

CASE STUDY

Applying an Equity Lens: Reflecting on Harms from the COVID-19 Response and Mitigation Strategies Implemented in a Local Public Health System

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Abstract

This case study used an *Equity Lens Protocol* to guide partners' engagement in reflecting on harms and mitigation strategies related to the COVID-19 response in a local public health system. This protocol is based on the Guidance document for assuring an equitable response to COVID-19 prepared by the Pan American Health Organization. We used a participatory approach to engage partners doing the work in systematically reflecting on harms, mitigation strategies, and lessons learned and implications for practice. Results identified specific harms (e.g., loss of income, challenges to learning) related to particular COVID-19 response measures (e.g., home confinement, school closure); as well as mitigation strategies implemented to reduce harms. This case study illustrates use of technical support to enable systematic reflection on the COVID-19 response through an equity lens.

Introduction

“Achieving health equity within a generation is achievable, it is the right thing to do, and now is the right time to do it.”

--Commission on Social Determinants of Health, Final Report, 2008

Working to assure equal opportunities for health and wellbeing is always the right thing to do; but a pandemic is a particularly challenging time to do it. Although necessary to control the pandemic, the public health response to COVID-19 has had undesired consequences, especially for vulnerable populations such as those of low-income and racial or ethnic minorities. For instance, public health measures, such as home confinement and school and workforce closures, had adverse effects including overcrowded housing, social isolation, and lack of income for many families (PAHO, 2020).

With attention to equity, some public health systems have implemented programs and policies to mitigate or minimize adverse effects. Yet, challenged in responding to demands, few public health systems have systematically reflected on potential harms and mitigation strategies to assure a more equitable response to this public health emergency. Without stakeholder engagement in such systematic reflection, it is less likely that the public health response will be adjusted to minimize harms to vulnerable populations.

To address this gap, we developed and field tested an *Equity Lens Protocol* (Fawcett and Holt, 2021) to provide technical support for partners in public health systems to systematically reflect on the COVID-19 response through an equity lens. (See Appendix A for a copy of the full *Equity Lens Protocol*). The protocol provides questions to guide reflection and planning on: a) potential harms (i.e., how implementation of COVID-19 public health measures might harm vulnerable populations) and b) mitigation strategies implemented by the local public health

system to minimize adverse consequences. This protocol is based on a PAHO Guidance document for an equitable response to COVID-19 prepared by the Pan American Health Organization (PAHO, 2020).

This case study had three primary objectives: a) To better understand potential harms of COVID-19 response activities, especially for vulnerable populations; b) To document mitigation strategies/activities implemented to minimize harms; and c) To reflect on what was learned and implications for practice. We used a participatory approach to engage those doing the work in a local public health system in systematically reflecting on COVID-19 response activities through an equity lens. Results highlighted different specific harms (e.g., loss of income, challenges to learning) related to particular response measures (e.g., home confinement, school closure); and specific mitigation strategies implemented to reduce harms were identified. This case study illustrates use of technical support to enable systematic reflection on the COVID-19 response through an equity lens.

Context and Implementation of the Local Public Health Response

Context of the Local Public Health Response

This case study used an equity lens to examine the COVID-19 response in a local public health system, Douglas County, Kansas (USA). Douglas County is composed of the city of Lawrence (largest city and county seat), nearby smaller cities (Eudora, Baldwin, Lecompton, Kansas), and surrounding rural areas. According to the 2020 U.S. Census, the county population was 118,785, making it the fifth-most populous county in the State of Kansas.

The racial makeup of Douglas County was 83.4% White, 4.7% Black or African American, 2.7% Native American, 5.0% Asian, 0.1% Pacific Islander, and 4.2% from two or more

races. Hispanics or Latinos of any race were 6.5% of the population. Those persons speaking a language other than English at home was 10.2 %. 49.6% of those over 25 years had a high school degree or higher. The median household income (2015-2019) was \$59,435. People living under the poverty line was at 15.1%.

Vulnerable groups refer to those at elevated risk for harm due to differential exposures, opportunities, and access including through systemic racism. The focus was on those experiencing inequities associated with social class, race or ethnicity, gender, income level, disability, and/or place. In this case study, participants in focus groups identified some particularly vulnerable populations in this local health system: a) those of lower income/social class; b) racial/ethnic minorities (especially Black, Latino, and American Indian/Alaska Native people); c) those speaking a language other than English; d) women; e) older adults; f) those with physical or cognitive disabilities; g) those with limited access to, or ability to navigate, technology; h) those with limited transportation options; i) those experiencing homelessness; and j) those living in places of concentrated poverty.

A number of partners worked together to implement the COVID-19 response in this local health system. The primary structure for collaboration was the Unified Command; including Lawrence-Douglas County Public Health (the local health department), LMH Health (local hospital), City of Lawrence, Douglas County Government, local school districts, University of Kansas (KU) and other education partners. Other community partners included Heartland Community Health (FQHC), Watkins Health Center at KU, Haskell Indian Health Center, transportation partners, Senior Resource Center, pharmacies, and the local homeless shelter.

A team of health equity advisors provided guidance and technical support to the Unified Command throughout the local COVID-19 response. This team used equity reflection and reporting methods to engage and learn from those most affected. Equity response activities included focus groups with community members (e.g., to learn about barriers and needed supports), internal discussions (e.g., with Unified Command), public discussions (e.g., about the importance of equity to the local response), analysis of data on new cases and vaccination uptake across different population groups, and recommended actions to further equity. Ongoing during the pandemic, the team of equity advisors was a primary support structure for applying an equity lens to the local COVID-19 response.

COVID-19 Response Implemented in the Local Public Health System

As part of the COVID-19 response, 11 types of public health measures were put in place to reduce new cases, hospitalizations, and deaths in this community. Types of COVID-19 responses implemented included:

- 1) *Individual quarantine of cases and contacts*: Isolation and quarantine requirements for COVID-19 cases and contacts in Douglas County followed state health department (KDHE) requirements. This included a 10-day mandatory isolation for positive cases and required quarantine for identified close contacts. Initially, quarantine was for 14 days following date of last exposure; it was later reduced to a 10-day quarantine (in December 2020). Quarantine was further modified for school and childcare settings, using a “test and stay” approach, intended to enable children to stay in school and childcare to as much as possible.
- 2) *Home confinement*: Douglas County began with a stay-at-home order in March 2020, and then went through a phased re-opening through spring and summer of 2020. In summer

2020, restaurants and bars were closed; and then subsequently re-opened, initially with limited hours and operating requirements.

- 3) *School closure*: Public schools were closed, and remote learning was instituted in all school districts. Although local School Boards retained final authority on closure, the local health department (LDCPH) provided guidance for opening and closing and regular reporting on the level of disease transmission. These “gating criteria” were used by local School Boards as part of their decision making regarding school closure.
- 4) *Workplace closure*: Some non-essential businesses were shut down and/or reduced hours to help prevent COVID spread. Closure of bars, restaurants, and gyms occurred, as well as reduced hours for retail shopping. Modification of work environments was another strategy used, including adoption of physical-distancing practices following LDCPH guidance. People were encouraged to work from home, if possible.
- 5) *Public transit restrictions*: For public transit (e.g., buses), Douglas County followed guidance provided by the Federal Highway Administration including required mask wearing and physical distancing among passengers. To enable the transit system to better limit occupancy, the City of Lawrence made it possible for bus riders to schedule their trip in advance.
- 6) *Congregate settings* (e.g., nursing homes, shelters, prisons): The Lawrence Community Shelter reduced the resident limit to prevent COVID transmission. Nursing homes limited access for family members. Guidance on how to best limit disease transmission in congregate settings was provided through LDCPH staff outreach and consultation to congregate settings.
- 7) *Limitations on gatherings and mass events*: Limitation orders were put in place for mass gatherings (e.g., for faith congregations, community gatherings, sporting events) beginning in Fall 2020. Size limitations ranged from a maximum of 10 – 50 people, with greater latitude allowed

for outdoor events. Consistent with gathering limitations, City/County Commission meetings were shifted to an online format.

8) *Handwashing with soap and water*: Handwashing was encouraged through communications, and hand sanitizer was made available in businesses and public places. Early in the pandemic, when supplies were limited, health care, education and congregate care settings could request and receive hand sanitizer by making a request to LDCPH.

9) *Mask-wearing mandates*: Public health orders required use of masks in indoor spaces. Schools required masks of students and staff. LDCPH responded to complaints of non-compliance by working with organizations to help them understand the need for and importance of mask wearing by the public and by employees. LDCPH and Douglas County enacted a variety of mask mandates at various stages of the pandemic (e.g., requiring masks for everyone over 2 years of age; for just those from 2 years to 11 years).

10) *Testing for COVID-19*: The LDCPH, LMH, local health providers, pharmacies, and other partners offered free testing for COVID-19. Tests were also made available through schools and at community events.

11) *Vaccine distribution*: When COVID-19 vaccines became available in early 2021, LDCHD, LMH Health, local health providers, pharmacies, and other partners offered free vaccinations for the public. Vaccine prioritization was largely managed by the state health department (KDHE); however, significant local effort was made to reach vulnerable populations first. Extensive communications addressed safety, effectiveness, and timing of vaccines; and attempted to address the public's concerns, hesitancy, and resistance. To enable access, free distribution of vaccines has occurred through a variety of partners, in a variety of settings, for a variety of populations.

Participatory Methods for Reflecting on COVID-19 Response through an Equity Lens

This case study used the *Equity Lens Protocol* (Fawcett and Holt, 2021) to guide partners' engagement in reflecting on the harms and mitigation strategies of the COVID-19 response. This protocol is based on a PAHO Guidance document for an equitable response to COVID-19 prepared by the Pan American Health Organization (PAHO, 2020); Dr. Orielle Solar-Hormazabel, lead author.

Using a social determinants of health perspective (Commission on Social Determinants of Health, 2008), the PAHO Guidance document (PAHO, 2020) offers a detailed set of potential harms from public health measures to address COVID-19 and recommended mitigation strategies for minimizing harms for vulnerable populations. The *Equity Lens Protocol* used in this study provided questions to support systematic reflection among partners—with a focus on potential harms, mitigation strategies, and lessons learned and implications for practice. This protocol provides technical guidance for systematic reflection among local partners, appreciating that “sensemaking” is best done by those engaged in the work (Phori, Fawcett, et al. in press).

Participants in the case study included four members of the leadership team and staff of the local health department that led the COVID-19 response. Participants also included three health equity advisors, all women of color, who advised the Unified Command on issues of equity and health care access throughout COVID-19 response. These partners had knowledge and responsibility for implementing the public health measures used in the local COVID-19 response.

The *Equity Lens Protocol* was developed, and implementation facilitated, by the University of Kansas (KU) team, a PAHO/WHO Collaborating Center at KU. The protocol was implemented during several weekly (1 hour) meetings with partners. Each meeting focused on a theme: a) Background, context, vulnerable populations, and COVID-19 response measures implemented; 2) Identification of harms, especially for vulnerable populations; 3) Identification of mitigation strategies used to minimize harms; and 4) Lessons learned, including enabling and impeding factors in the response, and recommendations for implementing a public health response with an equity lens. The facilitator used questions provided in the protocol to prompt dialogue; and a recorder captured group responses for later review and refinement. Participants reviewed, amended, and approved drafts of the emerging case study.

Results of Participatory Reflection: Identified Harms and Mitigation Strategies Implemented

Results of this participatory reflection include: a) Specific harms identified for vulnerable populations, by general type of harm (see illustrative harms in Table 1 below); and b) Mitigation strategies implemented to reduce potential harms for vulnerable populations, by type of public health measure implemented (see illustrative mitigation strategies in Table 2 below).

Table 1 displays illustrative specific harms identified as occurring for vulnerable populations in this local public health system. As can be seen in Table 1, participants identified an array of different types of harms experienced by vulnerable populations. These included harms related to material living (e.g., lack of housing; limited public areas), income and employment (e.g., lack of income), education and learning (e.g., changes in school operations, differences in supports for learning), and other types of harms.

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Table 2 displays illustrative mitigation strategies implemented to reduce potential harms in the local public health system. Mitigation strategies aim to address intermediate determinants of health including those programs and policies intended to reduce differential exposures and enhance opportunities, reduce vulnerabilities and enhance capabilities, and increase access (Solar and Irvin, 2010). As can be seen in Table 2, partners documented a number of mitigation strategies implemented to reduce harms. These included programs and policies to reduce harms related to: individual quarantine of cases and contacts (e.g., hotels contracted so residents could complete isolation or quarantine free of charge); school closure (e.g., school district providing iPad or laptop to all students); workplace closures (e.g., state and federal moratorium and local funding to prevent home evictions); and other activities. Communications regarding mitigation strategies included messaging that protecting ‘vulnerable’ populations carries inherent benefits for the more privileged public, particularly in a pandemic.

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Conclusion and Discussion

Demands of the COVID-19 response made it difficult for health systems to keep equity at the center. The *Equity Lens Protocol* (Fawcett and Holy, 2021; see Appendix A) included questions to guide partners' systematic reflection on key equity aspects—potential harms and implemented mitigation strategies. Stakeholder engagement in systematic reflection about equity aspects makes it more likely that the public health response will protect all of us.

The *Equity Lens Protocol* closed with guiding questions for an overall reflection on four broader aspects of the COVID-19 response: a) Factors impeding or making more difficult an equity response; b) Factors enabling or making easier an equity response; c) Lessons learned from equity work in this public health response; and d) Recommendations for assuring an equitable public health response. Partners' insights into each aspect are summarized in the sections that follow.

Factors impeding or making more difficult an equity response. Factors identified by partners as making more difficult an equity response included:

- Initially, equity was not centered (i.e., not a strong consideration) in the public health response. We tended to prioritize the majority; those who can be reached easiest and the fastest. Early on, equity was thought about as on the margin, not a primary consideration.
- Technical aspects of the response excluded some people (e.g., when the Internet was needed to sign up for vaccines, some people didn't have the ability to do so or to receive the confirmation message; QR codes being used were confusing; we expected people to have a phone, or to be patient with busy signals from an overwhelmed phone system).
- Language communication was a barrier for some people. We expected people to speak and understand English.
- Transportation was a barrier for some people. This was particularly true for those who required multiple appointments.
- A legacy of discrimination contributed to individuals' distrust of each other, and of government.

- Medical mistrust contributed to rejection of recommended measures (e.g., vaccine hesitancy).
- Mistrust and lack of understanding of equity among organizations needed for the response.
- There was not a lot of diversity in the Unified Command structure that oversaw the response. The Health Impact Advisor group (composed mostly of racial minorities) was providing guidance to a primarily white leadership group; the dynamics were challenging.
- In Douglas County, people know how to collaborate and work together well, but there were still issues of distrust and uncertainty about a genuine commitment to equity.
- Understanding that equity is the work of all of us; not just that of a few people with designated roles, usually people of color, were responsible.
- Unwillingness to do what it takes to protect each other. Limited adoption of consistent, effective public health practices (e.g., mask wearing) by community members.
- Resistance and opposition to public health orders (e.g., wearing masks), citing personal freedom over protecting others.
- Reliance on employers as gatekeepers for access to vaccines affected prioritization, reach, and the equitable distribution of scarce vaccination resources; especially for those who were unemployed.
- Some important decisions regarding the COVID-19 response (e.g., who is vulnerable, quarantine protocols, priority for vaccinations) were decided at federal and state levels; not decided locally where there is more knowledge of the context.
- Struggle and tension in balancing implementation of needed public health measures and likely harms, especially for vulnerable populations. For example, we knew that isolation and quarantine would affect people's ability to earn income, have childcare, etc.; and yet, this was the best way to protect the community from the spread of COVID-19. Although aware of these tensions, it was hard to know the "right answer" in balancing interests.
- Difficulty of assuring an equitable response to the COVID-19 pandemic when the deeper issue of inequities remains unaddressed.

Factors enabling or making easier an equity response. Factors identified by partners as

making easier an equity response included:

- Public health has a history of focusing on equity, so the public expected attention to equity as part of the local response.
- Public health had existing partnerships with organizations and networks that were trusted by vulnerable populations.
- The high education level in the community was a protective factor, especially in not accepting and acting on misinformation.
- Community engagement, including with vulnerable populations, informed and enabled adjustments in the local COVID response (e.g., an October-November 2020 vaccine survey gauged willingness and hesitancy of adult residents to be vaccinated, their decision-making factors, and their preferences for vaccine resources and locations—and this was used to tailor communications; an August-September 2021 survey gauged community interest in booster doses and inquired about where community members would prefer to receive a booster dose, if interested—and this led to a decision to use drive-through as the mode of delivery).
- Lawrence has a rich community organizing environment. The equity response relied on

community groups to help reach those who may not be connected to the medical system; and to help spread information about testing, immunizations, and boosters; and to help provide transportation, etc.

- The equity work of the public health team benefitted from access to demographic data (i.e., sex, race and ethnicity, age, zip code, and municipality within Douglas County) to help understand differential impact among different populations, including vulnerable groups. Senior data analysts on staff integrated data from local sources, the state health department (KDHE), and from CDC (e.g., for the local American Indian population).
- Haskell Indian Nations University, and Haskell Indian Health Center, were strong partners in the equity work. They have a deep and trusted presence in the American Indian/Alaskan Native community.
- Public health responses (e.g., COVID-19 testing) were strengthened by engaging and welcoming community members and by adapting approaches to reach people through diverse settings (e.g., libraries, coffee shops, local recreation center).
- Equity impact advisors had community connections, trusted relationships, experience, and expertise. They helped to guide response efforts to be more equitable (e.g., by suggesting locations for distribution of testing and vaccinations).
- An internal reporting process raised awareness about health equity topics and needs in the community. Equity Impact Advisors were plugged into each of the different working groups in the Unified Command (e.g., testing or vaccination group). They gave input and feedback, and they conducted research on what other communities were doing and shared promising approaches with the broader team.
- Funding helped enable the equity response (e.g., RADxUp enabled health department staff to go to local businesses with incentives for their engagement in vaccination and testing efforts).
- Public discussion panels, featuring medical experts and public figures, addressed the importance and centrality of equity in the public health response. This raised awareness and advanced the conversation around health equity in the community.

Lessons learned from equity work in this public health response. Partners identified

lessons learned in this equity work including:

- Equity needs to be at the center of public health work. By centering on an equitable response from the beginning, we can build trust with communities that have borne a disproportionate burden.
- Equity calls for investment in people, structures, and relationships to assure a full and equitable response (e.g., organizational structure, funding, trust).
- Vulnerable populations are less able to obtain and follow guidance for protecting themselves, their families, and their communities (e.g., ability to get accurate information from a health care provider, be able to wear masks in their workplace, obtain time off to get a vaccine)
- A whole-system equity response requires good people who value equity in all partner organizations (e.g., public health department, hospital, school system, emergency operations, City/County Government)
- Forming collaborative partnerships with other communities doing equity work allows us to learn from and with them.

- Tools can make easier systematic reflection and planning for an equity response (e.g., Health/Equity Impact Assessment; this Equity Lens Protocol). For example, a simplified version of a Health/Equity Impact Assessment was used in allocating CARES Act funding to community partners.
- Facts are not always persuasive as people make decisions about whether to comply with public health guidance (e.g., whether to wear a mask, whether to get a vaccine)
- Public health communications should start with where people are (e.g., their fears, worries), and messages should be tailored to address those felt concerns (e.g., no microchip in the vaccine).
- When there are differences in messaging among different sources of information (e.g., White House, CDC, state and local health departments), people will go to their own preferred sources of information (or misinformation).
- When COVID response activities (e.g., testing, vaccines, community engagement) are conducted in a diversity of settings and places (e.g., through trusted organizations, in diverse neighborhoods), they convey a commitment to equity and can better reach those most vulnerable.
- Important to assure a safe and respectful experience with public health services and to provide accountability (e.g., added an equity officer at mass vaccination clinic following reported incident of racism).
- In a continually changing pandemic, public health should be careful about setting goalposts for declaring success in the COVID-19 response since the benchmarks may need to evolve with changing conditions (e.g., when people can stop wearing masks indoors may change with changing conditions).
- A federal infrastructure for developing and delivering vaccines at scale is essential to a local public health response that serves everyone.
- In forming partnerships for an equity response, it is essential to have collaborative leadership—those willing to share risks, resources, responsibilities, rewards (and blame)

Recommendations for assuring an equitable public health response. Partners made

specific recommendations for assuring an equitable public health response:

- Public health's core functions and essential services (e.g., assessment, planning, partnerships, policy development) need to have equity at the center. This includes paying attention to potential harms for vulnerable populations and implementing strategies for mitigating harms and reducing inequities.
- Take the time from the beginning to think through different vulnerable populations' needs and barriers to benefit from response activities; fight the inclination to just move fast.
- Public health systems need to build capacity for an equity response before an emergency occurs (i.e., building community capacity for equity for a whole-community approach).
- We build an equity response capacity through community engagement, listening and being present, in all aspects of the work—including assessment, planning, intervention, and evaluation.
- Recruiting and designating people in community organizations and civil society as equity partners can help assure needed supports and advocacy for an equity response (e.g., in transportation, communications, equitable policies).
- In mobilizing needed partnerships for an equity response, be clear and intentional about

who has trusted relationships with different vulnerable populations and how they can be meaningfully engaged in assessing and minimizing harms for vulnerable populations.

Conclusion. Working together to achieve health equity is a critical aspect of the public health response, especially during public health emergencies. Evidence-based guidance, such as offered in the PAHO Guidance document, allows for the development of protocols for reflecting on harms and mitigation strategies for protecting vulnerable populations. This case study illustrates the potential for partners to systematically reflect on the public health response through an equity lens. Widespread adoption and use of such approaches can strengthen efforts to assure that health equity is at the center of public health efforts.

Table 1: Illustrative specific harms identified for vulnerable populations, by general type of harm, in the Lawrence-Douglas County public health system.

GENERAL TYPE OF HARM	SPECIFIC HARMS IDENTIFIED FOR VULNERABLE POPULATIONS
<p>1. Material Living [Related to implemented public health measures of Individual quarantine; Home confinement; Handwashing]</p>	<p>a. Lack of housing: The Lawrence Community Shelter reduced their limit for number of residents allowed to reduce COVID transmission. b. Overcrowded housing: Highest risk of death among elders living in nursing homes. c. Limited public areas: Loss of opportunities to earn a living for informal workers; Public library was closed, limiting access to computers for those who needed them; Public parks and playgrounds were closed.</p>
<p>2. Income and Employment [Related to Home confinement; Public transit restrictions; Limitations on gatherings; Handwashing]</p>	<p>a. Lack of income: Loss of income particularly hard for those who are unable to work, earn daily wages, or are non-salaried. b. Lack of unemployment benefits: Early on, some employees had difficulty accessing unemployment benefits (e.g., needed time off) due to restrictions.</p>
<p>3. Social Protection [Related to Individual quarantine; Home confinement; Workplace closure, Mask wearing mandates; Vaccine distribution]</p>	<p>a. Absence of social rights: Loss of home was a risk for many; National eviction moratorium provided some protection. b. Absence or weakness in protections from government: Some whose business or school was closed felt they did not get the needed protection from government interference in their lives; Other people wanted public health measures (e.g., mask-wearing mandates) to be enforced.</p>
<p>4. Education and learning [Related to School closure, Mask wearing mandates]</p>	<p>a. Changes in school operations and learning: Learning became more difficult; children did not progress in their learning as they should have. b. Differences in supports for learning: There was a difference in learning opportunities for children of parents who could work from home and supervise their children, and for those children whose parents could not.</p>
<p>5. Cultural relevance [Related to Individual quarantine; Home confinement; Congregate settings; Limitations on gatherings; Handwashing, Mask wearing mandates, Vaccine distribution]</p>	<p>a. Clash with ancestral community values, traditions, symbols, beliefs, and behavioral practices: Political polarization related to mask wearing mandates; Some churches resisted limitations on gathering for religious services, and some local lawsuits resulted. b. Cultural distrust: of vaccines, science, and recommendations of governmental institutions (e.g., belief there is a microchip in vaccines led some to not get vaccines; disbelief in reporting of number of cases; belief there is an inflation in reported number of COVID deaths).</p>
<p>6. Psychosocial risk and healthy environments [Related to Individual</p>	<p>a. Social isolation: Many people had less frequent contact with family members, friends, and neighbors. b. Deterioration in community relations: Decline in community civility related to resistance to public health measures.</p>

<p>quarantine; Home confinement; School closure; Workplace closure; Congregate settings; Limitations on gatherings; Mask mandates; Vaccine distribution]</p>	<p>c. Conditions adverse to healthy behaviors: Less opportunities for physical activity due to restrictions related to home confinement; limited access to parks and playgrounds, fitness facilities, and opportunities for engagement in sports. d. Greater uncertainty: Some people experienced heightened anxiety (e.g., due to risks, over-inflated perception of risk).</p>
<p>7. Gender inequity and burden of care [Related to home confinement; School closure; Workplace closure]</p>	<p>a. Caregiver overload: Women had undue burden managing caregiving for children (with school not being held in person) and work responsibilities. b. Overload of housework: Many more meals prepared and eaten at home, especially prepared by women of the household.</p>
<p>8. Delivery of basic services and supplies [Related to Home confinement; School closure; Workplace closure; Public transit restrictions; Testing for COVID-19, Vaccine delivery]</p>	<p>a. Difficulty accessing services: Accessing food, meals, and other basic services was a challenge for those with limited transportation. b. Less access to local resources: Limited access associated with home confinement and other restrictions. c. Differential access to personal protective equipment (PPE): Early in pandemic, it was difficult to secure and distribute masks so that all had them.</p>
<p>9. Access and continuity of health care [Related to home confinement; Public transit restrictions; Congregate settings]</p>	<p>a. Lack of continuity in follow-ups, medical exams, and health care: Disruption in regular medical exams (e.g., mammograms) and health services (e.g., delayed childhood vaccinations). b. Lack of access to health services: Access to COVID-19 testing and receiving vaccines was a challenge for those with limited transportation. c. Postponement of consultations and neglect of health needs: Suspension of in-person mental health services, routine dental services.</p>
<p>10. Human rights [Related to Individual quarantine; Home confinement; Congregate settings, Mask wearing mandates]</p>	<p>a. Limitations on human rights of expression: As COVID-19 cases were rising, there was a tension between trying to keep people safe by limiting public gatherings and wanting to support public protests of human rights violations (e.g., related to Black Lives Matter movement). c. Gender-based violence and violence against children and adolescents: Domestic violence filings, calls, and complaints increased; Lack of children interacting with mandatory reporters of family violence.</p>
<p>11. Social participation and intersectoral work [Related to Individual quarantine; Home confinement; School closure; Workplace closure; Public transit restrictions; Congregate settings; Limitations on</p>	<p>a. Lack of participation in the adaptation and implementation of measures: Lack of participation in civil society public decision making related to limitations on gatherings (e.g., City/County Commission meetings held virtually) b. Less social support: For members of faith community members, other support networks, due to limitations on gatherings; Older people in nursing homes were especially socially isolated due to restrictions on visitation.</p>

gatherings; Handwashing, Mask wearing mandates]	c. Lack of coordination between sectors and local actors: Challenges in working with others during diminished personal contact; This impedes personal/ human contact, and related trust, needed to work together effectively.
12. Communication [Related to Individual quarantine; Home confinement; School closure; Workplace closure; Public transit restrictions; Congregate settings; Limitations on gatherings; Handwashing; Testing for COVID; Vaccine distribution, Mask wearing mandates, Vaccine distribution]	<p>a. Lack of access and information for persons with disabilities: Mask wearing limited access to necessary visual cues/ information for those with hearing impairments.</p> <p>b. Inability to understand the official language: Challenging for those speaking a language other than English.</p> <p>c. Lack of technology fluency: Difficulty managing online reservations for vaccination/ testing, especially among elders.</p> <p>d. Discordant messages: Different messaging between local and state health departments; between health organizations and school districts.</p> <p>e. Misinformation: People went to the source of information of their choice (e.g., regarding vaccine safety), which was not always accurate.</p>

Table 2: Mitigation strategies implemented to reduce potential harms for vulnerable populations, by type of public health measure implemented in the Lawrence-Douglas County public health system.

TYPE OF PUBLIC HEALTH MEASURE IMPLEMENTED	MITIGATION STRATEGIES/ACTIVITIES IMPLEMENTED TO REDUCE HARMS FOR VULNERABLE POPULATIONS
1. Individual Quarantine of Cases and Contacts	<p>1) Employer reimbursement for COVID sick pay, enabling employers to allow sick employees to stay home.</p> <p>2) Care coordination project: where people could request needed support (e.g., food, medication, cleaning supplies/ disinfectant).</p> <p>3) Healthy Families staff provided quarantine assistance to vulnerable families.</p> <p>4) Hotels contracted with FEMA; residents could request to go to a hotel free of charge to complete isolation or quarantine. When the state declaration ended, Douglas County took steps as a community to continue that service.</p> <p>5) Local health officers allowed quarantine to be shortened from 14 days to 10 days to ease the burden on the workforce and working parents.</p>
2. Home Confinement	<p>1) Ability to connect families affected by isolation and quarantine to social workers and supports. (Initially through the Healthy Families program and then through the Compass Project.) Provided groceries, food, medication, etc. to assist with staying at home.</p> <p>2) Promotion and dissemination of MyStrength app (i.e., virtual tool for connecting people with behavioral health resources).</p> <p>3) Healthy Families program: Purchased iPads and provided service for up to six months to support clients’ needs to connect with others.</p> <p>4) Access to masks (and higher-quality masks) was particularly limited during early stages of the pandemic; eased later as resources were used to purchase and distribute masks for free.</p> <p>5) Public library started program for residents to more easily access social service agencies at the library.</p>
3. School Closure	<p>1) USD 497 (Lawrence School District) provided iPads or laptops to each student; it also provided hotspots as needed for internet access; and free access to all learning apps.</p> <p>2) Case workers provided assistance to non-English-speaking or technology-challenged householders to help them with access to remote learning.</p> <p>3) Lawrence Restaurant Association participated in preparing meals for school-aged children and youth.</p> <p>4) USD 497 provided boxes of food for meals to local families to come pick up; also provided some delivery of food to homes.</p>

	<p>5) Daycare/childcare agencies provided children with a supportive place to engage in online school to allow parents to go to work (e.g., through Boys & Girls Club, community daycare centers).</p>
<p>4. Closure of Nonessential Workplaces and Businesses</p>	<p>1) Lawrence Restaurant Association started Hospitality Workers Relief Fund to provide direct aid to local hospitality workers.</p> <p>2) City approved establishing outdoor dining spaces; County funding (CARES Act) helped restaurant/hospitality industry stay in business.</p> <p>3) Food service workers prioritized as part of the mass vaccination plan.</p> <p>4) Championed by the Chamber of Commerce, the CARES Act provided a way for employers to provide support to employees (reimbursement for COVID-related absences).</p> <p>5) Physicians from the University of Kansas Medical Center provided a day of medical services for homeless residents (at Camp Woody).</p> <p>6) County used CARES Act funding to help prevent home evictions; State and federal moratorium on evictions provide some protection.</p> <p>7) Food and meals distributed through community efforts (e.g., Just Food, Ladybird Diner, Lawrence Public Library).</p> <p>8) Tents/ camping authorized in public parks (legalizing camps for people who are homeless).</p> <p>9) Lawrence Homeless camp (Camp Woody) ensured homeless residents' access to shelter, water, food, and other basic needs during winter months.</p>
<p>5. Public Transit Restrictions</p>	<p>1) Required masks for all transit drivers and passengers.</p> <p>2) Placed X's on some bus seats to prompt for physical distancing.</p> <p>3) Followed guidance provided by Federal Highway Administration.</p> <p>4) Prioritized transit drivers in vaccination distribution.</p> <p>5) Worked with transportation providers to help provide testing for drivers.</p>
<p>6. Congregate Settings (e.g., nursing homes, shelters, prisons)</p>	<p>1) With the help of volunteers, Lawrence opened an overnight drop-in shelter to provide a safe option in freezing temperatures for homeless people sleeping outside; Hotel vouchers were provided to residents experiencing homelessness when temperatures were below 35 degrees.</p> <p>2) Homeless camp (Camp Woody) was set up to provide additional temporary housing, meals, and medical services through the winter.</p> <p>3) Isolation/quarantine hotels contracted to provide space for those who needed it; Continued as a local order after it was stopped at state level.</p> <p>4) Nursing homes prioritized for vaccination through Federal Retail Pharmacy Partnership program.</p> <p>5) Visitations of nursing homes conducted by LDCPH, and recommendations made for implementing safety procedures.</p> <p>6) LDCPH worked with jail nurses on disease investigation and vaccinations for prison population.</p> <p>7) Revised/ expanded who qualified for house arrest to reduce crowding in the jail and related exposure for those convicted of crimes.</p>

	8) Prioritized residents of congregate settings for vaccine distributions (e.g., those living in shelters, prisons, halfway houses).
7. Limitations on Gatherings and Mass Events	<p>1) Created and communicated “gating” criteria to allow more flexibility as to when it was safe for gatherings.</p> <p>2) Emphasized outdoor spaces and mask wearing to allow continuity of sports and related gatherings.</p> <p>3) Continually reviewed and adapted the “gating” criteria to be responsive to both the pandemic and the economic needs of the community.</p> <p>4) Exemptions to gatherings provided to allow for church services.</p> <p>5) Testing/screening program implemented to allow kids to participate in school-based activities.</p> <p>6) Public Health Orders Coordinator provided guidance for ceremonies, events, etc., for safe gatherings.</p> <p>8) LDCPH worked with Parks and Recreation for industry-specific gating criteria (i.e., what activities could happen, under what conditions).</p> <p>9) When requested, LDCPH provided guidance to faith communities regarding safe practices, and site visits/ consultations helped to implement guidance.</p>
8. Handwashing with water and soap	<p>1) City of Lawrence provided free and accessible sanitizing stations downtown.</p> <p>2) LDCPH received 14 pallets of hand sanitizer from state health department (KDHE) that was distributed locally.</p> <p>3) Local aquatic center/ Parks and Recreation provided access to restrooms/ handwashing facilities for those in need.</p> <p>4) Homeless camp (Camp Woody) had laundry and handwashing facilities, and hand sanitizer available for guests.</p>
9. Mask-Wearing Mandates	<p>1) Provided free masks to low-income families through the United Way.</p> <p>3) Provided education and raised awareness of efficacy of masks.</p> <p>4) Federal CARES Act funds were used to purchase masks for redistribution to those in need.</p> <p>5) Created a “Safe & Smart” campaign to promote and normalize wearing masks and to minimize stigma.</p> <p>6) Exemptions provided for those with medical conditions that precluded their mask use.</p>
10 Testing for COVID-19	<p>1) “Went where people were” to provide free COVID testing (e.g., downtown main streets, Wal-Mart parking lot, Merc parking lot across street from hotel where homeless residents were staying).</p> <p>2) CARES Act money used to purchase \$.5M in test kits, which were distributed for free (e.g., through local schools, health department).</p> <p>3) LDCPH Epidemiology team and clinic worked to identify potential outbreaks and conduct testing in group settings (e.g., homeless shelter, halfway homes, daycares, nursing homes).</p>

	<p>4) Testing events were held with prioritized outreach to Black and indigenous residents and people of color; these events were held at locations convenient for prioritized populations, and in partnership with those who had trusted relationships with vulnerable populations.</p> <p>5) Testing events held in centralized community locations (e.g., Just Food, a local food bank; parking lot near low-income housing) where incentives were provided for testing and vaccination; transportation was made available upon request.</p> <p>6) Testing kits were provided at all vaccination clinics, including Spanish language clinics. For Spanish attendees at the drive-thru, there was a process in place for people to request to be put in a line with a Spanish speaking worker (wearing buttons that said, “Hablo Espanol!”).</p> <p>7) Monitored the level of testing uptake weekly, and used that information to make adjustments to better reach vulnerable populations.</p>
<p>12. Vaccine Distribution</p>	<p>1) When vaccines first became available, Unified Command decided to use allocation formula based on occupation, exposure, or other eligibility (e.g., older age); and not a wait list based on first come, first served that would have advantaged those with technology access.</p> <p>2) Developed a weekly equity allocation and related process to identify and assure that vulnerable populations received priority for vaccine appointments.</p> <p>3) Created drive-through videos to promote ease of use for registrants attending a drive-through clinic.</p> <p>4) Haskell Indian Nations University and nursing homes were given direct access through a federal vaccine allocation.</p> <p>5) Spanish language vaccine clinics were established with trusted partners: all workers spoke Spanish, and many were native speakers; Scheduled at times of large gatherings (e.g., after Spanish-language Mass).</p> <p>6) Established school-based clinics when vaccines approved for 5-11 year-old children (in Lawrence and other communities).</p> <p>7) Worked with Visiting Nurses Association to provide vaccinations to people who were homebound.</p> <p>8) Community partners provided transportation to vaccine delivery sites.</p> <p>9) Follow-up survey used to identify convenient locations for booster shots; community input identified preference for drive-through location.</p>

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Appendix

Appendix A: *Equity Lens Protocol: Systematically Reflecting on COVID-19 Response Harms and Mitigation Activities.* (Stephen Fawcett, Christina Holt). Center for Community Health and Development, University of Kansas.

Equity Lens Protocol: Systematically Reflecting on Harms and Mitigation Activities Related to the COVID-19 Response¹

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INTRODUCTION/ORIENTATION:

The Problem: Although necessary to control the pandemic, the public health response to COVID-19 has had undesired consequences; especially for vulnerable populations (e.g., those of low-income, racial/ethnic minorities, women). For instance, public health measures, such as home confinement and school and workforce closures, had adverse effects including overcrowded housing and lack of income.

With attention to equity, some public health systems have implemented mitigation strategies, targeted policies and programs, to minimize adverse effects for vulnerable populations.

Yet, challenged in responding to demands of the pandemic, few public health systems have been able to systematically reflect on potential harms and mitigation strategies to help assure a more equitable response to this public health emergency.

Approach: This protocol or guide uses a participatory approach to engage stakeholders—those with direct experience and responsibility—in systematically reflecting on potential harms of COVID-19 response activities and mitigation strategies implemented to minimize harms.

The protocol enables an equity lens by offering questions, and illustrative lists of potential harms and mitigation strategies from PAHO Guidance, to support systematic reflection, dialogue, and collaborative planning. Intended participants include those with knowledge and experience with the COVID-19 response, especially as it affects vulnerable populations. This protocol can be implemented at different levels, including at the local/municipality or broader level (e.g., state, province, country).

Purpose: The primary aims of this systematic reflection process are: 1) To better understand potential harms of COVID-19 response activities, especially for vulnerable populations; 2) To help document and communicate mitigation strategies/activities implemented to minimize harms; and 3) To reflect on what was learned and implications for practice.

¹**Footnote**: This protocol is based on a PAHO Guidance document for an equitable response to COVID-19 prepared by the Pan American Health Organization (Dr. Orielle Solar-Hormazabel, lead author): Pan American Health Organization (2020). *Guidance for implementing non-pharmacological public health measures in populations in situations of vulnerability in the context of COVID-19*. Regional Team, Health Promotion and Social Determinants of Health, PAHO/WHO Regional Office, Pan American Health Organization, Washington, DC.

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A. CONTEXT of the COVID-19 RESPONSE EFFORT

We invite you to reflect on the context, individually and in dialogue with partners.

Please describe the context or situation of the COVID-19 response to be reflected upon.

For this section, please include:

1. **Name of the place (city/municipality/county, state/province, country) in which the COVID-19 response occurred:**

2. **Description of the place/territory (i.e., population size, demographics, etc.):**

3. **Groups in a vulnerable situation to which mitigation efforts are focused (e.g., those experiencing inequities associated with social class, race/ethnicity, gender, income level, disability, and/or place):**

4. **Objectives of the mitigation, or harm reduction, effort:**

5. **Partners, structures, and factors enabling or making easier the mitigation effort:**

6. **Barriers, challenges, and factors impeding or making difficult the mitigation effort:**

7. **Other aspects of the context:**

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B. BRIEF DESCRIPTION OF PRIMARY COVID-19 RESPONSE ACTIVITIES IMPLEMENTED IN YOUR CONTEXT

[Ideally, before the meeting/dialogue, please review and reflect on primary activities]

Please prepare a brief description of primary response activities implemented; by each type of response activity.

- 1) **Individual quarantine of cases and contacts:**

- 2) **Home confinement:**

- 3) **School closure:**
- 4) **Workplace closure:**
- 5) **Public transit restrictions:**
- 6) **Congregate settings (e.g., nursing homes, shelters, prisons):**
- 7) **Limitations on gatherings and mass events:**
- 8) **Handwashing with soap and water:**
- 9) **Mask-wearing mandates:**
- 10) **Testing for COVID-19:**
- 11) **Vaccine distribution:**

[OPTIONAL: To more fully document primary COVID-19 response activities implemented, consider providing a brief name or title for each primary response activity implemented; and include requested information in a 2-3 sentence entry (i.e., WHAT was done; BY WHOM; To address WHAT GOAL; WHEN done (month/year; when begun, when ended); WHERE was this done; WITH WHOM was this done.)]

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C. DESCRIPTION OF HARMS EXPERIENCED BY VULNERABLE POPULATIONS IN YOUR CONTEXT

[In advance of the group meeting/dialogue: **Please review some potential harms of COVID response measures, especially for vulnerable populations (see Table 1 below). In the second column, check all that may apply in your context, and be prepared to describe specific harms in Table 1 below.**]

When different COVID-19 response activities (e.g., home quarantine, school closure) are implemented, there are potential harms or adverse effects; especially for vulnerable populations.

Using Table 1 below (adapted from the PAHO Guidance document), please check off and describe the **specific harms or adverse effects** (e.g., lack of housing, lack of income) noted for each general type of harm (e.g., material living; income and employment).

Focus on those harms experienced by vulnerable populations in your context; adding others as appropriate, and ignoring those not relevant to your situation. Be specific.

REFLECTION/DIALOGUE: *What specific harms were experienced, especially by vulnerable populations, related to each aspect of living (e.g., material living, income and employment)?*

Table 1: Specific harms experienced by vulnerable populations, by general type of harm.

GENERAL TYPE OF HARM	SPECIFIC HARMS EXPERIENCED BY VULNERABLE POPULATIONS <i>(What harms were experienced, especially by vulnerable populations? Be specific.)</i>
1. Material Living [Related to Individual quarantine; Home confinement; Handwashing]	a. ___ Lack of housing: b. ___ Overcrowded housing: c. ___ Limited public areas: d. ___ Absence or irregular water supply: e. ___ Other (be specific):
2. Income and Employment [Related to Home confinement; Public transit restrictions; Limitations on gatherings; Handwashing]	a. ___ Lack of income: b. ___ Lack of unemployment benefits: c. ___ Inability to get to work: d. ___ Other:
3. Social Protection [Related to Individual quarantine; Home confinement; Workplace closure, Mask wearing mandates]	a. ___ Absence of social rights: b. ___ Absence of labor rights: c. ___ Absence or weakness in protections from government: d. ___ Loss or child care: e. ___ Other:
4. Education and learning [Related to School closure, Mask wearing mandates]	a. ___ Changes in school operations and learning: b. ___ Lack of experience and means for distance learning: c. ___ Differences in supports for learning: d. ___ Other:
5. Cultural relevance [Related to Individual quarantine; Home confinement; Congregate settings; Limitations on gatherings; Handwashing, Mask wearing mandates, Vaccine distribution]	a. ___ Clash with ancestral community values, traditions, symbols, beliefs, and behavioral practices: b. ___ Resistance from some faith communities: c. ___ Cultural differences for mask wearing: d. ___ Cultural distrust of vaccines: d. ___ Other:
6. Psychosocial risk and healthy environments [Related to Individual quarantine; Home confinement; School closure; Workplace closure; Congregate settings; Limitations on gatherings; Mask mandates]	a. ___ Social isolation: b. ___ Deterioration in community relations: c. ___ Conditions adverse to healthy behaviors: d. ___ Greater uncertainty: e. ___ Other:

<p>7. Gender inequity and burden of care [Related to home confinement; School closure; Workplace closure]</p>	<p>a. ___ Caregiver overload: b. ___ Overload of housework: c. ___ Loss of women’s autonomy: d. ___ Other:</p>
<p>8. Delivery of basic services and supplies [Related to Home confinement; School closure; Workplace closure; Public transit restrictions; Testing for COVID-19, Vaccine delivery]</p>	<p>a. ___ Difficulty or inability to access food vendors or the purveyors of other services: b. ___ Difficulty accessing or purchasing medicines: c. ___ Difficulty accessing essential protection services for children at risk for violence, persons with disabilities, etc.: d. ___ Difficulty accessing personal protective equipment (PPE): e. ___ Other:</p>
<p>9. Access and continuity of health care [Related to home confinement; Public transit restrictions; Congregate settings]</p>	<p>a. ___ Lack of continuity in follow-ups, medical exams, and health care: b. ___ Lack of access to health services: c. ___ Postponement of consultations and neglect of health needs: d. ___ Other:</p>
<p>10. Human rights [Related to Individual quarantine; Home confinement; Congregate settings, Mask wearing mandates]</p>	<p>a. ___ Rights violation (be specific): b. ___ Gender discrimination: c. ___ Gender-based violence and violence against children and adolescents: d. ___ Other:</p>
<p>11. Social participation and intersectoral work [Related to Individual quarantine; Home confinement; School closure; Workplace closure; Public transit restrictions; Congregate settings; Limitations on gatherings; Handwashing, Mask wearing mandates]</p>	<p>a. ___ Lack of participation in the adaptation and implementation of measures: b. ___ Lack of coordination between sectors and local actors: c. ___ Less social support: d. ___ Other:</p>
<p>12. Communication [Related to Individual quarantine; Home confinement; School closure; Workplace closure; Public transit restrictions; Congregate settings; Limitations on gatherings; Handwashing; Testing for COVID; Vaccine distribution, Mask wearing mandates, Vaccine distribution]</p>	<p>a. ___ Lack of access and information for persons with disabilities: b. ___ Inability to understand the official language: c. ___ Lack or regular and timely access to the media: d. ___ Lack of technology fluency: e. ___ Discordant messages from different sources: f. ___ Misinformation: g. ___ Other:</p>

Source from which this Table adapted: Pan American Health Organization (2020). *Guidance for implementing non-pharmacological public health measures in populations in situations of vulnerability in the context of COVID-19*. Regional Team, Health Promotion and Social Determinants of Health, PAHO/WHO Regional Office, Pan American Health Organization, Washington, DC.

D. DESCRIPTION OF MITIGATION STRATEGIES IMPLEMENTED TO MINIMIZE IDENTIFIED HARMS EXPERIENCED BY VULNERABLE POPULATIONS

[In advance of the group meeting/dialogue: Please review some illustrative mitigation strategies/actions (see Appendix A below). Check all that were implemented in your community/context, and be prepared to describe them in Table 2 below.]

Public health systems have implemented a variety of mitigation strategies and activities intended to reduce harms or adverse effects experienced by vulnerable populations.

Using Table 2 below, please describe **mitigation strategies and activities** implemented in your context, by type of public health measure (e.g., home confinement, school closure). As you work on each aspect of Table 2, please review examples of potentially relevant mitigation strategies displayed in Appendix A: “Systematic Reflection on Mitigation Strategies to Minimize Adverse Effects with Vulnerable Populations.”

Focus on those mitigation strategies implemented to reduce harms for vulnerable populations in your context; adding others as appropriate, and ignoring those not relevant to your situation. Be specific.

REFLECTION/DIALOGUE: *What mitigation strategies were implemented to reduce harms, especially for vulnerable populations? Consider those programs and policies intended to reduce exposures and enhance opportunities, reduce vulnerabilities and enhance capabilities, and increase access.*

Table 2: Mitigation strategies implemented to reduce potential harms for vulnerable populations, by type of public health measure implemented.

TYPE OF PUBLIC HEALTH MEASURE IMPLEMENTED	MITIGATION STRATEGIES/ACTIVITIES IMPLEMENTED TO REDUCE HARMS FOR VULNERABLE POPULATIONS <i>(What mitigation strategies were implemented to reduce harms, especially for vulnerable populations? Consider those programs and policies intended to reduce exposures and enhance opportunities, reduce vulnerabilities and enhance capabilities, and increase access. Be specific.)</i>
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1. Individual Quarantine of Cases and Contacts (see Appendix A, Part A).	
2. Home Confinement (Part B)	
3. School Closure (Part C)	
4. Closure of Nonessential Workplaces and Businesses (Part D)	
5. Public Transit Restrictions (Part E)	
6. Congregate Settings (e.g., nursing homes, shelters, prisons)(Part F)	
7. Limitations on Gatherings and Mass Events (Part G)	
8. Handwashing with water and soap (Part H)	
9. Mask-Wearing Mandates	

10 Testing for COVID-19	
11. Vaccine Distribution	
12. Risk Communication (Part K).	
13. Social and Community Participation (PartL).	
14. Human Rights (Part M).	
15. Other (bespecific)	

[OPTIONAL: To more fully document mitigation activities implemented, consider providing a brief name or title for each mitigation activity implemented; and include requested information in a 2-3 sentence entry (i.e., WHAT was done; BY WHOM; To address WHAT GOAL; WHENdone (month/year; when begun, when ended); WHERE was this done; WITH WHOM was this done.)

E. OVERALL REFLECTION AND WHAT WAS LEARNED AND IMPLICATIONS FOR PRACTICE

[In advance of the group meeting/dialogue: Please review the four questions and be prepared to discuss and offer your ideas.]

This *Equity Lens Protocol* concludes with four questions to guide overall reflection and dialogue on what was learned and implications for practice.

REFLECTION/DIALOGUE: *Using the space below, record your reflections on these four questions: a) What factors impeded or made more difficult an equity response?; b) What factors enabled or made easier an equity response?; c) What are the lessons learned from equity work in this public health response?; and d) What are your recommendations for assuring an equitable public health response?*

1. Factors impeding or making more difficult an equity response:

2. Factors enabling or making easier an equity response:

3. Lessons learned from equity work in this public health response:

4. Recommendations for assuring an equitable public health response:

Appendix A: “SYSTEMATIC REFLECTION ON MITIGATION STRATEGIES TO MINIMIZE ADVERSE EFFECTS WITH VULNERABLE POPULATIONS”

Source (from which this Appendix was adapted): Pan American Health Organization (2020). *Guidance for implementing non-pharmacological public health measures in populations in situations of vulnerability in the context of COVID-19*. Regional Team, Health Promotion and Social Determinants of Health, PAHO/WHO Regional Office, Pan American Health Organization, Washington, DC.

Appendix A is designed to support Part D of this protocol, “DESCRIPTION OF MITIGATION STRATEGIES IMPLEMENTED TO MINIMIZE IDENTIFIED HARMS EXPERIENCED BY VULNERABLE POPULATIONS.” It can also be useful in identifying planned (but not yet implemented) mitigation strategies.

Considering the identified harms (those noted in Part C. of this protocol), this Appendix helps address the question:

What MITIGATION STRATEGIES have been implemented to minimize harms for vulnerable populations?

(Ideally, in advance of the group meeting) **Please review the recommended mitigation strategies/actions below and check all that were actually implemented in your context to reduce harm for vulnerable populations.**

NOTE: You may also use Appendix A to identify new or planned mitigation strategies that are not yet implemented, noting “planned” in parentheses next to the planned strategy/action.

RECOMMENDED MITIGATION STRATEGIES (from PAHO Guidance document): **Source** (from which this Appendix was adapted): Pan American Health Organization (2020). *Guidance for implementing non-pharmacological public health measures in populations in situations of vulnerability in the context of COVID-19*. Regional Team, Health Promotion and Social Determinants of Health, PAHO/WHO Regional Office, Pan American Health Organization, Washington, DC. [Note: The numbers in parentheses refer to references in the PAHO Guidance document.]

Using this list below:

- 1) **Please review and check mitigation strategies implemented to be discussed further, adding others as appropriate;**
- 2) **(in dialogue) Please describe what was implemented in this context to reduce harms for vulnerable populations:**

A. Individual quarantine of cases and contacts

Actions prior to or immediately after implementation of the measure:

1. Guarantee a safe distance of one meter between cases and their close contacts, good ventilation in the home, use of masks, and adequate isolation, as well as information and support (103, 104). For people in conditions unsuitable for isolation in the home or who live with high-risk family members, alternative residential facilities should be set up that provide food, water, hygiene products, and other basic articles so that cases and their contacts remain in isolation for the required period (14, 103, 105, 106).
2. Improve household hygiene and disinfection following the recommendations, and offer alternatives when soap is unavailable (103, 107, 108).

- __3. Provide food, water, hygiene and disinfection products, and other basic articles for cases and their contacts during the isolation and quarantine period (103, 109).
- __4. Ensure the continuity of treatments and medical exams for people with chronic diseases, especially those whose treatment is critical—for example, oncology services (110). Health checks should also be provided for quarantined cases and their close contacts at home or in alternative residences through home visits or remote consultations (87, 111).
- __5. Provide support in indigenous communities through the establishment of community facilities for the isolation of COVID-19-positive cases, suspected cases, and their contacts, in keeping with the local situation and culture (78,112).
- __6. Guarantee income during sick leave or preventive quarantine through existing protection systems and emergency mechanisms (4, 8, 95, 98).
- __Other (be specific):

B. Home confinement

Actions prior to or immediately following implementation of the measure:

- __1. Guarantee the supply of essential goods, including healthy food and hygiene products, and consider strengthening support systems through networks of neighbors, community volunteers, municipal personnel, food delivery systems, etc. (4, 96)
- __2. Facilitate measures to adapt homes so as to ensure physical distancing. For example, prioritize alternative spaces for the high-risk population, provide adequate ventilation, separate beds, etc. (103, 108, 133)
- __3. Create temporary residences (shelters) for homeless people or people unable to isolate at home, and facilitate the monitoring of basic prevention measures, including frequent handwashing with water and soap and sanitation in these centers (134-137).
- __4. Provide preventive solutions in dwellings, tailoring them to the national and local cultural context to ensure their acceptance by the entire population. These solutions include ventilation, cleaning, and disinfection, especially for housing in indigenous communities (houses, tambos, malocas, rancherías, community council rooms, quilombos, kumpanias, etc.) (78, 112, 138).
- __5. Authorize measures and residences that facilitate safe departure from the home for people seeking help or at risk of violence (98, 139, 140).
- __6. Improve dissemination and monitoring of the standards and regulations governing the control of alcohol and weapons sales, as well as drug-dealing practices and locations (98, 139, 140).
- 7. Limit entry of outsiders to indigenous territories and help indigenous communities remain in their territories by guaranteeing the availability of essential supplies (78, 30, 112).
- __8. Provide free health care to informal workers and their families, as well as people who have lost their jobs and associated health insurance as a result of the pandemic (4, 94, 95, 96, 98, 141-143).
- __9. Facilitate healthy settings by promoting physical activity and good nutrition on television, radio, and online (144-146).
- __Other (be specific):

Short-term actions:

- __1. Prevent the social isolation of people living alone through call systems, home visits, and support from networks of neighbors, community volunteers, municipal personnel, etc. (102, 147, 148).
- __2. Provide stress management and mental health information and recommendations tailored to the situation of populations, setting up emergency telephone hotlines, mass media, networks of community psychologists, and telehealth and telemedicine services (147, 149, 190).
- __3. Ensure the continuity of medical care for patients with chronic diseases through home visits and follow-up calls, as well as the provision of medicines (150-152).
- __4. Support mothers, fathers, and caregivers through tools that support healthy parenting in the context of teleworking or teleschooling (153).
- 5. Set up a system for monitoring families at risk of domestic abuse and violence, facilitating access to abuse emergency key codes and strengthening community networks and support (98, 139, 140).
- __6. Guarantee that survivors of violence (including older persons and children) have access to social services and free helplines, including telephone and text messages, chats, or silent calls (98, 139, 140, 154).
- __7. Waive or subsidize payments for public utilities such as water, electricity, and heating to guarantee the

basic conditions for implementing the measures (8).

__8. Provide rent support, including installment options; do not raise rents; and suspend evictions (6, 95).

__9. Establish an emergency basic income equivalent to the poverty line for six months for the entire population living in poverty in 2020. This would imply an additional cost of 2.0% of GDP. This income would make it possible to maintain consumption and meet basic needs, promoting compliance with social distancing and quarantine measures (6).

__10. Provide support against hunger to keep the pandemic from leading to a food crisis. This could take the form of money transfers, food baskets, or food vouchers for the entire population living in extreme poverty for a six-month period. (6, 95, 96).

__Other (be specific):

C. Closure of nonessential workplaces and businesses

Actions prior to or immediately following implementation of the measure:

__1. Facilitate internet and computer access to create suitable conditions for teleworking whenever the type of work and job permits it (161, 162).

__2. Adopt measures to maintain employment and limit mass layoffs (161).

__3. Provide free health care for informal workers and their families, as well as people who lose their jobs and associated health insurance.

__4. Establish paid occupational sick leave (workers compensation) if COVID-19 is contracted in the workplace, and in cases of preventive quarantine.

__5. Introduce supplementary measures such as cash subsidies and basic goods for workers who lose their job and income, especially for informal workers and their families (6).

__6. Guarantee the supply of basic goods (healthy foods, hygiene products, and essential medicines).

__Other (be specific):

Short-term actions:

__1. Expand social protection, increasing the coverage of existing programs (horizontal) or the amount or duration of the benefits (vertical) to compensate for the loss of income in the population, particularly among groups in situations of vulnerability.

__2. Provide inclusive unemployment benefits for an adequate period for workers who have lost their jobs.

3. Provide information and recommendations on stress management and mental health tailored to the situation of groups in situations of vulnerability, addressing family life, the burden of caring for others, teleworking, and other issues.

__4. Increase access to telephone hotlines to meet mental health needs (147, 149).

__5. Waive or subsidize payments for public utilities such as water, electricity, and heating to guarantee the basic conditions for implementing the measures (8).

__6. Provide rent support, including installment options; do not raise rents; and suspend evictions (6, 95).

Guidance for implementing non pharmacological public health measures in populations in situations of vulnerability in the context of COVID-19

__Other (be specific):

D. School closures

Action prior to and immediately after implementation of the measure:

__1. Facilitate the provision of food outside schools, replacing school breakfasts and school food (97, 172, 173, 174).

__2. Support families and schools, providing them with tools for distance learning (connectivity, equipment, etc.) (172, 175, 176)

__3. Propose alternative forms of learning (e.g., distance learning, guidance from library staff or older siblings, or networks of telephone friends) (101, 175, 177, 178).

__4. Facilitate the continuity of school psychosocial support programs through telephone or virtual follow-up, and implement strategies to prevent cyberbullying (139, 167, 179, 180).

__5. Promote measures to help workers with care responsibilities harmonize them with their paid work. For example, create and maintain opportunities for alternative care, such as daycare centers or schools that practice hygiene and strict physical distancing for the children of essential workers, depending on the phase of the pandemic (124, 101, 172).

__6. Create virtual forums for dialogue with parents, teachers, and students to discuss the options available afterschool closures in terms of school programs, home schooling, care, etc. (172).

__Other (be specific):

Short-term actions:

__1. Upgrade the competencies of teachers and schools, providing the technical support they need to develop learning strategies that consider the socioeconomic situation of students (177).

__2. Target and channel support to children in situations of vulnerability due to abuse, neglect, violence, etc., including children with disabilities (98, 122, 139).

__3. Provide information, recommendations, and options for managing stress and promoting the mental health of children and their families tailored to the situation of groups in situations of vulnerability (120, 181, 182).

__4. Provide support for achieving equitable distribution of the burden of care between men and women, raising awareness through campaigns promoting the participation of boys and adult men to ensure that they are doing their part in shouldering household chores (183).

__Other (be specific):

E. Enclosed facilities (nursing homes, quarantine centers, penitentiaries, extended-stay facilities, shelters, etc.)

E.1. Extended-stay facilities:

Actions prior to and immediately following implementation of the measure:

__1. Identify children in situations of vulnerability due to mistreatment, abuse, or overcrowding, and provide support (136, 188).

__2. Introduce and ensure physical distancing in these institutions (136, 189).

__3. Facilitate frequent handwashing with water and soap and regularly disinfect the facility (136, 190, 191).

__4. Restrict visits and provide alternative contact methods, such as telephone calls or video conferences with families and close relatives (136).

__5. Educate the staff of nursing and retirement homes and extended-stay facilities, as well as their residents, about the importance of personal protective measures and physical distancing, with special emphasis on older persons, given their higher risk of death (136, 191).

__6. Develop rapid procedures for returning people under alternative care (children, persons with disabilities) to their families and communities. Their reintegration should be a priority whenever feasible (101, 136, 184, 185, 188).

__1. Ensure that extended-stay facilities for older persons have policies and procedures in place to respond to violence (136, 139).

__2. Improve psychological support for residents of extended-stay facilities (136, 188, 191).

__3. Offer guidance to asylums, shelters, and other institutions to facilitate ongoing support for violence survivors and individuals at risk (192).

E.2. Enclosed facilities under judicial authority

Actions prior to and immediately following implementation of the measure:

__1. Introduce and ensure physical distancing in activities in these institutions.

__2. Facilitate frequent handwashing with water and soap and regularly disinfect the facility (197).

__3. Restrict visits and provide alternative means of contact, such as telephone calls or video conferences with family and close friends, as well as attorneys (66).

__4. Educate staff and inmates about the importance of personal protective measures and physical distancing, with special emphasis on older persons, given their higher risk of death (66).

__5. Improve psychological support for inmates, both adults and young people (136).

Short-term actions:

__1. Reduce the prison population and provide alternatives to imprisonment for inmates who have committed minor and non-violent offenses, those who have almost served out their sentence, and those in preventive or administrative detention¹⁴. Special care should be provided for older persons or persons with chronic or respiratory diseases, guaranteeing their human rights (67, 198, 67).

__2. Seek alternative solutions for people detained for immigrating or because of their immigration status, guaranteeing their human rights (66).

__3. Ensure that penitentiaries have policies and procedures in place to respond to violence (136).

F. Restrictions on gatherings and mass events (cultural, sports, social, religious, and political events)

Actions prior to and immediately following implementation of the measure:

- __1. Promote healthy living conditions by promoting physical activity and healthy nutrition through media such as television, radio, the internet, etc.
- __2. Conduct spiritual practices or rites virtually through different media (television, radio, internet) and include persons with disabilities (200).
- __3. Facilitate the dissemination of cultural content and virtual alternatives for cultural, social, and religious events through the media and social networks (199, 201).

Short-term actions:

- __1. Facilitate access by workers in the country's arts and culture industry, and their families, to healthy food, medicines, and basic services such as water, electricity, sanitation, and internet, and generate cultural and recreational content through alternative media (199).

G. Restrictions on public transit

Actions prior to and immediately following implementation of the measure:

- __1. Prioritize continuity of the transportation routes used by groups in situations of vulnerability, especially in the more remote areas (205).
- __2. Ensure that safe transit is available for people who need to go to work and require access to essential services (204, 206-208).
- __3. Facilitate physical distancing in critical spaces associated with public transportation, as such as bus stops, train stations, pedestrian walkways, and the vehicles themselves (buses, metro, trains, etc.) (209, 210).
- __4. Reduce the time spent on public transportation (to not more than 30 minutes), limit the number of passengers, and ensure adequate ventilation of the vehicles to help reduce infection (204, 210).
- __5. Facilitate payment by means other than cash (204).
- __6. Facilitate options for handwashing and regular hygiene in bus stations, metros, and trains, guaranteeing access for persons with disabilities (101, 203, 205, 211).
- __7. Issue clear messages and facilitate compliance with physical distancing and personal protective measures (206, 212).

Short-term actions:

- __1. Facilitate and promote dialogue with the community to identify the areas with the greatest need for public transportation and priority routes (213).
- __2. Facilitate access to and the use of other modes of transportation and mobility, widening bicycle lanes and facilitating pedestrian traffic, for example (204, 205, 214).

H. Handwashing with water and soap

Action prior to and immediately following implementation of the measure:

- __1. Guarantee a minimum daily volume of drinking water for all households in situations of vulnerability that are not connected to the water supply system through unconventional solutions (e.g., the distribution of water to homes or to specific points in the community, water tankers, water kiosks, etc.), always ensuring physical distancing (water access points separated at least by 1 m) (104).
- __2. Guarantee the accessibility and availability of water in households, neighborhoods, and territories, providing information and guidance on alternative forms of water capture (99, 101, 207, 217).
- __3. Establish basic vital water consumption for families free of charge, anticipating an increase in water use due to better hygiene and the confinement of many people in their homes (99, 217).
- __4. Provide free hand-washing stations with clean water and soap for the entire population in all public spaces and at critical points, guaranteeing access for persons with disabilities (99, 217).

J. Management of public health measures at the local level

Local management and planning

- __1. Adopt strategies for micromanaging public areas, especially at points of access to public and recreational services, and in particular, during periods of voluntary confinement and during the gradual easing of the measures (207, 104, 219, 220).
- __2. Create a one-way pedestrian walkway system, with markers on the ground and physical barriers in public settings to facilitate physical distancing (207, 104).
- __3. Establish local containment lines and quarantine areas in high-risk neighborhoods, guaranteeing the provision of essential supplies (food, medicines, basic services, etc.) (106, 221, 222).
- __4. Design strategies for the safe delivery of supplies and services (e.g., public health corridors) (222, 223).
- __5. Establish different time schedules for accessing public services and community provisions to prevent gatherings, whenever the context permits (104, 224).

Basic and community services

- __1. Prioritize the provision of basic services, including water, and guarantee the availability of services in informal settlements (99, 104, 207, 225)
2. Install and guarantee the availability of public handwashing facilities in places where sufficient access to water is limited (95, 99, 207).
- __3. Guarantee access to mental health and psychosocial support services, including on-site services, emergency telephone hotlines, and other remote options, and disseminate key information on resilience strategies (120, 147, 104).

Community participation

- __1. Facilitate local dialogue to identify and designate appropriate sites or spaces in the community for quarantine, isolation, and the care of cases, reorganizing facilities with adequate infrastructure (water and sanitation, bathrooms, electricity, and ventilation) (226).

K. Special considerations for essential workers and the continuity of the services they provide

For essential workers

- __1. Merchants in the risk group established by the ministry of health (people over the age of 65, patients with chronic diseases or those who are immunosuppressed) should refrain from working at markets in their districts, municipalities, towns, etc., or at least, refrain from serving the public (239).
- __2. Strengthen and follow the occupational health and safety guidelines using the hierarchy of controls (240-242).¹⁷
- __3. Guarantee the provision of personal protective equipment (240-243).
- __4. Guarantee cleanliness and hygiene in essential workplaces (240-243).
- __5. Introduce physical distancing, frequent disinfection, and use of personal protective measures in workplaces (211, 240).
- __6. Ensure sick leave policies for workers.
- __7. Create opportunities for dialogue with essential workers, including unions, to learn about their concerns and needs in order to ensure the continuity of their work (240).
- __8. Designate an isolated space in the home to enable essential workers to minimize the risk of infecting their family, or open residences for essential workers with high-risk family members (236).

Burden of care on essential workers

- __1. Provide additional support for essential workers, especially female health workers, to care for their children (due to school closures) and other dependents (98).
- __2. Distribute the burden of care among the different members of the household (98, 183).

For the customers of markets and other food vending locations

- __1. Take administrative steps to limit the number of people in the facility, through appointments, home delivery, schedules that designate specific hours for high-risk groups, etc. (219, 232, 244)
- __2. Facilitate physical distancing at market entrances and in aisles, etc. (219).
- __3. Facilitate the use of alternative modes of payment, limiting the use of cash.
4. Facilitate options for regular handwashing and hygiene in facilities, with a view to providing access for persons with disabilities (233, 234).
- __5. Issue clear messages and facilitate the observance of physical distancing and personal protection.

__6. Prevent customers from directly handling products (prepackaged bags, direct contact with the supplier, protection with plastic, prepackaged boxes for certain products – for example, a weekly basic basket) (239, 245).

L. Recommendations for RISK COMMUNICATION

__1. Provide the population with regular, timely, specific, user-friendly, audience-appropriate, and reliable information on the status of the pandemic and the public health measures adopted; this includes where the measures are being implemented in a territory and how long it will remain in effect. Information about the measures should be updated periodically and it should meet the different needs of the population (246).

__2. Regularly disseminate messages through the various communication channels (radio, television, print, etc.) that are appropriate to the population and territory and that are adapted for persons with hearing and visual impairments (246, 247).

__3. Adopt risk communication strategies that guarantee the rights of individuals, with clear messages tailored to the situation of groups in situations of vulnerability, including persons with disabilities and indigenous populations (246-250).

__4. Guarantee the cultural relevance of the messages and adapt them to the respective languages and dialects of each country (78, 248, 251).

__5. Work with influential people and community networks to provide timely information (249).

__6. Monitor and respond to rumors, questions, and comments through reliable channels (249).

__7. Develop communication strategies to counter false information (infodemic19) and social stigma (252).

__8. Facilitate community participation, including indigenous communities in the preparation of messages, and provide community leaders with timely information to protect people infected with COVID-19 (78, 227, 246).

M. Recommendations to facilitate SOCIAL AND COMMUNITY PARTICIPATION

__1. Provide the population with regular, timely, specific, user-friendly, audience-appropriate, and reliable information on the status of the pandemic and the public health measures adopted; this includes where the measures are being implemented in a territory and how long it will remain in effect. Information about the measures should be updated periodically and it should meet the different needs of the population (246).

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__8. Facilitate community participation, including indigenous communities in the preparation of messages, and provide community leaders with timely information to protect people infected with COVID-19 (78, 227, 246).

N. Recommendations to guarantee respect for HUMAN RIGHTS

__1. Ensure that restrictive measures that limit civil, political, economic, social, and cultural rights are evidence based and consistent with the principles of legality, proportionality, need, and temporariness and that their sole purpose is to protect public health (250, 256).

__2. Ensure that the strategies adopted take human rights into consideration, especially the principle of non-discrimination (247, 257).

__3. Ensure that penalties for citizens who fail to comply with confinement, quarantine, business closure, and other measures are rational and proportional to the infraction (78, 250).

__4. Provide special care for children in situations of vulnerability (due to mental health issues, disability, overcrowding) who are exposed to abuse and neglect (247, 250).

__5. Prioritize service delivery in remote areas and informal settlements to guarantee the availability of basic public services, including water (207, 225, 250).

O. Recommendations for MONITORING AND EVALUATING the measures

__1. Strengthen capacity for monitoring and evaluation of the implementation of the public health measures at the national and local level by collecting data on compliance by groups and territories in situations of vulnerability (disaggregated by sex, age, ethnicity, socioeconomic status, geography, and the areas of vulnerability detailed in Table 1) and analyzing the results, based on the morbidity and mortality associated with the situations of vulnerability (260, 45, 261)

__2. Improve the collection and analysis of data on inequalities detected in the public health measures and identify where these inequalities are created or exacerbated (45, 261).