
Standard Operating Model for "Drive-Thru" Screening Clinics

March 2020

Central Disaster Management Headquarters

◆ This document describes **the standard operating model** for COVID-19 **“drive-thru” screening clinics**. For the basic information on operation of screening clinics, please refer to the **「Operation Guide for COVID-19 Screening Clinics」**.

1. Background

- In response to **the increasing demand for diagnostic tests**, **“drive thru” screening clinics** need to be **expanded**. They **reduce disinfection and ventilation time** and **safely and efficiently collect samples in large quantity** without negative room pressure facilities.
- * **Definition of drive-through screening clinic:** A screening clinic which allows drivers (test subjects) to go through medical examination, fever-checking, and sample-taking through open window while remaining in their vehicles
- ** **Samples collected per hour: (General screening clinic) 2 VS. (Drive-through clinic) 6**

2. Basic Direction

- The “drive-through” model provides **one-stop service** to those who wish to get tested, allowing them to **go through the seamless process of “registration – medical examination – sample-taking – disinfection and education”** while **driving through** each point.
- It is a **screening clinic** exclusively **specialized in collecting samples*** and its purpose is **to collect a large number of samples**.

* Not provide other medical treatment and prescribe medicine

- **(Time required)** The process of “registration – medical examination – sample-taking – disinfection and education” **takes under 10 minutes**
- **(Number of samples collected)** 6 samples per hour x 10 hours per day = 60 samples

3. Operating Procedure

- **(Reservation)** Operate the **COVID-19 hotline** in situation rooms in health centers/medical institutions
 - **Check the health status and overseas travel history of the test subject** in advance and **schedule visiting time** to **shorten the time required for on-site registration and medical examination**
- **(Registration)** Check identification*, travel history, contact history, symptoms, and fill out test form (1 administrative staff)
 - Guided to set car **air conditioner to recirculation mode** (internal circulation mode)
 - * Need to **obtain the name, address, and contact information** of the test subject, and **double check the contact information**
- **(Medical examination)** Provide medical examination and decide whether to proceed with a test and collect upper/lower respiratory tract samples (1 doctor)
 - * **Collection of lower respiratory tract sample** is conducted only when **the subject has sputum and can expectorate sputum alone into a container under the doctor’s decision** (Sample collection guideline provided by CDCH, Feb. 20).

○ Sample Collection

- **(Upper respiratory tract) Collect sample, at a booth, of the patient in the vehicle, need to wear protective gear, and replace gloves after collection** (1 nursing staff)
- **(Lower respiratory tract) Patient self-collects sputum in the car while closing its windows. Medical staff packages and manages samples, needs to wear protective gear, conduct disinfection and **replace gloves** after collection (1 nursing staff)**

○ Vehicle Disinfection and Education

- **(Vehicle Disinfection)** After sample collection is completed, a **wrapping cloth for disinfection** is given to the patient, who is guided to **clean the inside of the vehicle** by him/herself. → Close the window through which the collection was conducted to **get it and the outside of a car disinfected** by using **disinfectant spray** (1 infection control staff)
- **(Education)** Through education, the patient is **guided to be self-isolated** and **not to share the car with others including family until the test result comes out** (1 administrative staff)

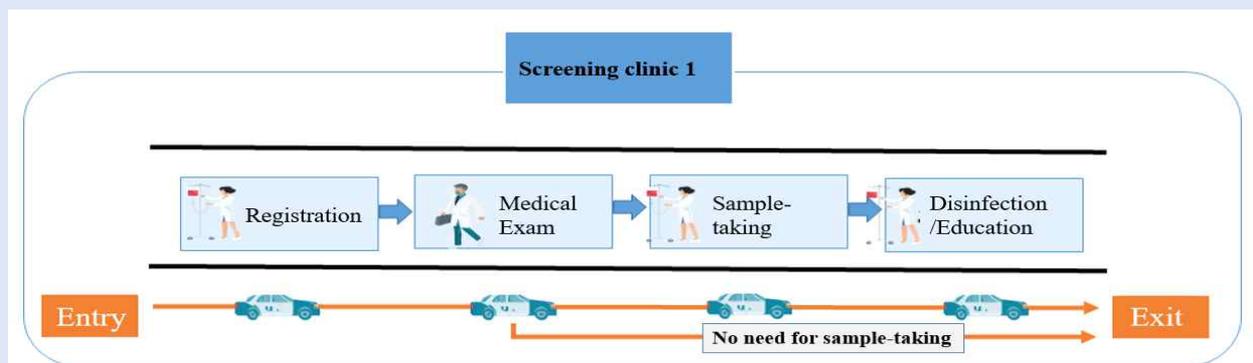
4. Operation Method

※ Refer to method 1 or 2 and use it in a way more suitable to each institution's circumstances

○ (Method 1) Operate 4 separate booths depending on each step “registration → medical examination → sample-taking → disinfection and education”

- It takes less than 5 minutes for each booth, reducing waiting time and collecting larger samples
- Enough space and human resources are needed to install and run 4 separate booths

< (Note) Drive-Thru Screening Clinic Model (Method 1) >



< (Case) Drive-Thru Screening Clinic (Method 1) >



< Case in Yeungnam University Medical Center >



< Case in Goyang City Health Center >

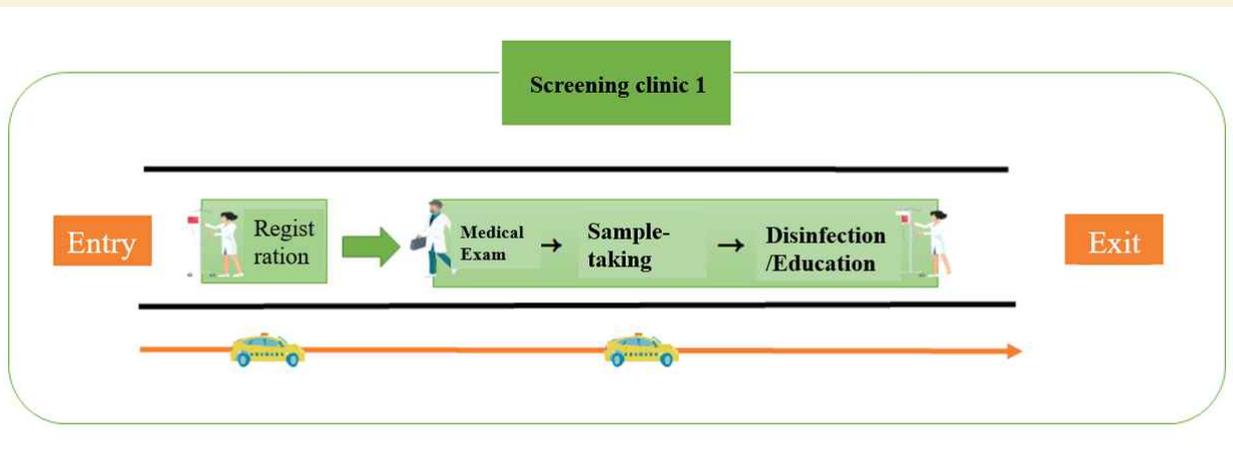
○ (Method 2) Simplified operation method consisting of two stages: "registration and waiting → medical examination, sample-taking, disinfection and education"

- It is operated in the same process, but it can use space and human resources efficiently by operating two booths.

- Each booth covers more processes, leading to some waiting time inside a car

* Need to efficiently allocate booking time through reservation hotline

< (Note) Drive-Thru Screening Clinic Model (Method 2) >



< (Case) Drive-Thru Screening Clinic in Sejong Health Center >



(Stage 1)

Checking reservation and waiting



(Stage 2) Medical examination·

sample-taking· disinfection/education

5. Required Resources

- **(Installation type)** Can decide a type and operate depending on each institution's circumstances such as **container-type** or **open type tent**
- **(Human resources)** Can operate with 4~8 staff members depending on operation type, such as **1~3 administrative personnel** (registration, education, facility management, vehicle control, etc.), **1~2 doctors** (medical examination), **1~2 nursing staff** (sample collection), and **1 infection control personnel** (disinfection)
- **Space Requirements**

- Size and area appropriate to the screening clinic standard
- Naturally ventilated area, which is as far as possible from the residential area
- Consider the access of community residents
- Area with easy supply of storage, electrical installation, telecommunication installation, water, etc.
- Immediately available space
- Area with sufficient storage space for medical waste
- Area where parking spaces are easily accessible

6. Considerations

- ① **For single-person drivers** (Riding with a caregiver not allowed)
 - Given positive features of this model, if a patient **is unable to drive a car** or needs a caregiver, **go to another screening clinic**.
 - * If a driver rides with an accompany or brings a symptomatic patient s/he cares for (e.g.: child), a test subject should get off a car and go to a separate place for sample collection, making positive features of "drive through" model meaningless.
- ② In this model, **medical personnel wears personal protective equipment and performs** procedures of registration, medical examination, sample collection, and others, **standing inside of a booth or in the open air** (to keep a close distance between the vehicle and the booth for smooth sample collection)

* If clinics have available staff members, it is necessary to **place two people in one booth** so that they can autonomously work in shift.

③ **Advance reservation system to reduce waiting time**

- It is necessary to **reduce waiting time** by **checking health conditions and overseas travel history of test subjects** and **scheduling a visit time** in advance through **COVID-19 hotline** in situation rooms in health centers/medical institutions.

Category	Operation Method	Photo
<p>Goyang City Health Center (Feb. 26, 2020~)</p>	<p><u>①Asking about health status→②Medical exam→③Sample collection</u> * ①-③ Use separate tents ** Time required under 10 minutes+a (waiting time)</p>	
<p>Yeungnam University Medical Center (Feb. 26, 2020~)</p>	<p><u>①Registration→②Medical exam→③Payment→④Sample collection</u> * ①-④ Use separate containers ** Time required under 10 minutes+a (waiting time)</p>	
<p>Sejong City Health Center (Feb. 26, 2020~)</p>	<p><u>①Checking reservation →②Registration, medical exam, sample collection</u> * ①-② Use separate tents ** Time required under 10 minutes (by reservation) ※ Reservation: Health center operating hotline (5 telephone lines)</p>	
<p>Jinju City Health Center (Feb. 28, 2020~)</p>	<p><u>①Registration and medical exam→②Sample collection</u> * ① Use separate tents, ② Drive thru without special equipment ** Time required under 10 minutes+a (waiting time)</p>	

※ Drive-thru clinics also in operation in Namyangju City (Feb.27~), Incheon Metropolitan City (Feb.27~), Gyeongju City (Feb.28~)