

The table has been created following the guidelines published by BOS ¹ on 25th September, 2020 and provides a list of most procedures in a routine orthodontic clinic with a reference to the AGP (Aerosol Generating Procedure) risk. Automatic instruments driving by computer, air, or similar, working at <60,000 rpm will tend to generate droplets or splatter rather than a true AGP with particle size of <5µm. Manual instrumentation does not generate an AGP. Patients who cough, sneeze or retch, during treatment procedures, will generate droplets which could produce an Aerosol or Splatter. Care should be taken to avoid stimulating these reactions.

Mitigation Procedures	
HVE	More than 250/min with ≥ 8 mm bore
Fallow Time (Group B)	Minimum of 10 minutes
Fallow Time (Group A)	See Table attached below
Ventilation	This should be 10 Air changes per hour (ACH).
Poly Clinics ²	5 meters between patients
Ref Here	

Group A procedures use powered, high velocity instruments that emit or require water or irrigants for cooling. These procedures will produce aerosol particles <5 µm and require airborne transmission-based precautions. (PPPE suitable for AGP)

Group B procedures that use powered, low velocity instruments used for limited amounts of time. These procedures are unlikely to produce aerosol particles <5 µm and require procedural mitigation (HVE) and standard infection prevention and control precautions as routinely used in dentistry. (PPPE suitable for Non-AGP)

Group C procedures do not use powered instruments. These procedures may produce splatter but are unlikely to produce aerosol particles <5 µm, and require standard infection prevention and control precautions as routinely used in dentistry. (PPPE suitable for Non-AGP)

Appointment type	Procedure	Group C	Group B	Group A	Comments/Suggested Alternatives
Consultation					
New Patient assessment	Examination Extra oral Intra Oral Periodontal	X X X			
	Tooth and air dry 3:1 (air & water or combination)		X	X	Consider cotton wool wipe, separate water & air / HVE
	Surface drying 3:1 (air or water only but not in combination)		X		Consider cotton wool wipe / HVE
	Photographs ³ Impressions Scanning	X X X			Care with occlusal views; consider non-mirror shots Reduce material to avoid coughing
Treatment Planning	Discussion Consent	X X			Consider virtual consultation; via video link Consider virtual consultation; via video link
Fixed Appliances & Fixed Retainers					
Bond up	Tooth prophy Surface wash and dry 3:1 (air & water in combination) Surface drying 3:1 (air or water only but not in combination) Etch: wash & dry separately		X X		Consider toothbrushing only Consider cotton wool wipe / HVE only
	Tooth/teeth drying with cotton wool wipe Self etch Prime, without blowing resin with 3:1 Bracket placement Band cementation	X X X X			Dry tooth with HVE and cotton wool plegdet Avoid 3:1. Bond strength may be reduced
Fixed Adjustment	a/w tie in a/w tie in and removal auxiliary attachment and removal	X X X			
Bracket repair	Composite removal - St. Handpiece Composite removal - St. Handpiece Composite removal - Hand instrument Bond - as above for Bond up		X	X	Use St. Handpiece or Hand instrument
Full Debond	Bracket removal Band removal	X X			
	Composite removal - St. Handpiece Adhesive removal with SL Adhesive removal; manual (plan to remove residual material later)		X		Use St. Handpiece or Hand instrument
Fixed retainer	Bandbond Prophy Etch: wash & dry separately		X X		Accept no tooth preparation or use St. Handpiece prophy Use HVE to dry
	Self etch Prime, without blowing resin with 3:1 Placement of retainer (Composite & Wire)	X X			Use HVE to remove monomer (dry)
Fixed retainer repair	Composite removal SL New retainer placement as per bondup Remove and provide Vacuum retainer		X		
Removable Retainers & Appliances					
Vacuum retainer	Impressions Scanning Fit Adjust/easing with shears or scissors Adjust/easing with handpiece and bur	X X X X X			
Hawley Retainer (or similar)	Impressions Scanning Fit Adjust/criss Easing with handpiece and bur	X X X X X			Reduce material to avoid coughing
Removable Appliances					
Aligners					
Clear aligner treatment	Impressions Scanning Fit Adjust/easing with shears or scissors Adjust/easing with handpiece and bur	X X X X X			Reduce material to avoid coughing
Bonding attachments	Tooth prophy Etch: wash & dry separately		X X		Use HVE to dry
	Self etch Prime, without blowing resin with 3:1 Placement of template and curing	X X			Bond strength may be reduced
	Flash removal with HS Flash removal with SL Flash removal manually		X	X	Use St. Handpiece
Attachment Removal	Adhesive removal with HS Adhesive removal with SL Adhesive removal; manual		X X X		Use St. Handpiece
Other Procedures					
Inter-proximal reduction	HS Handpiece St. Handpiece (rotary, reciprocating, disc) Manual abrasive strips		X	X	Use manual abrasive strips
TAD placement/removal	Handpiece Manual Driver		X	X	Manual placement if possible
Scaling teeth, roots	St. Handpiece Manual		X	X	Use hand instruments only

References

1. SDCLEP - Rapid Review of Aerosol Generating Procedures in Dentistry <https://www.sdclep.org.uk/published-guidance/covid-19-practice-recovery/rapid-review-of-agp/>
2. What is an Orthodontic AGP, British Orthodontic Society <https://www.bos.org.uk/COVID19-BOS-Advice/Recovery-Phase-Advice/What-is-an-orthodontic-AGP>
3. Evaluating dental aerosol and splatter in an open plan clinic environment: implications for the COVID-19 pandemic <https://osf.io/mot09/>

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For further information please visit www.bos.org.uk

Key	
AGP	Aerosol Generating Procedure
Non-AGP	Non Aerosol Generating procedure
HVE	High Volume Evacuation (suction)
3:1	3 in 1 air and water syringe
a/w	Air/water
HS	High speed handpiece
SL	Slow speed handpiece <60,000rpm
SEP	Self-etch prime
TAD	Temporary Anchorage Device

