowledgeable to determine which COVID-19 strategies will work best among unsheltered people. This seat will afford you the ability to advocate for services, changing policies, and new funding sources.
- Evaluate rough sleepers within encampments who have access to phones and can serve as liaisons with the street medicine team. Exchange phone numbers with these key individuals and check in with them regularly regarding concerns within the camp and to obtain status updates on street friends who may be developing symptoms or worsening.

Safety for Staff

- Hygiene: Make sure all your staff are trained in proper hygiene and pandemic precautions.
- ALL staff should be trained regarding [putting on and taking off Personal Protective Equipment \(PPE\)](#) including how to [wash](#) and [sanitize](#) hands. Click the links for helpful videos.
- High risk staff: Any staff who are older adults or at [high risk](#) should be taken off the front lines of patient contact.

- Mental and emotional wellbeing: Have resources to monitor the stress on staff and to identify those who are overextending themselves. Reduce the services you provide to only the essentials required to reduce the spread of the virus as much and as for as long as possible. You should both model excellent self-care and ensure all staff are doing the same. Consider temporarily moving highly anxious staff or staff having difficulty coping with the mental/emotional toll to office- or home-based roles..
- Plan for low staffing models and coverage for when / if staff become ill

Outreach Strategies

- Map out camp types and sites, identifying individuals and locations at highest risk. This will allow your team to prepare properly and focus your efforts.
- Limit outreach efforts to those medically necessary to treat existing active medical conditions or for COVID-19 containment purposes. Non-medical or foundational “relationship building” outreach can be limited or suspended at this time.
- Limit outreach to essential personnel for each visit. The deployment of volunteers or learners is not recommended unless vital to maintaining operations.

Preparing for Outreach

We are aware that people experiencing homelessness may be encountered in a variety of settings. In addition, as the pandemic evolves, the needs of our rough sleeping population will undoubtedly require more complex approaches. In general, we feel it is important to prepare *before* entering camps and congregate areas.

- If possible, review your medical records for patients within [high-risk age groups and with high-risk conditions](#) to plan to visit them on street rounds.
- Large camps and group areas clearly pose a higher risk of coronavirus transmission. If persons served are in tunnels and closed areas, then the issues may resemble those of a crowded shelter, but without even the most basic of hygiene options. For these we recommend adopting public health measures along the line of refugee camps and disaster responses.
- Include surgical masks, gloves, sanitizers, wipes for equipment and vehicle surfaces, and take gowns and more advanced equipment for when a highly suspected patient(s) will be encountered.
- Include sensing thermometer to screen patients and other standard diagnostic equipment such as a stethoscope and pulse oximeter. Be aware that some sensing thermometers do not work outdoors in colder weather.
- Provision should be made for the safe disposal of potentially infectious waste. Ideally an agreement with your local hospital or health department should facilitate that.

- Consider bringing supplies to improve sanitation at camps. These supplies may include bleach diluted in water to sanitize fomites in the camp, sanitizing wipes, hand sanitizer*, bucket and soap cleansing stations (you may need to improvise/ design your own; 5 gallon buckets filled with rain water are better than no sanitation), toilet paper, paper towels, cloth rags, etc. Do NOT use bleach solution on hands as this can over-dry, causing cracking and increased susceptibility to infection. Do not provide masks or bandanas in outreach supplies for rough sleepers to cover their noses and mouths; they can increase risk for viral transmission when wet or worn for extended periods of time.

*Please use caution in distributing hand sanitizer due to potential of abuse (people with alcohol use disorders may drink alcohol-based hand sanitizer). See the section later in this text on treating substance use disorders during the COVID19 pandemic.

Approaching a Campsite

When approaching a campsite (we use this generic term for any outdoor living site with multiple people) or single individuals, always:

- Pause at a distance of at least 6 feet and begin standard street medicine greetings to initiate the visit. At this point, the suggestion is not wearing masks or other intimidating equipment.
- Ask if there are any general or medical issues the group would like help with, and then proceed to explain that one of your concerns for the people served is their risk of the recent COVID19 pandemic. Frame the visit in terms of concern for the people in the camp and the desire to engage them in solidarity with their own self-care.
- Take time to listen to their opinions and desires to establish a shared commitment to addressing the issues they identify.
- Before entering the camp, offer supplies including sanitizers for the camp.
- If permission is granted to enter the camp, explain that you will be wearing masks, gloves, and other PPE when within 6 feet of others to protect people sleeping at the camp from contracting coronavirus while offering medical care and supplies.
- Make every effort to approach and interact with rough sleepers in a [trauma-informed](#) way that minimizes stigma and promotes trust and emotional safety. Street medicine teams are reporting from a variety of U.S. locations that rough sleepers are being increasingly stigmatized during the COVID19 pandemic.

Street Medicine Assessment

Assessments should be made of the individual and their environment.

- Educate rough sleepers on proper hygiene and transmission precautions. Making it fun may help it stick. Reassure your patients that with proper precautions they may be as safe as the rest of the community.

- Once in the camp, be especially aware of people experiencing cough, shortness of breath, appearing feverish or ill.
- Explain that you will need to use protective gear when you come closer.
- When within 6 feet of others, surgical masks and gloves (at minimum) should be worn by the street medicine team.
- The use of N95 respirators or PAPRs should be reserved for procedures in which upper and lower respiratory secretions may be aerosolized (nebulizer treatments, intubation, etc.)
- In recognition of scarcity of resources, the following recommendations are offered from most to least preferred:
 - Use gloves, change them between patients, and wash with soap and water (filling gallon milk containers with tap water may be useful for this purpose).
 - Use gloves, changing between patients and use hand sanitizer between patients. If gloves are scarce, use hand sanitizer on gloves between patients.
 - If only one option (gloves OR soap & water OR hand sanitizer) is available, use whatever you have.
 - If no hand hygiene tools are available, teams are recommended not to participate in outreach.

Transportation

- If the patient is in respiratory distress, call 911 for transport.
- If a patient is at [high risk](#) of death from COVID19 AND testing is available AND testing will make a difference in whether the patient is recommended for hospitalization, transport the patient to a testing site or test in their outdoor location.
- Unnecessary transportation for any reason should be avoided by the team, even use of taxi or rideshare services.
- Non-emergent transport for medical necessity (e.g. chemotherapy) should be done in full PPE (gown, glove, facemask with eye protection, and surgical mask) with plastic covering on seats, with the patient sitting in the back seat.

Quarantine Considerations

Symptomatic Patient WITH Respiratory Compromise

- Place a surgical mask on the **patient**.
- Refer any patients with fever over 38C (100.4 F) and significant respiratory compromise (dyspnea, tachypnea, hypoxia) to the appropriate Emergency Department via 911
- Notify that EMS and ED that you are referring the patient with suspicion of COVID19 in advance.

Symptomatic Patients WITHOUT Respiratory Compromise

- Do not call 911 or transport to the Emergency Department.

- Every effort should be made at placement indoors in monitored facility IF:
 - The patient can be placed in single room isolation (hotel, motel, or other specifically designated isolation facility).
 - The patient can be placed in a shelter or related facility with quarantine capabilities.
- If no indoor quarantine options are available, shelter in place with an individual tent and quarantine close contacts.
- **NOTE: Careful assessment of risk of remaining outside must be weighed with risk of relocating to crowded shelter. In this case, it is likely safer for the patient (and public) to remain quarantined in the camp location.**
- The street medicine team should visit frequently (daily) to monitor patients for deterioration of condition. Identify a capable rough sleeper in the camp to report the ill person's condition back to Street Medicine, especially if phone calls/ texting is an option.
- Camp members should be given surgical masks and hygiene resources and told to practice as much isolation from other persons and groups as possible.
- Camp members should also be instructed how to care for the ill person, such as setting food outside his or her tent, without coming into contact with the person.

High-Risk Asymptomatic Patients

- Every effort should be made to place high-risk individuals indoors in a monitored facility IF:
 - The patient can be placed in single room isolation (hotel, motel)
 - The patient can be placed in shelter or related facility with quarantine capabilities
- **NOTE: careful assessment of risk of remaining outside must be weighed with risk of relocating to crowded shelter. In this case, it may be safer to patient and public to remain quarantined in camp location**
- Street Medicine teams should visit frequently (weekly at minimum) to monitor patients for deterioration of condition. Identify a capable rough sleeper in the camp to report the ill person's condition back to Street Medicine, especially if phone calls/ texting is an option.

Patient Refusal

- If a person refuses to go to a site where the diagnosis can be confirmed, then every effort should be made to assist the camp to find an onsite "isolation" option.
- One option may be an additional tent or a secluded area where friends can still feed and care for the patient.
- Camp members should be given masks and adequate hygiene supplies.
- Regular camp monitoring routines should be set up for such areas with medical staff who wear adequate protective equipment.
- In the US, it is difficult to involuntarily commit someone for suspected illness. If the patient has proven illness, in theory they can be committed as a risk to others. Such laws (such as TB infection) have rarely been enforced in modern times. An ethics committee in consultation with the health department should make the call on such cases.

Managing Non-COVID19 Disorders

Patients Needing Medications for Chronic Conditions

- Make sure that rough sleepers have adequate supplies of medications for their chronic physical and psychiatric conditions to avoid preventable emergency room visits.
- Consider the risks and benefits of refilling medications you do not normally manage against risks to the rough sleeper and the general public for using emergency room beds for non-emergent reasons. The risk/ benefit analysis will differ in each instance.

Patients who Use Substances

- As street outreach efforts are scaled back to essential personnel, street medicine teams should recognize that supplies of harm-reduction aids may be impacted. We highly recommend working with local harm-reduction agencies to obtain naloxone, syringes, pipes, and other harm-reduction aids to supply to rough sleepers. See the advocacy section if your organization prevents your street medicine team from distributing these harm-reduction aids.
- Street medicine teams should strongly encourage and educate rough sleepers who use substances, including tobacco, that sharing bottles, cigarettes/ joints/ blunts, needles, etc is very risky during the COVID19 pandemic.
- Opioid Use Disorder
 - For patients taking buprenorphine:
 - consider giving a two-week supply of buprenorphine to people usually receiving a one-week supply
 - consider giving a four-week supply for people usually receiving a two-week supply
 - For patients taking methadone: Please note that some methadone clinics are providing a take-home supply to their patients, including rough sleepers. Rough sleepers may be at risk of victimization, overdose, and/or precipitated withdrawal.
- Alcohol Use Disorder (AUD)
 - People with AUD are at higher risk of developing withdrawal symptoms due to:
 - mandated closure of liquor stores by state and local governments or voluntary closures by liquor store owners
 - decreased funds to pay for alcohol from decreased earning through panhandling
 - quarantine or isolation in indoor locations
 - local communities forcing rough sleepers into shelters (currently occurring in some locations)
 - People with AUD are at high risk of drinking alcohol-based hand sanitizer, mouth wash, and other isopropyl alcohol products when supplies of liquor, beer, and wine are low. Drinking small quantities of these products can result in liver damage, liver failure, and death in larger quantities. Weigh the risks and benefits of distributing these products to rough sleepers with alcohol use disorder.
 - Street medicine teams should consider the following information for managing alcohol withdrawal outside of hospitals:

- People who drink liquor daily are most likely to develop withdrawal, as beer and wine have a much lower alcohol content and are more expensive
- People who switch from liquor to beer or wine may experience dangerous withdrawal symptoms or hyponatremia (low sodium in the blood) due to drinking a higher volume of liquid.
- If your team chooses to offer benzodiazepine tapers to people sleeping rough, chlordiazepoxide (librium) has a lower street value, is less often misused, and auto-tapers more effectively than other benzodiazepines. Chlordiazepoxide is contraindicated for people of advanced age and people with advanced liver disease; lorazepam or oxazepam are typically preferred only in these cases.
- If your patient is unwilling or unable to stop drinking entirely, consider the risks and benefits of providing a benzodiazepine taper in combination with beer or wine to help them safely stabilize at a lower blood alcohol level without requiring emergency room treatment.
- Remember that people with a history of alcohol withdrawal seizures and delirium tremens are safest detoxing in the hospital. Weigh the risk to the patient of coronavirus exposure in hospital settings, the risk of withdrawal complications, and the need for hospitals to have as many beds available as possible for people with life-threatening COVID19 infections when making decisions about managing withdrawal.
- Withdrawal from substances other than alcohol and benzodiazepines is uncomfortable, but not life-threatening. Consider the following in selecting treatment:
 - It may be helpful to provide comfort measures, when safe, in anticipation of withdrawal, especially to reduce the likelihood that a person may elope from isolation to use
 - Low-dose antipsychotic medication can assist patients who develop psychosis during intoxication or withdrawal and may help prevent emergency room visits. Clinical judgment of risks and benefits should drive decision-making on a case-by-case basis.

Considerations for Social Isolation among Rough Sleepers

- Rough sleepers who typically isolate and are consumed in their own inner worlds are most likely to weather social isolation and quarantine well.
- Complete physical isolation for social rough sleepers is likely impossible. Consider encouraging rough sleepers to identify their street “family” or closest 3 to 4 people with whom they spend the most time. Staying together as a family/friend unit, but maintaining physical distance from people outside of that unit, may provide sufficient socialization while minimizing risk.
- Social rough sleepers, especially those who use substances together, will likely have the most difficulty with moving indoors where housing options are available and forced quarantine may be traumatic. For social rough sleepers, consider the following risks and options:
 - Many rough sleepers have difficulty transitioning from the street to housing without a high level of support from street medicine teams and other outreach workers. Moving

indoors to mitigate risk associated with COVID19, voluntary or otherwise, will likely be more challenging because of the lack of time for mental and emotional preparation for leaving the streets. Use frequent phone check-ins to reduce isolation and trauma. Get creative about providing videos, photos, and messages - this is a great opportunity for volunteers and staff working from home.

- The emotional toll of rapid change creates special vulnerability for people with substance use disorders and those in fragile sobriety. Frequent phone, text, or other check-ins should be used. There are also virtual AA and NA options for people with smartphones.
- People who have experienced isolation while incarcerated may be triggered by traumatic memories if forcibly quarantined or placed within other isolated settings, such as hospital rooms. Talk to vulnerable people about triggers in advance when possible and help hospital and other staff to practice trauma-informed care.

If Your Local COVID19 Epidemic Reaches a Crisis Level

It is possible that your community may face an unmanageable number of COVID19 patients and that the street population will also experience overwhelming levels of disease. Keep in touch with your county health department and emergency response authorities to make sure you are following proper local protocols. Your local authorities will probably have detailed guidelines for the general community, though many of these guidelines will not perfectly match the reality of the street medicine population. Access to resources will likely present barriers to our patients, and many of our patients may refuse to follow the mandated guidelines of the larger medical system. We hope that none of our communities will reach this level of crisis, but street medicine programs must prepare for that eventuality and the unique needs of our populations.

If a true disaster level occurs in your community, the health department, FEMA and other groups may take the lead in the incident command response. In many communities there is a Medical Reserve Corps that may dovetail with your street medicine program. It is important to familiarize yourself with those groups (and to familiarize them with you) ahead of time. Discuss how to complement the efforts of these authorities and do your best to work within that context. However, it is our obligation to carefully look for gaps in the overall response that your street medicine group can fill.

Ways in which the street medicine program may prove critical include some of the following:

- An awareness of the locations and the trusting relationships to allow teams to work with the street population. This includes education and support of the emotional needs of those served.
- Direct care for those remaining on the streets and as navigators through the general medical system.
- As an adjunct to providing public health measures to the street population (tents, water supplies like water buffaloes, hygiene and isolation equipment, etc.) as well as monitoring each location's extent of illness to support the health department's logistical efforts.

- Helping to create off-street partnerships to reduce the crowding and risk of those experiencing street homelessness. This includes possible true quarantine options for those with proven COVID19 but not appropriate or able to be hospitalized.

Advocacy

1. Advocacy surrounding street sweeps, anti-camping laws and tent bans <https://nhchc.org/wp-content/uploads/2020/03/Issue-brief-COVID-19-HCH-Community.pdf>
2. Advocacy for re-opening liquor stores: the Street Medicine Institute recommends advocating within your communities and states to re-open liquor stores or drop mandates to close them to prevent people from going into alcohol withdrawal. Educate decision-makers on the need to prevent people from going to Emergency Departments for alcohol withdrawal to maximize space for people requiring care for COVID19.
3. Advocate within your health systems and communities to reduce stigma towards rough sleepers and other people experiencing homelessness as we are navigating this pandemic. It is important to help decision-makers and others understand that people sleeping rough are probably no more likely to be infected than the general public.

Suggestions/ Guidelines for Student-Led Street Medicine Groups

The following suggestions were compiled from advice and wisdom of street medicine experts shared predominantly during a conference call on March 18, 2020..

- This list is intentionally brief. Please reach out to us at studentcoalition@streetmedicine.org for more detailed responses and if you have additional questions.
- A full “meeting minutes” can be found [here](#), outlining all questions asked with detailed answers.
- A COVID-19 Resources Google Folder with additional resources can be found [here](#). We will continually add to this folder as we are made aware of more resources.
- As the Street Medicine Institute Student Coalition (SMISC), we will hold weekly discussion sessions for all students to come together, be a resource for one another, and share advice, tips, stories, etc.
- The #1 most important thing to consider at this time is to adhere to your University’s mandated guideline. Most hospitals are recommending students NOT go out and see patients during this crisis if you are not essential to their care. Most programs are limiting contact with patients to only providers. Students should adhere to these guidelines and make every effort to serve our patients in the best way possible by not doing more harm than good during this pandemic.

There are many ways that, as students, we can continue to love and serve our street neighbors from afar. The following are suggestions:

- **Item Donations:** Consider organizing donations from the community to give to your Street Medicine's team members, other outreach members on the front line, shelters, etc.
 - Much needed donations include: hand sanitizer, disinfectant wipes, tents, sleeping bags, tarps, toilet paper, tissues, soaps, nonperishable food items such as canned goods with pop tops, snacks, bottled water. All food products should be edible for people with no or few teeth.
 - ****NOTE:** Please use extreme caution when collecting donations or making "hygiene kits" by frequently sanitizing your hands and not touching your face during the handling of donations. Screen the volunteers (i.e. recent travel, shortness of breath and/or cough, fever) who will be putting together the kits. We don't want the donations to be a vector of disease.
 - It is recommended to avoid including face masks in hygiene kits for distribution as they can become fomites when improperly used.
- **Education:** Consider using your student skills to develop information sheets and infographics that are easy-to-read and can be easily distributed to those experiencing homelessness in your community. Ask shelters if you can come and provide education to their residents.
 - The SMISC is currently developing a general set of infographics which will be distributed ASAP for use by any street med team.
- **Advocacy:** Our street neighbors now more than ever need advocates. Their civil liberties are at risk of being threatened, especially now. Even if you are forced to sit on your couch during this time, you can advocate!! Some ideas include:
 - Explain to authorities that "rounding people up in shelters" could make the situation worse and why.
 - Advocate that local governments call off street sweeps during this time so that those sleeping on the street can remain in place and be found by the Street Medicine team.
 - Advocate that liquor stores do not suddenly close, as EtOH withdrawal will be detrimental at this time (increased ED and ICU visits, death, etc).
 - Write articles, post on social media, speak to the local media sources. Explain the population of patients that you serve, the difference between sheltered and unsheltered homeless, how our population is at risk and what we can do to help.
 - Make a record for your Street Medicine team of what is unfolding during this pandemic.
- **Creative contact:** Find creative ways to contact your patients to combat loneliness during isolation. If they have a cell phone, call them and talk. Send them an encouraging message or video.
 - Try to not use the term "social distancing" during this time, as many patients already feel distanced from society. Instead use "physical distancing."
- **Recommendations (generally) for caring for sheltered homeless patients**

- As stated above for participation in street teams, the #1 most important thing to consider at this time is to adhere to your University's mandated guideline. Most hospitals are recommending students NOT go out and see patients during this crisis if you are not essential to their care.
- Coordinate with the local shelters where you are providing care – if possible, recommend use of rooms not typically designated for sleeping to create areas to separate various cohorts (i.e. symptomatic vs non-symptomatic)
- Remember to operate within your own scope as students. Leave the clinical judgement to an accompanying provider if possible.
- If a provider is unavailable to provide clinical judgement, you can advise shelters to separate cohorts based on screenings (see below)
- Screening in the shelters and separating cohorts
 - Question 1) Have you traveled recently to an area with high prevalence of COVID-19 (Johns Hopkins has a map with the case distribution <https://coronavirus.jhu.edu/map.html>)?
 - Question 2) Do you have a new-onset cough or new-onset shortness of breath?
 - If yes to either of the above questions: take the patient's temperature
 - If temperature is elevated place this patient in the 'Symptomatic Group'
 - If possible, utilize a separate room for patients that are in the 'symptomatic group'
 - Use face masks sparingly (ex: only for those who have been stratified into the symptomatic cohort and prior to being transferred to isolation)
- Other recommendations for shelters
 - Screening upon entry to shelter when possible
 - Staggered or multiple mealtimes to limit group gatherings
 - Patient education on physical distancing, hand hygiene, cough etiquette, sleeping safety (i.e. head-to-toe, if applicable)

Lessons Learned

As cases of COVID19 have increased to pandemic levels, many non-medical outreach teams have ceased outreach, placing responsibility for crisis management on street medicine teams. This has signaled a fundamental shift in knowledge required to practice street medicine and what should be considered "core curriculum." Street Medicine usually is viewed as primary care on the street and as such, practitioners have increased knowledge about mental health and substance use disorders. The COVID19 pandemic has revealed our duty for proficiency in disaster preparedness as communities look to street medicine for screening, care, and containment of rough sleepers. A consequence of this is the need for communities to consider street medicine as essential to public welfare like police and fire departments. Street Medicine should be an essential standing service offered in any community where there are people sleeping outdoors, and not just turned to in times of crisis when programs already lacking resources become further overextended.

Additional Resources:

The resources listed here were created for a variety of consumers and may not be specific to the unique needs or experiences of rough sleepers. However, they may provide helpful ideas that can be adjusted in for the needs of street medicine patients.

- HUD website for working with shelter-users and people living in encampments:
<https://www.hudexchange.info/resource/5985/infectious-disease-toolkit-for-cocs/>
- Center for the Study of Traumatic Stress - psychological effects of quarantine:
https://www.cstsonline.org/assets/media/documents/CSTS_FS_Psychological_Effects_Quarantine_During_Coronavirus_Outbreak_Providers.pdf
- Resources for patients for immediate assistance with emotional and mental health needs:
 - Disaster Distress Helpline - Call 1-800-985-5990 or text TalkWithUs to 66746
 - National Suicide Prevention Lifeline - Call 800-273-8255 or
 - Crisis Textline - Text TALK to 741741
- COVID-19 guidance/ resources for people who use drugs:
 - Harm Reduction Coalition: <https://harmreduction.org/miscellaneous/covid-19-guidance-for-people-who-use-drugs-and-harm-reduction-programs/>
 - Homeless Youth Alliance in San Francisco: <https://nhchc.org/wp-content/uploads/2020/03/hya-covid-19-peeps.pdf>
 - Yale Program in Addiction Medicine:
<https://drive.google.com/file/d/1W9mcVKIzaVOelZfVLxGAsrfO2utaBVNj/view>
- Kaiser Permanente – NHCHC resource for monetary support:
<https://about.kaiserpermanente.org/community-health/news/supporting-covid-19-response-for-u-s-homeless-population>
- Infographics (pictures) for shelter/ homeless service agencies and patients:
<https://nhchc.org/wp-content/uploads/2020/03/NHCHS-COVID-Guidelines-Rev.pdf>
- Self-care for health care professionals
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