



CHECKLISTS

Wastewater Surveillance in Open Drains



Questions	Indicators to check	Rationale	Ideal indicator
Location - where to sample	<ul style="list-style-type: none"> 1. Open and <10m drain Has nearby human settlements 	Accessible to collect the sample To get the representative samples	Site having better access to sample collection
When to sample	During peak hours; 7-9 AM	Represents the majority of pollution	Preferably before 8:30 AM
Sampling type	Grab Sampling Method	Easy to collect and economical	Grab Sampling Method
Number of sampling sites per drain	One sample per drain	Coverage of large number of localities with dwellings	Preferably a mouth of the drain; More than one per drain
Sampling frequency	Twice in a week	Two times sampling provides 3 days window -- to capture new infections from the population	Twice a week to capture new infections which might not be possible once a week
Tools, equipments and technology used	Bucket, rope, labelled bottles, PPEs-gloves, masks, overall, pH meter thermometer, sanitizers, disinfectants	Facilitates sampling process; provides safety measure to Sample Collector from possible infections.	Automated sampler could be a viable solution for sampling.
Mapping of catchment area	Conducted through visual inspections and google survey	To get the ideal sites for sampling	

Wastewater Surveillance in Manholes



Questions	Indicators to check	Rationale	Ideal indicator
Location - where to sample	Last manhole near to Inlet to STP / Pumping Station	Covers the major populations	Hyper localization of the area based on the population
Population coverage	HH covered per manhole	Helpful for granular findings of hotspots and target localities	Highest HH covered with each manhole
When to sample	During peak hours; 7-8:30 AM	Represents the majority of pollution	Preferably before 8:30 AM
Sampling type	Grab sampling	Easy to collect and economical	Grab sampling
Number of sampling sites	One site from a ward (selection based on the population)	Highest possible population coverage	Manhole directly connected with main sewer line.
Sample frequency	Twice in a week	Two times sampling provides 3 days window -- to capture new infections from the population	Twice a week
Tools, equipments and technology used	Bucket, rope, labelled bottles, PPEs-gloves, masks, overall, pH meter thermometer, sanitizers, disinfectants	Facilitates sampling process; provides safety measure to Sample Collector from possible infections.	Automated sampler could be a viable solution for sampling.

Wastewater Surveillance in Sewersheds



Questions	Indicators to check	Rationale	Ideal indicator
Location - where to sample	Manholes that are easily accessible and not obstruct the traffic	Majority of the city connected to underground drainage system and represents to majority of the population for core areas of city	Downstream of the Identified catchment area
When to sample	During peak hours; 7-8:30 AM	Represents the majority of pollution	Preferably before 8:30 AM
Sampling type	Grab Sampling	Easy to collect and economical	Grab Sampling
Number of sampling sites per drain	One sample per sewersheds	Covers all the HH connected with sewer lines in the city	Influent from the sewersheds site.
Sampling frequency	Twice in a week	Two times sampling provides 3 days window -- to capture new infections from the population	Twice a week
Tools, equipments and technology used	cket, rope, labelled bottles, PPEs-gloves, masks, overall, pH meter thermometer, sanitizers, disinfectants	Facilitates sampling process; provides safety measure to Sample Collector from possible infections.	Automated sampler could be a viable solution for sampling.