Rapid Risk Assessment on Use of Biometrics in Beneficiary Operations and Novel Coronavirus (COVID-19)

Version 1.2

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Contents

The following is an overview of considerations – for more information on the topics below contact SCOPE Service Desk at scope.servicedesk@wfp.org and include "COVID-19" in the email or reach out to Sinan Ali sinan.ali@wfp.org.

I. Background

The novel coronavirus (COVID-19)[1] is a new strain of coronavirus that has not been previously identified in humans. It had not previously detected before the outbreak that was reported in Wuhan, China in December 2019.

The outbreak was declared a Public Health Emergency of International Concern on January 30th 2020. On the March 11th, after an assessment made on the rapid spread of the virus around the globe, the World Health Organization (WHO) described the COVID-19 as a pandemic. As of April 3rd, cases have been reported in more than 200 countries with Europe being the new epicentre of the COVID -19.

This rapid risk assessment is based on information available as of 3rd April and will be regularly updated as the on-going pandemic continues to develop.

II. Risk of Disease Transmission During Beneficiary Interactions with Biometrics

Registrations powered by SCOPE can be customised to meet the needs of a Country Office (CO) and its interventions. Specific targeting criteria, anthropometric data, languages, locations, photos, fingerprints and iris can be captured. In the recent years, more COs are registering their beneficiaries biometrically, especially under circumstances where there is a weak/complete absence of identity systems or to ensure a higher degree of assurance that the intended assistance reaches the right beneficiary. Recent studies[2] have shown that the fingerprinting procedure exposes people to the risk of transmission of the virus. Typically, WFP activities involve close proximity between people and the COVID-19 outbreak serves as a critical reminder of health procedures to apply during all WFP operations. However, there are two biometrically supported beneficiary processes that require further risk inquiry.

1. At beneficiary registration, ten fingerprints or/and two irises of a person are captured with biometric sensors. In both cases with the equipment[3] currently in use, there are overlapping contact area between successive people:
   - Fingerprint biometric registration requires fingers' contact with the fingerprint sensor surface.
   - Iris biometric registration requires contact between the area surrounding the eyes with the surface of the monocular or binocular iris scanner[4].

2. If biometric authentication is used for assistance redemption, then brief contact between the relevant sensor and either single finger or eye area occurs[5].

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[1] Details available at: https://www.cdc.gov/coronavirus/2019-ncov/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2Fnovel-coronavirus-2019.html
[2] Biometric Fingerprinting for Visa Application: Device and Procedure Are Risk Factors for Infection Transmission, Jan A. Jacobs , MD, PhD and Marc Van Ranst , MD, PhD.
[3] SCOPE equipment. Different type of equipment available with IRISguard (including contactless).
[4] Equipment might be used contactless on a tripod. Not tested yet in the field.
[5] SCOPE equipment. Different type of equipment available with IRISguard (including contactless).

III. Individual Exposure

There are risks around the transfer of microorganism that can cause the infection by using contaminated 'devices' such as scanners. There are higher risks during fingerprints capture than authentication and hand shaking. Microorganisms may penetrate the skin via small cuts or abrasions. The contaminated person may also bring them unintentionally to the mouth (gastrointestinal infection) or the conjunctivae and nasal mucosa (respiratory tract infection).

Individual fingerprint reading done during assistance redemption activities has a lower transmission risk than fingerprint capturing during biometric registration due to the shorter contact time, small surface and low contact pressure.

IV. Potential Impact

As of April 3rd 2020, there are about 11,520,000 different individuals in contact with WFP and partner's biometric systems[6] in 34 countries. 33 of these countries have currently reported number of COVID-19 infections[7]. However, no WFP COs with biometrics operations are yet known to be under direct threat.

This risk assessment serves as TEC input to corporate and CO preparedness planning measures and will need the vetting of Programme and medical health functions to provide complete guidance to country operations.

V. Mitigation Options

All COs in areas of risks, must comply with infection control measures as per local regulation and WHO recommendations. Local SOPs have to be reinforced and the staff (WFP/CPs) must be reminded of procedures of cleanliness[8]. Age, underlying diseases, nutrition status, and medication can make individuals more vulnerable to the infection, putting the beneficiaries WFP serves in particular as significant risk group for the disease.

If it is determined that the continuation of biometric registration or authentication before distribution presents a real risk to beneficiary health, then biometrics should be temporarily suspended. This is premised first on a "do-no-harm" approach and second, on recognition that temporary suspension is unlikely to lead to significant control risks as other modalities for identification can be used and, in the case of pre-registered caseloads, de-duplication has already occurred.

Immediate (short term) Actions in Areas of Low Risk of Infection

There is currently no vaccine or cure for COVID-19, which is a disease that affects your lungs and airways. The best way to prevent the disease is to avoid being exposed to this virus. There are a number

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[6] SCOPE corporate solution, Progress and IrisGuard.

[7] WHO, Situation Report- 73, 2 April, 2020: Afghanistan, Bangladesh, Bolivia, Burkina Faso, Burundi,, Central African Republic, Colombia, Chad, Democratic Republic of Congo, Republic of Congo, Ethiopia, Gambia, Ghana, Guatemala, Iraq, Liberia, Lebanon, Jordan, Madagascar, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria ,The Philippines, Somalia, South Sudan, Sierra Leone, Sri Lanka, Syria, Sudan and Uganda.

[8] Hand and respiratory hygiene.

of critical actions that must be followed to ensure WFP activities do not contribute to the spreading the disease and cause harm to vulnerable beneficiaries.

Short term actions that must be enforced across all programs and activities include:

General
- Enforce SOPs at CO level including procedures of cleanliness during registration and regular WFP activities.
- Train staff (WFP/CPs) on implementing on basic control measures at the both the workplace and field operations:
  - Hand Hygiene - Wash hands frequently and thoroughly using soap and water (for 40-60 seconds) or alcohol-based hand gels (for 20-30 seconds);
  - General Hygiene - Cover mouth and nose with a disposable tissue when coughing or sneezing. Throw tissue away immediately in a closed bin and wash hands;
  - Social Distancing - Revise office/registration/distribution layouts to ensure social distancing of at least 1 metre (3 feet) distance between people (staff and beneficiaries). Ensure there is a distance maintained on the registration queues.
- Train field staff on procedures in case of skin injures and disinfection of the devices.
- In coordination with the health cluster/working group, organise sensitization campaign for WFP and CP staff and the beneficiaries.

Standard Hygiene
- In coordination with the health cluster/working group, organise sensitization campaign for WFP and CP staff and the beneficiaries.
- Current literature flags that simple infection control measures mitigate the risk of contamination.
- The process of fingerprint capturing performs well with freshly cleaned hands. Consequently, hands must be cleaned with hand sanitizer or other disinfectant as recommended by health actors **before and after** each scanning:
  I. Rub hands with alcohol-based product[9] (for 20-30 seconds), possibly ethanol[10].
  II. Hands should be rubbed until they are dry.
  III. No need for running water, sink, or drying facilities[11].
- All devices must be **cleaned after each use**. A liquid disinfectant should be used to clean the glass surface of the scanner before and after every use:
  I. If the surface is dirty, use a glass cleaner spray or wipe with a tissue, paper towel, or cloth dampened with a cleaning agent.
  II. Spray or wet the surface with common household disinfectant.
  III. Let the surface stay wet for as long as is recommended on the label of the disinfectant before wiping off or drying.
- Consider the possibility of using disposable transparent covers over the contact surface or a removable surface contact plate that can be detached and soaked into a disinfecting solution.

Long-term Actions if the Virus preads in the Area of Intervention

It is of fundamental importance that practices of hygiene and social distancing are continuously applied as these are currently the only measures we can apply to help prevent the spread of the disease to your friends and wider community.

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[9] Handwash with water and plain soap has virtually no activity against nonenveloped viruses, and antimicrobial soaps based on chlorhexidine or triclosan have only a limited activity.
[10] Consider alternative solutions when operating in predominantly Muslim communities (e.g: perfume, Dettol)
[11] https://docs.wfp.org/api/documents/WFP-0000112474/download/

General

- Reinforce personal hygiene practices and control measures including:
    I. Hand Hygiene - Wash hands frequently and thoroughly using soap and water (for 40-60 seconds) or alcohol-based hand gels (for 20-30 seconds);
    II. General Hygiene - Cover mouth and nose with a disposable tissue when coughing or sneezing. Throw tissue away immediately in a closed bin and wash hands;
    III. Social Distancing - Revise the layout of the registration site to ensure social distancing of at least 1 metre (3 feet) distance between people (staff and beneficiaries).
- Revise the registration plan to consider the additional time required for the regular cleanliness of the equipment.
- Disable authentication by minimising use of biometrics - disable biometric or PIN authentication[12].
- Reinforce the coordination with the health cluster/working group considering the possibility to have a specialized health subject matter expert attending the registration/ distribution sites.

Standard Hygiene

- Use of gloves for all personnel and beneficiaries.

Technology

- Use of water-resistant equipment.
- Modify biometric capturing software to enforce a longer time interval between individuals, to implement a hard control and space out the time for interaction between individual beneficiaries. This gives the operator and beneficiaries more time to carry out sanitation or hygiene procedures.
- Use biometric scanners with contact surface design that reduces the risk of accumulation of dirt and moisture in areas not reachable during the regular cleaning.
- Investigate contactless biometric systems, i.e. contactless fingerprint or iris scanners, as a long-term alternative.
- Use a gateway/client registration set up which is designed for distributed registration workflows whenever possible. Separating queues can help to organise the process more efficiently.

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[12] Likewise to biometric authentication, using PIN code requires contact with the surface of the POS. Therefore, bearing risk of the spread of the virus through contact.

VI.Additional Resources

For additional details on the novel coronavirus, track the spread and virulence of the virus, and to receive advice on measures to protect health and prevent the spread of this outbreak, refer to WHO website and consult the links below:

I.   Regular WFP updates on COVID-19 available [here](#)

II.   Resources for staff awareness and preparedness:
- [Medical Advisory to WFP Employees](#) (also in [French](#), [Spanish](#), [Arabic](#))

- Coronavirus Standard Staff Presentation: https://docs.wfp.org/api/documents/WFP-0000112474/download/

- [Travel Advisory to WFP Employees](#), (also in [French](#), [Spanish](#), [Arabic](#) and [Chinese](#))

- [UN Coronavirus Prevention Instructions for Employees](#)

- [WHO Advice on the Use of Masks](#)

- [UN Medical Directors Prevention Instructions](#)

III.   Resources for Country Office preparedness:
a. Business Continuity

- [Corporate CO Business Continuity Preparation Guideline](#)

- [EPRP - Minimum Preparedness Actions](#)

b. Operations and Scale-up

- [WFP operational and scale up guidance](#)

  - [Food and Nutrition Assistance](#)
  - [Adjusting Food Distribution SOPs](#)
  - [CBT Guidance on Operational Continuity](#)
  - [Breastfeeding Interim Guidance](#)
  - [Pregnancy Interim Guidance](#)

- [Coronavirus Preparedness and Response Checklist](#) (also in [French](#), [Spanish](#), [Arabic](#) and [Chinese](#))

c. Employee Health and Safety

- HR Guidelines for Offices on the COVID-19 Outbreak for Staff Members ([English](#)) and Non-Staff Members ([English](#))

- [List of Office Hygiene Items for WFP Country Offices](#)

- [Staff Risk Management Plan](#)

- [WHO Getting your workplace ready for COVID-19](#)

- [UNMD Pandemic Guidelines](#)

d. Biometric Related

- Biometric Fingerprinting for Visa Application: Device and Procedure Are Risk Factors for Infection Transmission: https://academic.oup.com/jtm/article/15/5/335/1818880

- Hitachi Turns Standard Computer Camera into Finger Vein Scanner: https://findbiometrics.com/biometrics-news-hitachi-turns-standard-computer-camera-into-finger-vein-scanner-091007/

- Additional instructions to clean and disinfect SecuGen finger printer readers can be requested directly to Famoco focal point.