

REFERENCE

Ghoneim A, Proaño D, Kaur H, Singhal S. Aerosol-generating procedures and associated control/mitigation measures: Position paper from the Canadian Dental Hygienists Association and the American Dental Hygienists' Association. *Can J Dent Hyg.* 2024;58(1):48–63.

Supplementary Table S6. Fallow time study characteristics

Author(s), date, country	Study design	Number and type of observations	Dental settings	Dental setting characteristics	Type and duration of AGP	Post-procedure duration	Use of aerosol mitigation	Calculation of fallow time	Fallow time	Main finding
College of General Dentistry (2020) ¹⁰³ United Kingdom	Review	83 articles/documents	Not specified	Not specified	Not specified	Not specified	Not specified	Not specified	Not specified	ACH is a huge factor in determining fallow time. Fallow time varies according to the procedure, ventilation rate, high-volume suction used, rubber dam, and length of procedure. Shortest times (10 min) are recommended for ≥ 10 ACH, with high-volume suction used and with or without rubber dam.
Choudhary (2022) ⁶⁸ United States	Non-randomised experimental study	Patients Number: Not specified	Pediatric + General, Endo + Perio, Orthodontic	Not specified	High-speed drilling Low-speed drilling Ultrasonic scaling	Not specified	Dental suction used = 8.2 mm tip with flow rate 74 standard cubic feet per minute at 7.0 Hg (2095.44 LPM; Henry Schein 1400 RAMVAC standard model).	Not specified	Not calculated	When present, appeared transient regardless of dental clinic configuration. Authors imply this is sufficient evidence to reduce fallow time to 5 min.

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					Duration: Not specified					
Clarkson et al. (2020) ¹⁰⁴ United Kingdom	Rapid review	30 documents	Not specified	Not specified.	Not specified	Not specified	Not specified	Not specified	2 min to 180 min	Same fallow time between non-COVID and COVID patients. Use of aerosol-mitigation strategies and increase the number of air changes per hour.
Ehtezazi et al. (2021) ⁶⁹ United Kingdom	Non-randomised experimental study	3 mannequins	Typical dental surgery room	4.4 m x 3.1 m x 2.6 m. All non-experimental air-conditioning equipment was turned off during the experimental work, and the	Air turbine handpiece, electric contra-angle handpiece, and ultrasonic scaler	15 min	Low-volume suction, high-volume suction (intraoral) with air filtration system, high-volume suction (extraoral), and air cleaning system	Estimation of fallow time was performed by linear regression of particle concentrations at each sample location	28 min to 34 min without any intervention; 26 min with low-volume suction; 21 min	All aerosol-management interventions evaluated were relatively effective in controlling aerosols generated by the dental handpieces. The use of high-volume intramural suction HVS(IO) or the HVS(IO) combined with the ACS was

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				average room temperature and relative humidity over the study period were 27°C and 67%, respectively	Duration: 3 min			following cessation of AGPs and was calculated as the time at which the extrapolated particle concentration decreased below the upper baseline particle concentration	with high-volume suction	enough to reduce the fallow time to 0 min. In the absence of aerosol-management interventions, particles in the range of 0.05 µm to 0.236 µm remained at elevated concentrations within the macro-environment (locations 5-6, >50 cm) for longer than the experimental period.
Fennelly et al. (2022) ⁹⁹ United Kingdom	Non-randomised experimental study	70,524,717 particles recorded Mannequin	Typical dental surgery room	Mechanically ventilated clinic at Cork University Dental School and Hospital	Ultrasonic scaling and high-speed drilling Duration: 6 min (1 min intervals)	Not specified	High-volume evacuation and high-volume evacuation plus local exhaust ventilation	Not specified	49 min to 280 min	High-volume evacuation and high-volume evacuation plus local exhaust ventilation eradicated all procedure-related aerosols, and the enclosure stopped procedure-related aerosols escaping. If no mitigation procedures done, then fallow time increases to 71 min or even 126 min.

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Li et al. (2021) ¹⁰⁰ China	Non-randomised experimental study	Mannequins Number: Not specified	Dental clinic	36 m x 2.7 m x 2.3 m. Indoor room temperature and relative humidity (23°C, 52%). Ceiling ventilation with 6 ACH.	Ultrasonic scaling Duration: 2 min	40 min	HVE intraoral (3 cm ² aspirator tip and at the high flow rate, 300 L/min of air.)	The fallow time estimation was studied by the linear and exponential regressions of the particle counts in the post-procedure duration. Fallow time was calculated as the time by the particle counts decreased below the baseline levels.	27 min to 35 min	Without any mitigation measures, the estimated fallow time in the single dental surgery environment with 6 ACH is in the range of 27 min to 35 min. High-volume evacuation cannot eliminate the fallow time to 0 min but can reduce it by 3 min to 11 min Although the ACH was recommended from 6 to 12 ACH, the relationship between the fallow time and ACH value was not well-investigated. Some other factors of fallow time include duration of dental treatment, dental procedures, ventilation type, and number of dental providers.
Robertson et al. (2022) ⁷⁹ United Kingdom	Rapid review	75 articles	Not specified	Not specified.	Not specified	Not specified	Not specified	Not specified	2 min to 180 min	Fallow time ranged from 2 min to 180 min in 26 documents. Longer fallow period for patients with COVID-19. Although most documents recommended similar durations. Fallow

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										periods can decrease to a minimum of 10 min.
Shahdad et al. (2021) ⁶² United Kingdom	Non-randomised experimental study	Mannequins Number: Not specified	Multichair open clinic and closed surgery in a dental teaching hospital	Not specified	Cavity and crown preparation	30 min	High-volume suction and saliva ejector	Estimated from the aerosol measurements by calculating how long it took from the end of the procedure for the aerosol	10 min	Largest fallow time was found in the case of the non-mechanically ventilated environment with windows closed throughout. The estimates for the required fallow time were notably smaller for the procedures in the hospital mechanically ventilated closed and open bays. Usually, the aerosol

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					Duration: 20 min			concentration in each size range to revert to within a threshold of 5% of the mean value before the procedure. A conservative approach was adopted, with the overall fallow time taken as the longest identified for each particle size range.		levels were found to return to pre-procedure levels within less than 10 min (with 6 ACH). Fallow time estimates were larger for the procedures in which the tooth being operated on was alternated every 5 min.
Vernon et al. (2021) ¹⁰¹ United Kingdom	Non-randomised experimental study	Mannequins Number: Not specified	Clinical surgery	9 ACH	Root canal access and full crown preparation	20 min	High-volume aspiration (with saliva ejection), rubber dam and aspiration, and an aspiration Jet 25 aerosol extraction device	Not specified	Not calculated	The HSCAH eliminated any aerosol within 6 min of procedure completion. This evidence strongly suggests there is no need for a prolonged fallow period with this handpiece. Where a HSCAH is not available, a

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					Duration: 20 min		with a flute shaped end piece.			rubber dam was equally effective in reducing air contamination shortly after conclusion of an AGP.

ACH: air changes per hour; AGP: aerosol-generating procedures; HVS (IO): high-volume suction intraoral; HSCAH: high-speed contra-angle handpiece