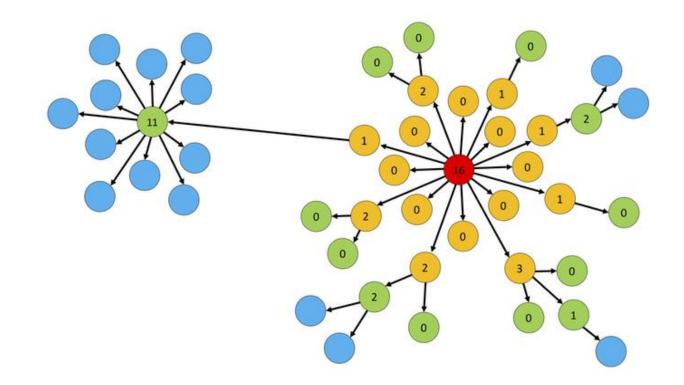
Cluster investigation

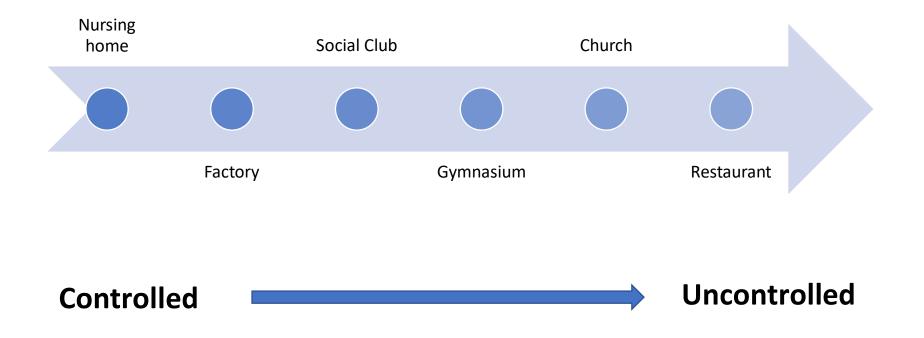
How to obtain actionable intelligence

COVID is a clustering disease

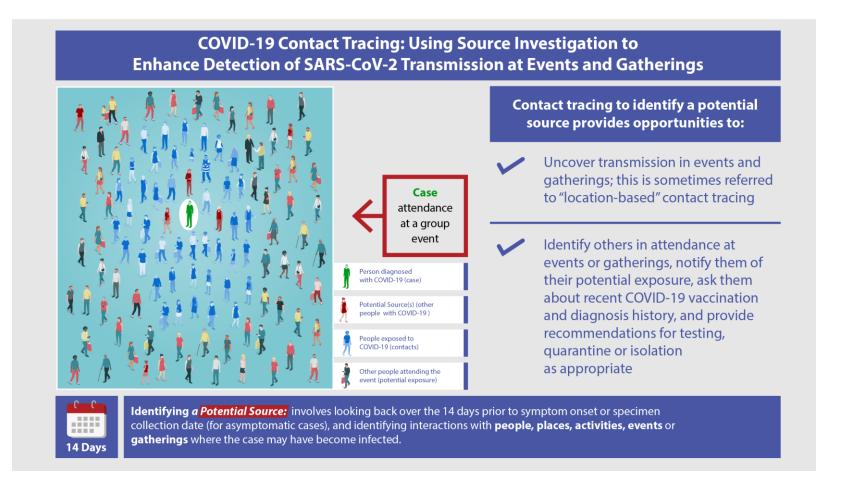


"Is the K number the new R number? What you need to know" The Conversation (June 26, 2020)

Cluster detection in uncontrolled settings

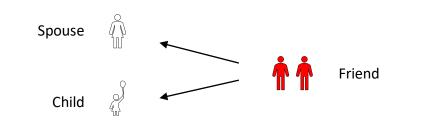


Source investigation = retrospective tracing = backward tracing

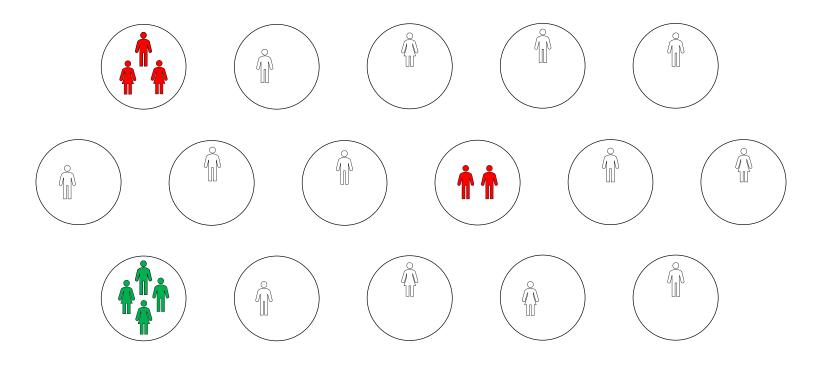


https://www.cdc.gov/coronavirus/2019-ncov/php/contact-tracing/contact-tracing-plan/source-investigtion.html

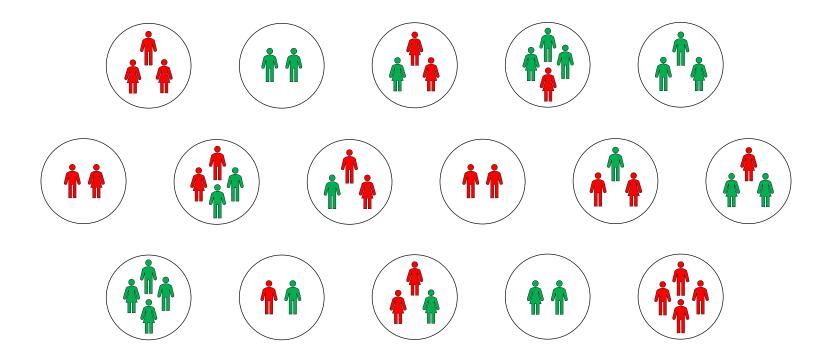
"Who could you have infected?"



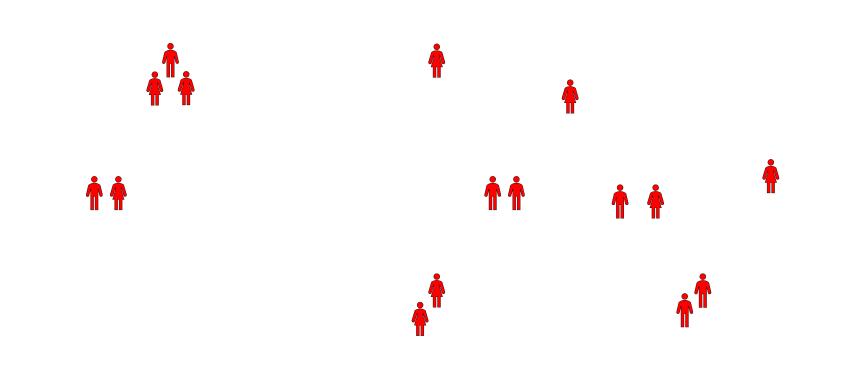
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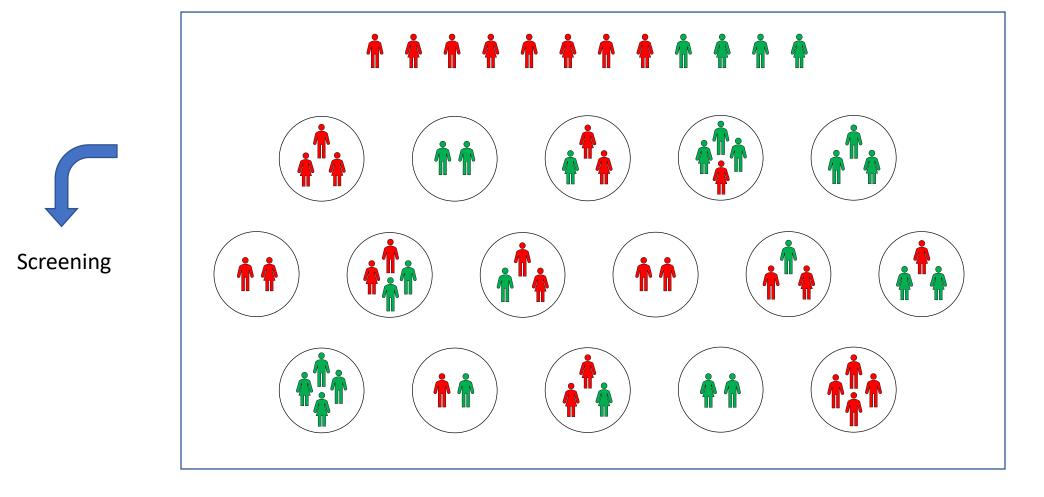
Backward tracing \rightarrow forward tracing



Forward tracing alone will not find all cases



Location-based tracing \rightarrow location-based prevention





Pandemic likely to shift in coming months

- More localized outbreaks (perhaps caused by new variants).
- More "uncontrolled" cluster types (e.g. restaurants, workplaces, places of worship).
- Decreased testing (i.e. more hidden cases).

Cluster investigation allows proactively finding/responding to these outbreaks

- Coordinated with testing, tracing, support for isolation/quarantine, vaccinations, and sector-specific advice.
- Good way to find unvaccinated pockets, communicate with those individuals, and help them get vaccinated.

Cluster investigation: practical ideas

Who calls locations?

- Case investigators/contact tracers can be trained in retrospective tracing.
 - Talking with business owners.
 - Local testing/vaccination options.

Who provides guidance?

• Small specialized cluster team of epidemiologists, experienced case investigators/contact tracers.

Cluster investigation: state-level considerations

Cluster investigations are most efficient and effective with:

- Staff dual-trained in retrospective and prospective contact tracing
- Educated owners/management (who keep patron lists).
- Data collection system that is easy-to-use, searchable, and analyzable.
- Data sharing across jurisdictions (towns, counties, etc.).
- Availability of vaccination and support services.