

# LASER WHITENING STEP-BY-STEP

## WHITER TEETH AREN'T JUST FOR MOVIE STARS AND POLITICIANS.

It seems that everyone is in search of a brighter and more engaging smile. According to Statistic Brain Research Institute, “the tooth whitening industry rakes in over \$11 billion annually.” Obviously, there is serious interest in this form of self-improvement.

*By Heidi Christopher, RDH*



Sixty-four percent of dental offices in the United States already offer chairside whitening. If you're among them—congratulations! You're offering your patients a service they want. If you're part of the 36% not offering whitening, consider the benefits of laser whitening. It's faster than other in-office options and can help build your hygiene program.

This guide shows the step-by-step procedure for whitening using the EPIC diode laser and LaserWhite20 whitening gel. As with all treatment plans, the dentist should first perform a complete intra-oral exam and evaluate current x-rays to qualify the patient for the whitening procedure and discuss expected results.

### 1 GETTING READY

**PRO TIP:**

Take a photo of the 'before' shade to help the patient visualize the results.

- Measure and record the shade of the patient's teeth using a Vita shade guide
- Clean teeth surfaces using a pumice that does not contain glycerin. Try to remove any dental plaque and superficial stains, being careful not to abrade the soft tissue.
- Apply Vaseline to the patient's lips and insert check retractors. Use cotton rolls for increased protection and comfort.



### 3 MIX WHITENING GEL

- Remove caps from both the activator and base gel syringes. Connect the two syringes together by twisting one onto the other until fully tightened.
- Tightly grasp the plungers of both syringes. Mix whitening gel by pressing the contents of the lavender syringe into the clear syringe. Reverse and repeat 25 times. Make sure gel is consistent throughout the syringe, and continue mixing if necessary.
- Push the mixed gel into the gel base barrel, then unscrew the syringes from each other.
- Screw on a brush applicator tip.



**PRO TIP:**  
For added comfort, apply Vaseline on the mucosa in areas not protected by liquid dam.

### 2 APPLY LIQUID DAM

**PRO TIP:**

Be sure to extend the material at least half a millimeter onto the enamel, and cover any exposed root surfaces.

- Rinse and air dry the teeth and gingival tissue.
- Initiate the flow of the liquid dam by discharging a small amount onto a mixing pad or other surface.
- Starting at one end of the arch, apply the liquid dam to the gingiva to build a strip about 2 mm wide by 1-1.5 mm thick. At embrasures, express the liquid dam through the opening, filling the space completely.
- Protect one extra tooth at each end of the arch beyond those that will be whitened.
- Cure the liquid dam in sections with a standard curing light for 5-10 seconds per arch.



**PRO TIP:**

If the liquid dam runs, cure after every two to three teeth.

**96%**

of patients are concerned about appearance.

**#2**

Whitening is the second most popular procedure.

**40%**

of aesthetic dentists perform whitening.

\*American Academy of Cosmetic Dentistry

## 4 APPLY GEL

- Divide the upper and lower arches into four treatment sites.
  - Q1 Upper right quadrant (4-8)
  - Q2 Upper left quadrant (9-13)
  - Q3 Lower left quadrant (20-24)
  - Q4 Lower right quadrant (25-29)

**PRO TIP:**

To confirm consistency of application thickness, the lavender color should be even and not streaky.

**PRO TIP:**

Dispense half of the gel into mixing cup and use a small paintbrush for application if easier.

- Dry the teeth by wiping them with gauze or a cotton roll.
- Evenly apply a thin layer (approx. 1 mm) of the mixed LaserWhite20 gel over all four quadrants.
- Use only half of the gel in this application, saving the remaining gel for the second application.
- Make sure that the gel does not contact the patient's gingiva, tongue, or lips.
- Check patient for sensitivity or discomfort. If sensitivity continues, use the desensitizer included in the kit.\*
- **Do not proceed if sensitivity continues.**



## 5 LASER APPLICATION

- Ensure everyone in the room is wearing the appropriate eye protection and press the Ready button on the EPIC.
- Place the whitening handpiece, with disposable clear cap attached, about 1mm from Q1 without contacting the gel.
- Activate the laser by pressing down on the foot pedal and hold the handpiece in place for the duration of laser delivery of 200 J, about 30 seconds.
- Repeat for Q2, Q3 and Q4.
- Repeat for all quadrants one more time (each quadrant will receive two doses).
- Remove gel using a surgical suction tip. Flush lightly with an air and water spray to remove any residual gel, if necessary.

**PRO TIP:**

Allow gel to remain on teeth for a minimum of five minutes after last laser cycle.



\*Desensitizer not available in Canada.

## 6 SECOND APPLICATION

- Replace brushed applicator tip with new tip and reapply LaserWhite20 gel using above steps, using remaining half of gel.
- Repeat laser application steps above. Each quadrant will now have four doses of laser energy.
- Allow gel to sit five minutes after last laser cycle and remove.

## 7 FINAL STEPS

- Rinse teeth thoroughly with water from syringe.
- Remove liquid dam by sliding the tip of an explorer or forceps between the gingiva and the barrier, carefully lifting it away.
- Use an explorer or floss to remove any residual liquid dam from interproximal spaces and rinse again.
- Perform a final polish with a fine grade paste to give luster and shine to the teeth.
- Apply a moist cotton gauze over the gums and teeth and wait a few minutes to rehydrate the tissue and enamel.
- Measure and record the shade using a Vita Shade Guide Brightness Scale. Compare initial shades with final shades and discuss with patient.



**PRO TIP:**

Take a photo of patient and post to social media, with the patient's permission of course.

**PRO TIP:**

Use a new lip balm branded with the office information and put in the patient's take home kit.

### ABOUT THE AUTHOR

Heidi Christopher currently practices as a clinical hygienist, owns a staffing service, TDH Employment Referrals, specializing in placement of dental hygienists with advanced skills. Heidi actively provides laser training as a AGD PACE CE provider through her own company and serves as an instructor & lecturer for the International Center for Laser Education (ICLE) and the World Clinical Laser Institute (WCLI).

