

Recommendations for the prevention of the spread of Coronavirus disease (COVID-19) among solid waste workers

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Those who work in the collection and sorting of waste are considered extremely vulnerable to contracting the coronavirus. Current studies show that the virus can survive on materials such as plastics for up to 5 days. Photo by D. Tomich.

Purpose

The purpose of this document is to guide urban cleaning services and responsible agencies, as well as outsourced companies and informal waste pickers working from sorting centers¹ who work with solid waste. It provides specific guidelines for waste pickers on how to protect themselves against exposure to the coronavirus (COVID- 19) associated with their waste collection work.

Justification

As everyone knows, the world is experiencing a new reality as a result of COVID-19, also known as coronavirus, which appeared in December 2019. This disease is highly transmissible through droplets (from sneezing, coughing), and spread by touching contaminated surfaces, materials and objects. On March 11, 2020, the World Health Organization (WHO) deemed it a global pandemic.

This virus causes a respiratory illness that, in most cases, does not result in major illness for patients. However, some individuals develop the most severe condition of the disease, which requires hospital care.

We emphasize that workers who work in the collection and sorting of waste are considered extremely vulnerable to contracting this virus. Thus, the University of Brasilia, along with Women in Informal Employment: Globalizing and Organizing

¹ Dump pickers and street pickers safety will be addressed in a separate note.

(WIEGO) and Waste Workers Occupational Safety and Health (WWOSH) developed these recommendations for the institutions responsible for people providing services in urban cleaning and the collection and sorting of recyclable materials.

The recommendations presented here are based on documents from: The World Health Organization (WHO) and the Solid Waste Association of North America. Recommendations from the National Movement of Waste Pickers of Recyclable Materials in Brazil (MNCR) were also consulted. It is important to note that specifics of the outbreak in each location, as well as the nature of the solid waste services provided in each context, need to be factored in when adopting these recommendations.

Recommendations:

For the Worker:

- Wash hands with soap and water or use alcohol gel. Hands should always be washed at the beginning of the working day, at intervals after removing gloves, before and after meals, after smoking, or using the bathroom, after using public transport, and after touching objects of collective use such as door handles, railings, handrails, etc.
- Do not greet other people with handshakes, hugs or kisses.
- Cover your mouth and nose with the inside of your elbow or tissue (or toilet paper) in case of coughing or sneezing. Then, immediately dispose of the used tissue.
- Do not share personal items such as glasses, cutlery and toothbrushes.
- Never touch your face (especially your mouth, nose and eyes) with your hands or gloves unless they are clean.
- Consider wearing a mask while working if all of the following apply:
 - You are exposed to dust or air from waste while on the job and/or you are in close contact with other people while on the job.
 - The mask creates a seal around your face.
 - You are careful to never touch the front of the mask.

- You will always put on and remove the mask by touching the ear straps.
 - You wash your hands with soap or hand sanitizer before and after touching mask.
 - You are able to dispose of the mask after use.
 - You can replace the mask when it becomes wet.
- Don't wear a mask:
 - If you cannot dispose of the mask after use.
 - If there is a chance the mask may have become contaminated, do not wear it-- dispose of it.
 - Tie hair back to avoid face contamination.
 - Advise all workers that the materials collected and sorted may be contaminated by the virus. Current studies show that Coronavirus can survive on materials such as aluminum (2 to 8 hours), glass (up to 4 days), paper (4 to 5 days), plastics (up to 5 days), steel (up to 48 hours). Therefore, materials should always be considered to be contaminated with the virus.
 - Avoid putting worn gloves in your pocket; after removal, we suggest keeping gloves in plastic bags.
 - Carefully wash hands before touching people or objects in common usage after getting home.
 - During the collection of waste, avoid exposure to fumes from waste, such as the air released during the compaction of the truck.
 - Keep all work surroundings ventilated.
 - If in doubt about your health or safety, before going to a health service, use the communication channel provided by the government, in the Federal District.
 - Advise colleagues with even mild symptoms to stay home and protect others from transmission.
 - Elderly, hypertensive, diabetic and immuno-compromised patients are more likely to develop the most severe cases of the disease and should be advised to stay home to avoid infection.

For the workplace:

- Provide soap/liquid soap for frequent hand washing.
- Frequently clean objects used collectively, such as handrails, tables, bathrooms, door handles, transportation and work vehicles grab handles and breakroom (with 70% alcohol or 1% hypochlorite).
- Advise all workers that materials collected and sorted may be contaminated by the virus, and inform them that current studies show the virus can survive on materials such as aluminum (2 to 8 hours), glass (up to 4 days), paper (4 to 5 days), plastics (up to 5 days), steel (up to 48 hours). Therefore, materials should always be considered as contaminated.
- Keep surroundings ventilated.

For workers with symptoms of the disease:

- Advise workers not to come to work if they, any family member or person they have come in contact with, have any symptoms (fever, cough, sneezing or shortness of breath).
- Advise patients that materials can be contaminated by the virus and that current studies show that the virus can survive on materials such as aluminum (2 to 8 hours), glass (up to 4 days), paper (4 to 5 days), plastics (up to 5 days), steel (up to 48 hours). Therefore, careful and proper disposal of everything the patient discards is important.
- Avoid sharing face towels, pillow cases and other objects in common usage.
- Keep surroundings ventilated.
- Elder, hypertensive, diabetic and immuno-compromised patients are more likely to develop the most severe cases of the disease. Workers with this profile should be advised to stay home and seek medical support as soon as possible.

For managers:

- We recommend financial compensation for waste pickers under contracts with municipalities who have to stay at home because they are sick, have someone sick at home, are people at risk of developing a serious condition (elderly, diabetic, hypertensive) or have to take care of younger children, and social grants for waste pickers without contracts.
- Guide patients undergoing home treatment regarding the disposal of contaminated waste.

About Home Health Waste and Collection Vehicles

Because the human coronavirus is resilient on surfaces, living up to 9 days on inert surfaces (according to Kampf et al, 2020), and given its capacity to transmit easily from human to human, careful hygienic measures are necessary.

In the case of infected patients in home quarantine, infected solid waste will potentially be generated. As it is not possible to identify which households are living under these conditions, the waste put out for collection may be infected without the knowledge of the collector. Therefore, it is recommended that collectors sanitize their hands regularly (at least every 20 minutes).

In circumstances in which the collection vehicle has a compacting system, it is recommended to maintain a minimum distance of 6m from the truck during the compacting procedure, since compacting forces air from the waste into the surroundings. At worst, it may generate an airstream of viable virus, as occurs during a sneeze, but with a possible lower pathogen concentration (according to Doremalen et al., 2020).

In some Latin American cities, authorities are recommending not to use vehicles that do not have an area of one square meter per person. Recommendations are being made to disinfect the interior vehicle cabins and shovels with a sanitizing fog system at shift changes, since generally more than one person uses the vehicles.

Authors and proposing institutions

Proposing Institutions

Universidade de Brasília ("Pare, Pense, Descarte [Stop, Think, Discard]" Extension Program and the Research Group on Access to Medicines and Responsible Use - Amur) and WIEGO (Women in Informal Employment: Globalizing and Organizing) – Cuidar Project Brazil.

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About WIEGO: Women in Informal Employment: Globalizing and Organizing (WIEGO) is a global network focused on securing livelihoods for the working poor, especially women, in the informal economy. We believe all workers should have equal economic opportunities and rights. WIEGO creates change by building capacity among informal worker organizations, expanding the knowledge base about the informal economy and influencing local, national and international policies. Visit www.wiego.org.



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