Fan Use and Covid-19

When is a fan useful?

Fans are effective for personal cooling when air temperature is cooler than skin temperature (i.e. around 35°C). However, if air temperature is very high (greater than skin temperature) and humidity is also high (as to impede the rate of sweat evaporation), the use of a fan can be counter-productive and increase body temperature. During extreme heat, indoor temperatures can be much hotter than the temperature outside and so re-circulating extremely hot air can be dangerous. In such situations, taking a cold shower or bath or moving to an air-conditioned place is a much better way to cool off.

Fans and Covid-19

When fans are being used by more than one individual, they may contribute to the spread of Covid-19 by aiding the travel of respiratory droplets further than they would otherwise.

As such, when using fans in rooms with multiple occupants, it is important to ensure the fan's directional airflow does not connect the breathing zones of different occupants. This can be achieved by directing fan airflow towards the floor or ceiling, rather than directly towards or across a group of people.

More information:

National Collaborating Center for Environmental Health, on fans and extreme heat:
https://ncceh.ca/content/fans

BC Center for Disease Control, on how coronavirus spreads:
http://www.bccdc.ca/health-info/diseases-conditions/covid-19/about-covid-19/how-it-spreads