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FOR SUSTAINABLE DEVELOPMENT



Environmental Ambassadors for Sustainable Development
Position Paper on COVID 19 and waste
management

2020

EASD (Environmental Ambassadors for Sustainable Development) Position Paper on COVID 19 and waste management

The aim of this paper is twofold: 1. to remind the decision-makers in the international treaties to which the state is a Party, and relating to the management of waste from health care facilities, and 2. to raise attention to the practice of waste management in COVID19 pandemic circumstances. This text is an indicative set of information, and is not designed to include a detailed and comprehensive analysis. References given in the context of the text can be used for deeper analysis and recommendations.

Introduction

On March 24, 2020, United Nations Environment Programme, with the coronavirus disease (COVID-19) pandemic continuing to spread and its impacts upon human health and the economy intensifying day-by-day, urged the governments to treat waste management, including of medical, household and other hazardous waste, as an urgent and essential public service in order to minimize possible secondary impacts upon health and the environment¹. It is noted that unsound management of this waste could cause unforeseen “knock-on” effects on human health and the environment.

¹ <https://www.unenvironment.org/news-and-stories/press-release/waste-management-essential-public-service-fight-beat-covid-19>

² <https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19>

³ Kampf G, Todt D, Pfaender S, Steinmann E. Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. *J Hosp Infect.* 2020;104(3):246–51

⁴ *Safe management of wastes from health-care activities: a summary.* Geneva: World Health Organization; 2017 (WHO/FWC/WSH/17.05). Licence: CC BY-NC-SA 3.0 IGO.; Available at <https://apps.who.int/iris/bitstream/handle/10665/259491/WHO-FWC-WSH-17.05-eng.pdf;jsessionid=082D1168BEB4E017D5161BA09980DF-C9?sequence=1>

There are two main routes of transmission of the COVID-19 virus: respiratory and contact. Respiratory droplets are generated when an infected person coughs or sneezes. Droplets may also land on surfaces where the virus could remain viable; thus, the immediate environment of an infected individual can serve as a source of transmission (contact transmission)². A recent review of the survival of human coronaviruses on surfaces found large variability, ranging from 2 hours to 9 days³, where virus particles can be picked up and transferred to the nose, eyes and mouth.

Waste from health care facilities

Health care waste have different categories: hazardous waste (infectious waste, sharps waste, pathological waste, pharmaceutical plus cytotoxic waste, chemical waste, radioactive waste) and non-hazardous or general health-care waste. World Health Organization (WHO) document (2017) highlights the key aspects of safe health-care waste management in order to guide policy-makers, practitioners and facility managers to improve such services in health-care facilities ⁴ (including disposal

options in emergency situations). As underlined, ideally, all health-care waste management practices seek to implement environmentally sound management of hazardous waste or other waste⁵, best environmental practices⁶ and best available techniques⁷ in accordance with the Basel and Stockholm conventions and relevant national regulations and requirements. It is also important to ensure wastewater from the health-care facility is safely managed throughout containment, collection, transport, treatment and disposal. Waste generated during the health care of suspected and confirmed cases of COVID-19 should be disposed of as hazardous infectious waste; staff should be trained in the correct procedures for waste handling; segregation of waste as hazardous and non-hazardous waste should occur at the point of waste generation; appropriate hand hygiene measures should practice to protect people against infections, including COVID-19⁸. On March 19, 2020 World Health Organization make available *Guidance on water, sanitation and health care waste which is relevant for viruses (including coronaviruses)*⁹. This Technical Brief is written in particular for water and sanitation practitioners and providers.

All who handle health care waste should wear appropriate personal protective equipment (boots, apron, long-sleeved gown, thick gloves, mask, and goggles or a face shield) and perform hand hygiene after removing it¹⁰.

Serbia is the Party of *the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* from year 2000¹¹. Serbia also ratifies Amendment to the Basel Convention in 2002 (entering in force in 2019), and plastic waste amendments are effective from March 2020. *The UN Basel Convention's Technical Guidelines on the Environmentally Sound Management of Biomedical and Healthcare Wastes*¹², includes information and practical aspects of waste management useful for authorities seeking to minimize hazards to human health and the environment. It is also useful to consult the latest information related environmental management of medical waste caused by COVID-19 in China, for example¹³. Focal point for Convention implementation is in Ministry for Environment.

Serbia is also the Party of *the Stockholm Convention on Persistent Organic*

5 *Taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes (Basel Convention)*

6 *The application of the most appropriate combination of environmental control measures and strategies (Stockholm Convention).*

7 *The most effective and advanced stage approaches to preventing and, where that is not practicable, generally to reducing releases of chemicals listed in Part I of Annex C and their impact on the environment as a whole (Stockholm Convention).*

8 <https://www.qld.gov.au/health/conditions/health-alerts/coronavirus-covid-19/industry/resources-and-fact-sheets-for-industry/waste-management-for-health-facilities-and-waste-contractors>

9 <https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19>

10 <https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19>

11 <http://basel.int/Countries/StatusofRatifications/PartiesSignatories/tabid/4499/Default.aspx#RS14>

12 <http://basel.int/Implementation/TechnicalMatters/DevelopmentofTechnicalGuidelines/TechnicalGuidelines/tabid/8025>

13 <http://bcrc.tsinghua.edu.cn/en/col/1257152450718/index.html>

Pollutants (POPs). Country signed it in 2002 and ratify in 2009¹⁴; also, Serbia from 2010 to 2018 is affected by Amendments to Annexes to the Stockholm Convention¹⁵. Stockholm Convention National focal point is in Ministry for Environment.

National relevant legislation includes Law on Waste Management, Rule book on medical waste management (2010), Law on transport of hazardous goods, etc. Within the national legislation, health care institutions have plans/procedures for medical waste management, what include waste segregation to hazardous and non-hazardous waste; these plans include waste management in emergency situations. In 2008, Ministry of Health was working on Guidelines for safe management of medical waste. There are accredited programs for continual education on medical waste management¹⁶. However, Serbia is lacking in related infrastructure (like incineration capacities for medical waste).

Household waste management in COVID19 pandemic circumstances

The safe management of household waste is likely to be critical during the COVID-19 emergency. The pandemic of the coronavirus, COVID-19, raises questions and brings challenges regarding municipal waste management practices and procedures (safety and health measures for employees, waste treatment

requirements, general procedures due to coronavirus for waste sector)¹⁷. Medical waste such as contaminated masks, gloves, used or expired medicines, and other items can easily become mixed with domestic garbage, but should be treated as hazardous waste and disposed of separately. These should be separately stored from other household waste streams and collected by specialist municipality or waste management operators¹⁸. Parties to the Basel Convention are currently working on a guidance document for soundly managing household waste and whilst not yet finalized, an initial draft may be consulted for provisional guidance¹⁹.

Waste collection workers should be protected, as they are one of the most vulnerable parts of the population since they are already exposed in several health risks, including infections. Waste collection workers is the second most important human shield to coronavirus, after the health workers²⁰; among other measures, direct contact (without gloves) with bins or bags should be avoided in any case and drivers and collectors should avoid contact with residents and employees from serviced business.

Summary of observed trends regarding municipal waste management during the COVID-19 crisis in March 2020 is prepared and graphically presented by Association of Cities and Regions for sustainable

14 <http://www.pops.int/Countries/StatusofRatifications/PartiesandSignatoires/tabid/4500/Default.aspx>

15 <http://www.pops.int/Countries/StatusofRatifications/Amendmentstoannexes/tabid/3486/Default.aspx>

16 <http://www.zdravstvenisavetsrbije.gov.rs/> ; <http://www.batut.org.rs/index.php?content=573>

17 <https://www.acrplus.org/en/municipal-waste-management-covid-19>

18 www.unenvironment.org/news-and-stories/press-release/waste-management-essential-public-service-fight-beat-covid-19

19 <http://www.basel.int/Implementation/HouseholdWastePartnership/OverallGuidanceDocument/tabid/8227>

20 www.iswa.org/home/news/news-detail/article/blog-waste-management-during-the-coronavirus-pandemic/109/

Resource management²¹. International Solid Waste Association distributed the video on how to dispose of healthcare waste in landfills²².

In **Serbia**, it should be noted that no regular collection system for hazardous waste from households has been established until now. During state of emergency (declared on the territory of the Republic of Serbia on 16 March 2020), in addition to regular waste collection and cleaning activities, City of Belgrade Public Utility Company regularly wash waste disposal containers/bins using a chlorine-based disinfectant prescribed by the World Health Organization as a measure to prevent the spread of COVID19²³. They request from all citizens to dispose waste properly and only in places designated for this, in order to avoid formation of “wild”/ non-sanitary landfills, and to enable all the emergency teams to effectively maintain hygiene in the city of Belgrade. Citizens are reminded to close the containers after disposing of waste so that it does not fall off onto public areas and use foot slippers to avoid contact with the container. It is expected that this is follow in the other local communities.

EASD noted that PWW Holding, in practice collecting and transporting household waste in 12 municipalities in Serbia, response to Covid19 include safety measures and recommendation to workers and citizens; among others they noted shortages in personal safety equipment and disinfectants.

EASD COVID19 response

EASD took position that it is important to raise awareness and call for a few but important measures touching upon:

1. security of workers and work continuation in waste management (including transport) (fb <https://www.facebook.com/ambasadori.odrzivog.razvoja/> and <https://www.facebook.com/groups/EcoSchoolsSerbia/> awareness posted on March 19. 2020);

2. Launch and running “EASD e-awareness raising campaign: attention to environmentally and health friendly waste management in corona virus pandemic related situation” (using web blog <http://ambassadors-env.com/blog/2020/03/28/aor-e-kampanja-pozornosti-u-uslovima-vanrednog-stanja-zbog-covid19-virusa-treba-sa-otpadom-bezbedno-i-pravilno-postupati/> , and fb noted above, posted on March 28, 2020. EASD developed and shared instruction how to deal with household waste during COVID 19 circumstances

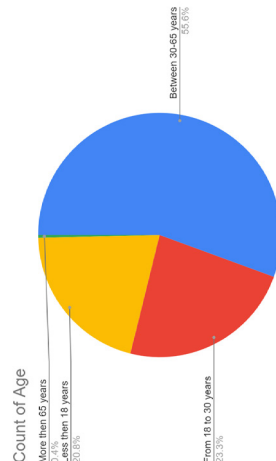
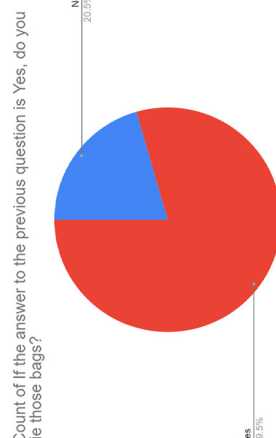
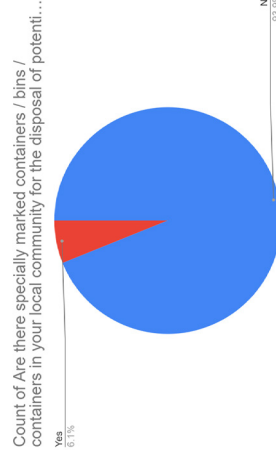
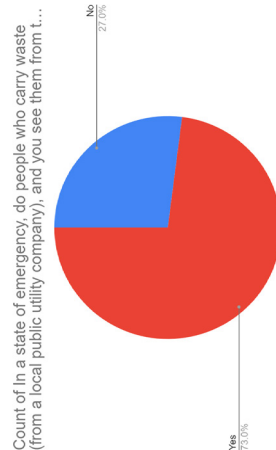
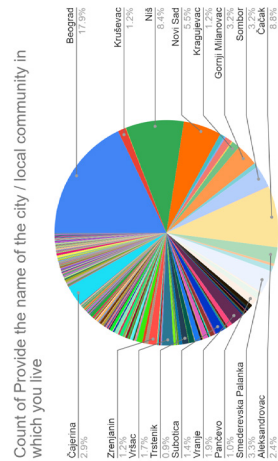
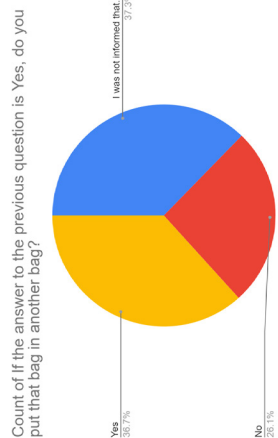
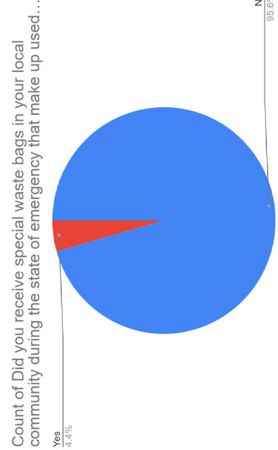
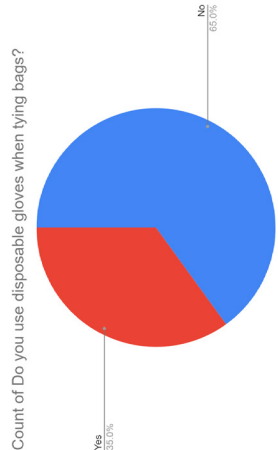
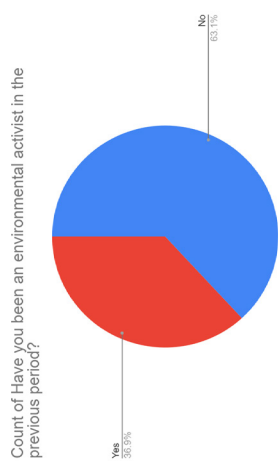
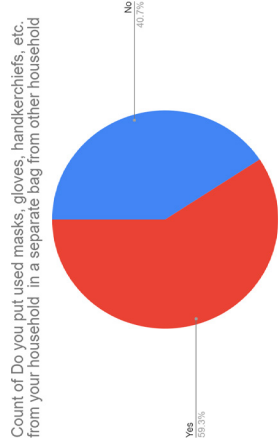
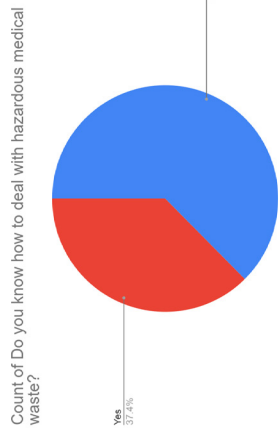
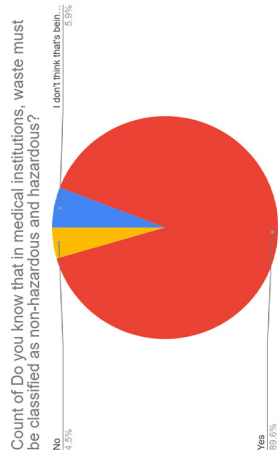
2.a. Above campaign include “EASD Survey : Signals on waste care in practice” https://docs.google.com/forms/d/e/1FAIpQLScQg9ebPf5ob5VsJC0m-8yIFIR4_6w5GQnrvNRJvbPo2Z14Ew/viewform , posted on April 7, 2020.

Snapshots from survey from 1913 participants are given bellow:

²¹ <https://www.acrplus.org/en/municipal-waste-management-covid-19>

²² <https://www.youtube.com/watch?v=y1EAb6I9vm4>; also see the page <https://www.iswa.org/iswa/covid-19/>

²³ <http://www.gradskacistoca.rs/?p=17289>



Lessons to be learned

Environmental Ambassadors for Sustainable Development, an ECOSOC consultative organization from Serbia, immediately, after a state emergency declared, organization started e-awareness raising campaign: attention to environmentally and health friendly waste management in corona virus pandemic related situation. As the part of e-awareness raising campaign, survey is conducted – with 1913 responders (about 37% were environmental activists in pre -Covid19 time; about 18% from Belgrade, the rest from all parts of Serbia; Eco-Schools Network was especially active). Some outreach results to share: 73% think and see that waste collectors (from a local public utility company), in a state of emergency, wear protective gloves and masks; on the other side, citizens seem responsible, and about 60% of them put used masks and gloves in a separate bag and then in the beg for household waste.



EASD photos: from the streets in Belgrade, March/April 2020

EASD (Environmental Ambassadors for Sustainable Development)
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