



Air changes/hour (ACH) and time required for airborne-contaminant removal by efficiency*

ACH	Time (minutes) required for removal 99% efficiency	Time (minutes) required for removal 99.9% efficiency
2	138	207
4	69	104
6 ⁺	46	69
8	35	52
10 ⁺	28	41
12 ⁺	23	35
15 ⁺	18	28
20	14	21
50	6	8

* <https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html#tableb1>

+ Denotes frequently cited ACH for patient-care areas.

Additional information:

- Ventilation requirements for areas affecting patient care in hospitals and outpatient facilities
<https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html#tableb2>
- Air change rates form typical rooms and buildings
http://www.engineeringtoolbox.com/air-change-rate-room-d_867.html