

- Big square on the top left is driver
- Each dot is passenger
- Small square represents each passenger's AC
- Wave represents air flow, when AC turns

There is approximately 1 feet for the walkway. Normally, when turning on AC in the bus, each seat's AC turns on simultaneously. If one passenger decides to close it, the same side passenger's AC air flow will increase, which means the probability of disease flow also increases to other passengers.

If we set the initial patient's probability of spread of the disease as 0.5, 0.3, 0.2 as breathe, cough and sneeze, under circumstances of no one turning off their fan, the probability of whoever is closest to the patient's probability of getting disease should be bigger than other passengers. Whoever is

further away than the patient's probability of getting the disease should be less than the ones who are closest to the patient.

## AC refrigeration cycle

https://www.transairmfg.com/basics-of-bus-air-conditioning.cfm

Facts about school bus A/C

http://www.matthewsbusesflorida.com/rifled-air-conditioning

Simple Efficient, how bus' AC works in a video https://www.youtube.com/watch?v=qWZ-Jpg1-ok&ab\_channel=Ebersp%C3%A4cherWorldwide