Discussion Brief: Recommendations for Outdoor Sputum Induction
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Smear microscopy of sputum, often obtained by inducing sputum, is a key tool for TB diagnosis in resource-limited settings as it is low cost and more feasible than other procedures (Menzies D. Sputum Induction: Simpler, Cheaper and Safer- But Is It Better? American Journal of Respiratory and Critical Care Medicine. 2003,167:676).

In this discussion, 15 members on four continents shared protocols and recommendations for outdoor sputum induction (OSI) that address environmental considerations, time needed between inductions, and precautions for health workers thus creating a comprehensive online “how-to” guide.

Key Points

- The priority in any setting is to ensure maximum ventilation. OSI is more appropriate to warm climate but still/windless days and the formation eddies (air current going in another direction from the main wind) are of special concern.
- The site for OSI should be at least 20 feet away from clinic or other occupied area, and located downwind from other patients and health care workers.
- A piece of yarn, flag, or other material should be used constantly to determine wind direction and strength.
- The OSI unit should be flexible and portable so as to be relocated daily depending on wind.
- One or two lightweight curtains, gauze-like, should be used for privacy but positioned so as not to block the wind.
- The OSI unit should have a roof for protection from inclement weather, with a gap between any walls or curtains to ensure maximum cross-ventilation.
- Though not as critical outdoor as indoor, time between inductions in OSI units should be between 5-10 minutes as noted by members.
- Health care workers overseeing OSI and handling samples should wear particulate respirators such as N95 respirators.

Key References


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Please consider replying to this discussion with the following information

- Your experience with OSI and relevant protocols/guidelines

Recommendations

You may also be interested in the following content in GHDonline communities

- Discussion Brief: Using particulate respirators for TB Infection Control
- Facilities for Sputum Collection and Similar Critical Services