# 全港性污水監測計劃 SEWRGE SURVEILL ANGE PROGRAMME



自2020年3月起,香港已實施一項不可或缺及 持續的防疫措施一「污水病毒監測計劃」。 其主要目的是:

(1)為疫情爆發提供預警信號,(2)在社區層面 監察感染區域,找出隱性患者,及(3)追蹤社區 疫情,準確推算確診人數、檢視疫情防控需要。 監測計劃目前已覆蓋 600 萬人,相等於香港 80%的總人口。

"The Territory-wide Sewage Surveillance Programme" has been implemented in Hong Kong as an indispensable and on-going anti-epidemic measure since March 2020. The objectives are to:

1) provide early warning signals for COVID-19 outbreak; (2) monitor the epidemic situation at district-level and identify "hidden cases" of COVID-19; and (3) forecast the number of confirmed cases accurately so as to provide robust information on the pandemic situation. The surveillance programme is now covering a total of 6 million people, equivalent to 80% of Hong Kong's population.



### 3月 March

**乳污水採樣**及 懷測

Joint research with the University of Hong Kong on sewage sampling and testing methodologies

### 10月 October

26個指定監測點 人口:~2百萬 每7天循環

**26 Stationary Sites** Population: ~2 million 7 days/cycle



2021年

#### 10月 October

人口:~4百萬 每5天循環 12-24 個臨點採樣

112 Stationary Sites Population: ~4 million 5 days/cycle 12-24 sampling points



2023年

### January

人口:~6百萬 每2天循環

**120 Stationary Sites** Population: ~6 million 2 days/cycle

病毒監測計劃的時序 2020年 Development and Implementation





### 8月 August

污水處理設施採樣 Sampling at wastewater treatment facilities



### 12月 December

154 個指定監測點 人口: ~6百萬 每2天循環 154 Stationary Sites

2 days/cycle

40 個臨點採樣

Population: ~6 million 40h Ad-Hoc sites

## 病毒檢測

**Sewage Sampling** and Virus Testing

污水採樣及

● 於污水井進行 自動採樣,抽取 污水樣本 Automatic sampling at sewer manhole to extract sewage samples





Laboratory conducts virus testing on sewage sample and submits results on the same day



#### 污水檢測呈陽性後的行動

Government Response to Sewage Positive Results

- 分析污水渠網,編訂採樣臨點 Analyze sewerage and select the Ad-hoc sites
- 擬定翌日的採樣計劃 Develop a sampling plan for the next day
- 編制社區行動名單
- Compile community action lists
- 安排進行圍封強檢行動 Arrange "Restriction-Testing Declaration" operations



污水病毒監測流程 Sewage Surveillance Process

發展及實施污水

of the Territory-wide Sewage

Surveillance Programme

#### 數據處理 Data Analysis

● 整合病例的最新 位置分佈、建築物 及其相關的公共 污水網絡、人口數 據,編制疫區地圖





Verify data and prepare reports for on the same day ● 根據病毒擴散情況,鎖定追踪目標 Based on the spread of the virus

● 核實數據,編制當天報告

- to locate and trace the high risk area
- 與其他部門分享數據 Share data with other departments



