

COVID-19 Prevention among Seafood Processors: Workplace & Social Factors

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention.



Background

Seafood Processing Industry

- In the United States (U.S.), the seafood processing industry is highly hazardous, with workers facing ergonomic, physical, chemical, biological, and psychosocial hazards [1-4].
- Seafood processors have the highest injury and illness rates of all U.S. maritime workers [5].
- Workplace organization in factories often requires close contact between workers, which was a major concern during the COVID-19 pandemic [6-7].

Seafood Processing Workforce Characteristics

- The U.S. seafood processing workforce is diverse [8-10]:
 - Primarily low-wage workers
 - Male and female workers
 - Many racial and ethnic minorities
 - Oftentimes seasonal workers, depending on fishery seasonality
 - U.S. citizens and foreign-born individuals
 - Immigrant workers may face language barriers and other challenges to their occupational safety and health

Seafood Processing Immigrant Workers

- Many seafood processors working in the United States are immigrants on temporary worker visas (i.e., H2B visas) [8-10]
- H2B visas [11]
 - Temporary worker visas are for persons who want to enter the US for employment lasting a fixed period of time (e.g., 9-month contract)
 - Visa holders are not considered permanent or indefinite; it is not a pathway to citizenship
 - Each of these visas requires the prospective employer to file with US Citizenship and Immigration Services (USCIS)
 - H2B: For temporary or seasonal non-agricultural work

Study Aim

Understand the experiences of seafood processing workers and managers during the COVID-19 pandemic:

- How has the pandemic affected the health and quality of life of workers, managers, and their communities?
- What are the occupational, social, cultural, economic, and mental health factors impacting worker safety and health during the pandemic?
- What can be done to improve occupational safety and health?



Methods

Methodology [12-17]

Qualitative Methods Used	Qualitative Theory
• Semi-structured interviews • Snowball sampling • Interviews conducted in participant's native language (Spanish or English)	• Power as transactional • Knowledge as co-constructed • Meaning-making agents

Theoretical Orientation

Constructs: Health and safety during the COVID-19 pandemic

Measurement: Asking participants about occupational, social, cultural, economic, and mental health factors

Explore seafood processing workers' and managers' perceptions regarding:

How does precarious employment [18] impact their health and safety?

What workplace hazard control measures were in place to protect them from COVID-19?

Interview Guide Questions

WORK-RELATED INFORMATION

1. What's your job title?
2. How would you say you've been affected by COVID-19?
3. How was COVID-19 handled at your workplace?
 - a. Did you receive training on how to stay safe at work during COVID-19? Can you describe the training?
 - b. What measures are in place to keep you safe from COVID-19 at work? Do you think these measures are enough? What other measures do you want to keep you safe from COVID-19 at work?
 - c. Do you feel that these measures are followed or reinforced at work? When or why are these measures not followed?
 - d. How are you told about work related COVID-19 policies?
 - e. Do you feel safe from COVID?
4. Describe what happens if someone gets COVID-19 while at work.
5. What would you do if you felt unsafe at work?

Interview Guide Questions (Continued)

WORKPLACE EXPERIENCE

6. What new challenges have you faced at work since the COVID-19 pandemic began?
7. Are there situations at work that you currently would avoid for risk of COVID-19 but can't (e.g., daily/monthly attendance bonuses, childcare needs, sick leave, wages)?
8. During COVID-19, has your job impacted your physical and mental well-being?
9. What's the process for working at the processing plant?
 - a. H2B visa?
 - b. Are you provided housing? Food costs?
 - c. Salary? By the hour? What happens if you can't work?
 - d. How do you get to the States?
 - e. Who pays for transportation?
10. Did you feel you had options to leave/move during the height of the pandemic?

HEALTHCARE INFORMATION

11. Do you have any current health conditions?
12. What are your barriers to accessing quality medical care?
13. If injured while working, are you able to see a medical professional?

Interview Guide Questions (Continued)

COVID-19 PERSONAL HEALTH EXPERIENCE

- 14. To your knowledge, do you have, or have you had COVID-19?
- 15. Do you know anyone in your family, friends, or community that became seriously ill or died as a result of COVID-19?
- 16. Have you received a COVID-19 vaccine?
- 17. If not, are you planning on getting a vaccine?

COMMUNITY PRACTICES AND ATTITUDES TOWARDS COVID-19

- 18. Have you been treated unfairly at work?
- 19. Have you received any aid/assistance during the pandemic?

CONCLUSION

- 20. Is there anything else you want to tell me about your job, or your experience at work with the COVID-19 pandemic that we haven't discussed?

Interview Locations

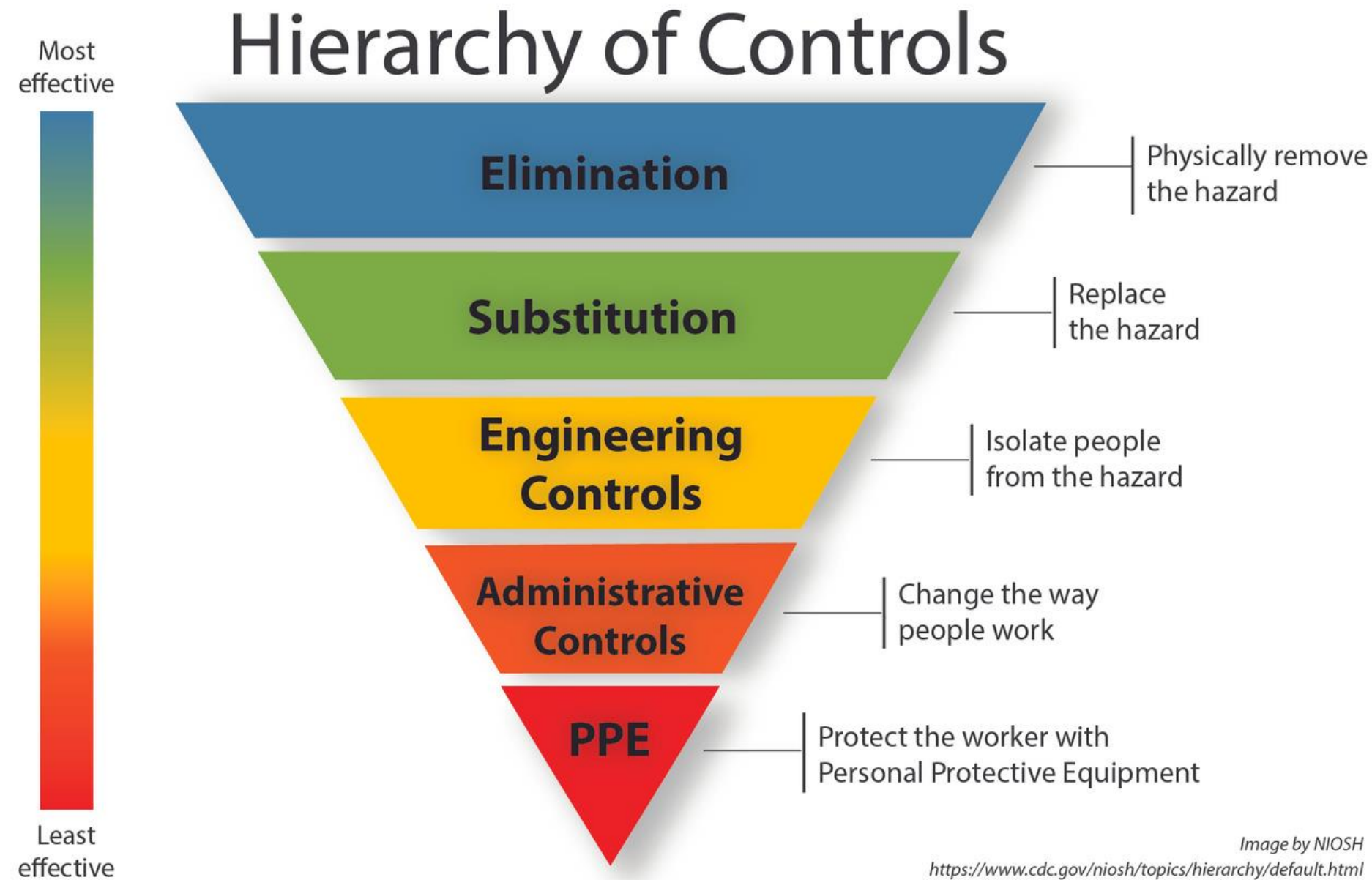


Analysis

Structural Conditions	Social Worlds
• Political-economic conditions ◦ Price of shrimp imports ◦ Diesel prices ◦ Regulations	• Cultural and interpersonal worlds ◦ Family values ◦ Relationships with co-workers

Analysis: Framework for Categorizing Participants'

Descriptions of Workplace Hazard Control Measures [19]



Reference: <https://www.cdc.gov/niosh/topics/hierarchy/default.html>



Results

Demographics

Year One: Texas (n=20)

Dates: June 2021-May 2022

- Latino/a (n=17)
- White (n=2)
- Vietnamese (n=1)
- Male (n=12)
- Female (n=8)
- 19-56 years old
- H2B Visa Holder (n=19)

Year Two: Louisiana (n=24)

Dates: June 2022-May 2023

- White (n=12)
- American Indian (n=6)
- Latino/a (n=4)
- African American (n=1)
- Vietnamese (n=1)
- Male (n=6)
- Female (n=18)
- 22-72 years old
- H2B Visa Holder (n=4)

Demographics

In Texas (TX), mainly all H2B visa workers

In Louisiana (LA), H2B visa workers, Indigenous (i.e., American Indian), & Cajun French workers

Housing:

- House/rented rooms from family/friends (TX, n=11; LA, n=8)
- Trailer (TX, n=6; LA, n=3)
- Hotel (TX, n=0; LA, n=4)
- Living with family (did not specify type of housing) (TX, n=2; LA, n=6)
- Did not answer (TX, 1; LA, n=3)

Themes

Common themes from codes:

- Financial Risk, seen through 1) Housing arrangements, 2) hourly wages, 3) paid sick leave, and 4) clinic access for H2B workers
- Hazard control measures

Housing Arrangements

“I was in [Louisiana Seafood Processing Plant] for 3 years during the pandemic. I found work cleaning the crawfish. **We were in a hotel with 89 other people.** We basically didn’t know what COVID was or the consequences of getting it. **It spread through the hotel and a lot of people were infected** but we had no idea how it would ravage person after person.”
(Participant A_LA)

“We basically didn’t have any help. We didn’t have any pills or anything and then a girl got tested and the results came back that she had COVID. Then by that point we knew that it was spreading through all of us. **A lot of people were scared.** There were about 10 or 15 people who were tested, that presented with the worst symptoms. **There were 3 people that isolated, including my niece. I had to take care of her and another colleague.** I was there with them too, with the risk of getting infected, but when it comes to being supportive and helping well, imagine if I was not with them, my niece would be isolated. She did not want to go alone, so I went with her.” (Participant A_LA)

Housing Arrangements

“I’ve been coming here for about four years. We used to have to look for a place every year, but one of my cousins stayed, and now I have somewhere to go. **Whenever I come over here, I’ll go to her house.** She has a place for me. Also, since I live in [TX Gulf Coast] and people know that we come—we’re seasonal workers, they have little lodgings and little places where they can live that they rent out.” (Participant B_TX)

Hourly Wages

“The previous time I came, in one week **we worked two days, three days the most, and very few hours.** Sometimes we worked for two or three hours, and they would send us home...This time I’m only here until December, that’s two-and-a-half months. That’s just a short time, but there is work. Last time I came for four months, but there was hardly any work, so I told myself, “Why did they send for us if there is no work?” I was doing better over there with the job I had. I mean, **I have to support myself here, pay rent, food, and send money to support my family,** but with the money I was earning—it would have been better to stay.” (Participant C_TX)

Hourly Wages

“They sent us home. **We didn’t work for two weeks.** We went to get checked by the doctor, not here. They sent us to get tested to confirm we had COVID, but that was it.” (Participant D_TX)

“We really didn't shut down. **We were still working, but not as much.** We just had to clean up behind on ourselves and really, now we're not making hours we used to make, you know, and with the hurricane and all that.” (Participant E_LA)

Paid Sick Leave

“We told them, like, if you feel bad, don't come, let us know. But I don't think our employees let us know if they did get sick, or they just came like that, because I mean, once some people think they're not going to get paid or **they need the money, and so they kept coming...Most of them, they didn't let us know if they did have it.**” (Participant F_TX)

“**They had reduced a lot of hours.** I was at home for over a month. For example, the company didn't pay us for all the time...**If you come to work, you get paid. Otherwise, you don't.**” (Participant G_TX)

Paid Sick Leave

“Paid by the hour. If you can't come to work, you can't get paid.” (Participant H_LA)

“Were you able to get still get paid during that time for sick leave or anything?” “Oh, no, no.” (Participant I_LA)

“Physically, it [COVID-19] wasn't that bad because it wasn't serious, but emotionally it did [affect us] because they isolated us at a house. You feel that difference. Then, financially it affected us because we didn't get paid at all. We had the days off to rest, and they didn't pay anything. Then with the family, also, because we were separated, and you feel that impact emotionally.” (Participant D_TX)

Clinic Access for H2B Workers

“Sometimes it’s because it’s expensive, and **as immigrants, we don’t have the ability to have all the resources or everything we’d like to have.** We always limit ourselves to seeing the doctors because we think about what we have to pay.”
(Participant J_TX)

“I go see a doctor when I go back to Mexico because for those of us who come here, it’s more accessible to go to the doctor there. Here, the prices are too high. **We don’t make enough to pay a doctor with what we make working these contracts.**” (Participant K_TX)

Hazard Control Measures

“Well, the **mask** was the first one. We had the **sanitizer**. Well, we always wash our hands whenever we go in and out, we have done that all the time but now, when [the pandemic] started, it was more and more and more. Washing more, doing more, do it again. We have a **temperature reading** and whenever we go inside, we have to check our temperatures.” (Participant L_TX)

"I should **stay at home** when I'm sick. Safer for everyone, and I couldn't come here because of the scanner. They check the temperature every day, so if I'm sick, I cannot come here." (Participant M_TX)

"We had another boss, if your fever was, you know, 100 something he **make you go home**, go to the doctor, [...] and come back. You know, to be on the safe."
(Participant N_LA)

Hazard Control Measures

“... instead of keeping the plant closed, the bay doors closed, we opened everything up and we had fans going in the direction of outside. Even in summer.

So that was our big thing too and in a lot of processes like on our freezing line, it's probably 20 feet long and you've got three people on the line and so they're already naturally spaced-out - ones in the middle and then you have two on each end. This is a big plant, high ceilings, regardless of really the room that you go to. [...] **So, we had fans blowing and double doors and so that's really how I think we felt okay with the fact of having so many people in the plant.**

I would probably attribute the **ventilation** that we created and just the open space around here. I would attribute that to the lack of cases that we saw.” (Participant O_LA)

Discussion

Financial Risk:

Seen through 1) Housing arrangements, 2) hourly wages, 3) paid sick leave, and 4) clinic access for H2B workers

- Housing arrangements increased participants' perceived risk of COVID-19 and increased fears
- Participants working contractual jobs that paid hourly meant that when the plant was closed, they were not being paid
- Lack of paid sick leave created a situation in which participants worked while ill
- Lack of paid sick leave meant that some employees found alternative jobs, like selling food, and other employees underreported their COVID-19 symptoms
- The costs of healthcare coupled with not having healthcare benefits discouraged H2B participants from seeking care when needed

Workplace Control Measures

- Most study participants described their workplaces using elimination controls, administrative controls, and personal protective equipment (PPE)
- Only a couple study participants mentioned **engineering controls, such as ventilation**, and they described ventilation's importance for preventing COVID-19 infections
- The U.S. Centers for Disease Control and Prevention (CDC) has recently updated **recommendations on ventilation** in buildings for COVID-19 prevention [21]:
<https://www.cdc.gov/coronavirus/2019-ncov/community/ventilation.html>
- More research is needed to understand:
 - How management and workers are educated on engineering controls, like ventilation
 - If and how engineering controls are used in seafood processing plants

Conclusions

- The financial risk that seafood processing employees experience is important to examine for future social determinants of health research. The participants reported that their economic situation was linked to poor housing conditions, unable to work/get paid, working while ill, and not accessing a healthcare clinic when sick.
- As a workplace hazard control measure, **ventilation** is important for protecting workers from COVID-19, as well as the hierarchy of controls framework and CDC guidance [19-21]. More research is needed to explore how seafood processing managers and workers are trained on and use engineering controls in their factories.

Contact

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