CONGRATULATIONS!

You have embarked on a revolutionary new treatment for the treatment of nearsightedness and astigmatism known as

Orthokeratology.

These molds will change your life. However, you must take proper care of your lenses and know what to do in the event of a problem. This booklet provides important instructions and information. Please read it completely and keep it handy in case you have any questions. It is also available on the website (www.orthoklondon.ca) under the Patient Care Information menu.

WHAT TO EXPECT DURING THE FIRST FEW DAYS OF TREATMENT

► The lenses will feel a bit scratchy during the first few nights of wear. All molds are fit flatter than your original corneal shape, so they will feel loose and floppy in the beginning. Molding treatment involves gently pressing on the steeper central portion of your cornea and smoothing the shape flatter. As your eye reshapes, the comfort improves.

► Your initial prescription, your age, the shape of your eyes and your strict compliance with our instructions will determine how quickly we reach your goal. During the initial treatment phase, we may provide temporary soft contact lenses until we reach our goal. Please be patient, amazing vision without daytime contact lenses is on its way.

► Typically, we expect to see 90% of the vision changes within the first week of treatment and full treatment within two weeks. Some eyes will require a longer period of time to complete the process.

► Initially, you may find your excellent vision slips a bit later in the day. If this occurs, we may ask you to wear disposable lenses until full treatment is achieved.

► Don’t compare yourself to others who have undergone molding. Each person’s response varies.

► You may feel confused about how to care for your lenses or have many questions. CALL THE OFFICE or send us an email. This procedure is new to you and it is only natural to have questions. We are here to help.
LENS WEARING SCHEDULE

Contact lenses are medical devices regulated by Health Canada. Maintaining healthy eyes and proper vision includes diligent lens care, adhering to the prescribed wearing schedule and regular examinations. Your mold lenses are designed to be worn while you sleep and removed when you awake.

FIRST FEW NIGHTS OF WEAR

Insert your lenses as directed. Go right to sleep so the molds center for maximum treatment. Sleep a minimum of 7-8 hours ON YOUR BACK. You may need to prop your head with pillows to keep from rolling over. Continue to sleep on your back for the next 3 nights as well.

LENS CARE

To a large extent, lens wear success will depend on carefully following the instructions we have provided. To best meet your needs we have recommended the following lens care products:

<table>
<thead>
<tr>
<th>CLEANING</th>
<th>Boston Advance Cleaner</th>
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<tbody>
<tr>
<td>DISINFECTION/STORAGE</td>
<td>Clear Care, Boston Advance Conditioning Solution, Boston Simplus</td>
</tr>
<tr>
<td>INSERTION &amp; RINSING</td>
<td>Boston Advance Conditioning Solution, Sterile Contact Lens Saline</td>
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<tr>
<td>REWETTING</td>
<td>Refresh Optive, Systane Ultra, Blink</td>
</tr>
<tr>
<td>OTHER</td>
<td>Boston One Step Liquid Enzymatic Cleaner for weekly protein removal</td>
</tr>
</tbody>
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**IMPORTANT:** Only use the solutions listed above. If you change solutions you may damage your lenses, damage your eyes or interfere with your corneal treatment/molding. If you can’t find the solutions in the store or they are irritating you, call us at once. Always keep your bottles capped to prevent contamination. Rinse your plunger with sterile contact lens saline, dry it and store it in its container.
Inserting and Removing Your Lenses

Preparing the Lens for Wearing

Cleanliness is a very important aspect of proper care of your shaping lenses. Hands should be clean and free of any foreign substances whenever the shaping lenses are handled.

1. Always wash, rinse, and dry hands thoroughly before handling the lenses.
2. Avoid soaps containing cold cream, lotions, or oily cosmetics prior to handling your shaping lenses. These substances can adhere to the surface of the lens and are difficult to remove.
3. Handle your shaping lenses with your fingertips, avoiding the use of fingernails that can scratch or chip them.
4. Always start with the same shaping lens first to avoid mix-ups.
5. Remove the shaping lens from its storage case and examine it.
6. Prior to insertion and during cleaning examine the lenses for scratches, chips and debris remembering never to wear a lens that is not in perfect condition. Ensure each lens is being worn in the correct eye and moist with Boston Advance Conditioning Solution.

Inserting: (done just before bed) (Figure 1)

- Prior to insertion first place two or three drops of lubricating drops in each eye.
- Both the right and left lens should have been placed in its designated lens well. If the lenses are mixed up the right lens is gReen and the left lens is bLue.
- Remove the shaping lens from the case.
- Rinse the shaping lens with sterile saline solution.
- Inspect the shaping lens for cleanliness, uniform wetness, and unwanted debris.
- Place a few drops of Boston Conditioning Solution over the surface of the shaping lens to help cushion the lens upon insertion for improved comfort and to aid in the wetting properties of the lens.
- Place the lens on the top of index finger of dominant hand.
- Working over a countertop or table, bend forward and look down so that your nose is pointing straight down toward the surface you are working over. Do not work directly over a sink. If you must, be sure to close the drain.
- Lightly pull down the lower lid with your second and third fingers of the same hand that is holding the lens.
- Using your other hand pull up the upper lid (always grasp the lids right where the lashes come out (to improve your lid control).
• Gently press the lens onto your eye by looking directly at the lens as it makes contact. This will help achieve centration. (Some like to place a flat mirror on the counter so they can see themselves during insertion). It is not necessary to press the shaper on the eye, for as soon as it touches the tear film it will adhere – you do not need to push the lens onto the cornea.

• Upon insertion slowly and gently release the lids and blink. The shaping lens should center automatically. To minimize lid sensation during the initial adaptation process sit up straight and look downwards.

• If you experience profuse tearing and moderate to severe irritation or discomfort remove the lens, rinse thoroughly with sterile saline, add conditioning solution to the lens surface and reinsert when the eye normalizes. There will be mild lens awareness upon insertion. At no time should you wear a lens that is excessively uncomfortable.

• If you inadvertently place the lens onto the white of your eye, it must be removed. You cannot slide the lens into place. Remove and repeat insertion ensuring the lens is coated with conditioning solution.

• Empty the lens container of the used disinfecting solution and let air dry.

• Use the same technique to insert the other lens.

Wearing Schedule of Your Lenses
• Lenses are inserted just before bedtime.

• It is normal to have some mild discomfort when initially inserted. If it is excessive and persistent there likely is an object on the undersurface of the lens. Simply remove the lens, rinse with sterile saline, coat the lens with conditioning solution and reinsert. Never wear a lens if you have significant discomfort.

• At least 7-8 hours of overnight wear is required to achieve optimum corneal reshaping effect.
Removing the Lenses

Before attempting to remove a shaping lens, it is very important that the wearer verify that it is moving or not bound or adhered to the eye. First wash your hands with soap, rinse thoroughly with water and dry hands before handling the lenses. As a general practice before removing your lenses instill two to three drops of artificial tears. Oftentimes an adhered lens will begin to move spontaneously after instillation of the drops and a few minutes of forceful blinking. Wait until the shaper begins to move freely with the blink before attempting to remove it. To remove the lens first wash, rinse and dry your hands thoroughly then look upwards and place your finger at the lower eyelid margin at the edge of the shaper to gently but firmly apply pressure. Looking downward, the process is repeated using the fingertip placed on the upper eyelid at the shaper edge. Then look straight ahead and blink several times. Repeat process a few times if necessary. Once the shaping lens begins to move, it can be removed using one of the following methods:

Method One: Suction Holder (Figure 2)

This method is the easiest and can be used most often but other methods should be learned in the event the suction holder is lost or not available. Always check that the lens is in and on the cornea and moveable before attempting to use a suction holder. Squeeze the bulb of the moistened suction holder (with saline or conditioning solution only) and firmly place the end gently against the dome of the lens and release the pressure on the bulb and slowly withdraw both holder and lens.

![Figure 2](image)

Method Two: Lid Manipulation Method (Figure 3)

Look straight ahead into a mirror. Place the index finger of one hand on the upper lid above the lens and the index finger of the other hand on the lower lid below the lens. Pull the lids slightly apart to reveal the whole of the lens. Gently press the lids on the eye and move the fingers towards each other. The lens should then come away from the eye and be removed by the two fingers.

![Figure 3](image)
Method Three: Blinking Method (Figure 4)

Work over a table and hold the free hand cupped to catch the lens. Bend the head slightly down and open the eye as wide as possible so that both lids are beyond the edges of the lens. Stare straight in front of you and place a finger at the outer edge, separating the lids. Pull the lids towards the direction of the top of the ear and give a strong blink, where the lens should be ejected from the eye. At first it may stick to the lashes from where it is easily removed.

![Figure 4](image)

Advice on caring for your lenses

- Hands must be clean and free of creams. All traces of soap must be rinsed off. Avoid contamination of the lenses with perfumes, hair spray etc.
- While handling the lenses always work over a smooth soft surface (hand towel spread over a table). This avoids scratching or losing a lens on the floor.
- If the lens is dropped, do not move until the lens is located. Always lift a dropped lens by wetting a fingertip or suction holder with conditioning solution or artificial tears or saline. Lenses must not be slid across table surfaces.
- Never wipe lenses with a handkerchief or other material. If wiping is necessary use only the softest of paper tissues (lint-free)
- To avoid distorting the lenses never leave them near heat and always handle them very gently. Avoid holding the lenses by the edges.
- Fingernails should be cleaned and kept reasonably short to avoid scratching the eyes.
- Never use tap water, shower or swim or contact your lenses with any solutions not approved for rigid contact lens use. A very dangerous organism known as **Acanthamoeba** present in soil, water and contaminated surfaces can severely affect all contact lens wearers. **Corneal infections from this and other microorganisms can cause very serious infections to the cornea that can result in blindness.** Thus, meticulous and special care must be taken with your lenses to minimize any potential complications.
- If working over a sink ensure that it is plugged to prevent loss of the shaping lens.
- Never lick the lenses as harmful organisms can be transferred from the mouth to the eye.
Hygiene, cleaning and storage

Absolute cleanliness is essential in the handling and storage of contact lenses. In order to prevent dirt or harmful organisms being transferred to the eye the following rules should be observed:

- Always wash, rinse, and dry hands thoroughly before handling the lenses.
- **To clean the lenses** remove and place them in the palm of your hand and gently rub the front side of the lens in a radial pattern with two to four drops of *Boston Advance Cleaner* for **twenty (20) seconds**. Then place two drops of the cleaner in the bowl (inside) of the lens, then using a Q-tip gently clean the bowl being careful not to apply excessive pressure also for twenty seconds. This is done prior to placing the lenses in the appropriate holder with **CLEAR CARE® Solution**.
- Rinse lenses thoroughly with either Clear Care or sterile saline so that all the cleaner is removed from the lenses. Never use Boston Advance Cleaner directly in the eye or inadequately rinse the lens as this will cause severe ocular irritation.
- Return the contact lenses to the appropriate holder and close the baskets. Thoroughly rinse the lenses for 5 seconds through the basket with CLEAR CARE solution.
- Fill the lens case to the scribe mark with CLEAR CARE solution and place the contact lens holder in the appropriate CLEAR CARE case which has a disc at the bottom of the lens holder. Tighten the cap and store the contact lenses in the case **upright** for at least **six (6) hours**. This time is required to ensure the complete neutralization by the disc of the hydrogen peroxide present in CLEAR CARE. Do not shake the lens case.
- To avoid burning or stinging, **never put CLEAR CARE solution directly in or around your eyes**.
- Do not remove lenses from the lens case before the six-hour soak time is complete as residual hydrogen peroxide may cause severe ocular irritation.
- Also, make sure to put away your CLEAR CARE solution and Boston Advance Cleaner so that it is not accidently mistaken as a multi-purpose solution by a guest or family member.
- Old cases of Clear Care should be replaced and discarded before one hundred (100) uses or at least every three (3) months for hygienic reasons and the disc at the bottom of the case used to neutralize the hydrogen peroxide in CLEAR CARE becomes less effective. Failure to replace the case and disc results in residual hydrogen peroxide even after the 6 hour soak time that is very toxic and if inadequately neutralized can result in severe ocular irritation.
Hygiene, cleaning and storage

Once a week it is necessary to use Boston Liquid Enzymatic Cleaner to remove protein deposits as follows:

- After daily cleaning place lenses in a regular lens (non-Clear Care) case and fill to top with fresh Boston Advance Conditioning or Boston Simplus solution. It is important that the lens case is completely filled with fresh solution to ensure proper dilution of the Boston One Step Liquid Enzymatic Cleaner and reduce any chance of irritation.

- Next instill two drops of Boston One Step Liquid Enzymatic Cleaner into each lens well. Soak lenses for at least four (4) hours (or overnight) before wearing to ensure proper cleaning and disinfecting. Always use fresh solution for soaking and storing lenses.

- After removing lenses from the lens case, rub and rinse lenses for approximately five (5) seconds with sterile saline to ensure that the enzymatic cleaner is thoroughly rinsed off the lenses.

- As before insert two to three drops of artificial tears into each eye and apply Boston Advance Conditioning solution to wet the lenses for additional cushioning and insert.

- The case should be emptied of the old solution, cleaned by rubbing and rinsing with sterile saline, air dried and stored outside the bathroom caps and case down on a clean paper or cloth towel to avoid contamination. Fresh solution should always be used after each cleaning.
How to relocate a dislocated lens

1. Wash hands thoroughly with soap, rinse thoroughly with tap water and dry thoroughly
2. With the aid of a mirror, pull the lids away from the globe and tilting your head where necessary; look into the mirror at different directions to locate the lens.
3. Once located, look in the opposite direction of the dislocated lens (Figure 5a) and turn head such that you are now looking into the mirror.
4. With one index finger on the upper lid and one on the lower lid, manipulate the lid margins to just outside the rim of the lens (Figure 5b).
5. Gently nudge the lens back onto the cornea or with the lens held in position, look towards the lens. (Figure 5b).

Example: If the right lens dislocates out and down as in Figure 5a, turn/tilt your head and look in and up. Look into the mirror and limit lens movement by pressing the eyelid margins just outside the lens rim with two fingers. Then look towards the lens (that is, looking out) and the lens will be relocated properly. (Figure 5c)

DO’S AND DONT’S

DO:

1. Replace lenses on schedule recommended by the doctor.
2. Cut fingernails.
3. Clean case after every use.
4. Clean lenses after every use.
5. Put on makeup after inserting your lenses.
6. Replace the contact lens case at least every three months or every time you buy solution whichever comes first.
7. Keep all scheduled follow-up appointments with the doctor.
8. Wear your lenses at least 7-8 hours to attain the orthokeratology effect.
DO NOT:

1. Do not use tap water on your lenses or on your eye.
2. Do not use homemade saline on lenses or your eyes.
3. Do not top up solution; always use fresh solution.
4. Do not wear lenses past the recommended schedule.
5. Do not swim with lenses.
6. Do not hold your lenses by the edges when rinsing, it can warp the mold, diminishing your treatment.
7. Do not drag your lens out of the case, it could get scratched.
8. Do not let anyone else wear your lenses.

If you have any questions about your contact lenses or are experiencing difficulty with their insertion or removal, please call our office.

One of the most serious complications related to contact lens wear is microbial keratitis. The symptoms are:

- Redness
- Pain
- Discharge
- Sensitivity to light
- Blurred vision

**NOTE:** if you experience any of the above symptoms, contact the office immediately. If the clinic is closed, contact your family doctor or the hospital emergency room. Let the attending physician know you are a contact lens wearer.

Another complication of contact lens wear associated with poor care of the contact lens is giant papillary conjunctivitis (GPC). It is a reaction by the body's immune system to deposits on contact lenses.

**Symptoms of GPC are:**

- Itching
- Mucous discharge
- Decreased lens wearing time
- Increased lens awareness
- Excessive lens movement

**NOTE:** If you have any of the following symptoms, please see your optometrist immediately. Treatment may involve eye drops and/or discontinuation of contact lens wear for a period of time until the condition subsides.

**REMEMBER: IF IN DOUBT, TAKE THEM OUT!**

Remember, we don’t like brave patients. If you have any of the symptoms mentioned above or have any concerns whatsoever, please contact us. Dr. Fenn can be reached after hours in an emergency at (519) 673-9201. If there is no response please call (519) 754-8841.
TIPS FOR IMPROVED SUCCESS

Make Up:

Only remove your make up with baby shampoo. Oil-based removers will allow oil to penetrate your lids and place a film on your lenses. Oil-free removers are solvents and may damage your lenses and disturb your tear film resulting in dry irritated eyes. Never put liner on the pink margin of your lids. It can plug or infect your lid glands.

Lens Handling and Hygiene

If you drop your Ortho-K lens, always re-clean it thoroughly and rinse several times with saline. If it is stuck to the floor, use your plunger to remove it. If it falls in the drain, do not wear it until it has been re-sterilized with Clear Care for 6 hours.

When not to wear your lenses:

- When you are sick (cold, flu, have an infection, etc.)
- When you have an eye infection
- If your eyes are red, irritated or have discharge
- If the lenses are damaged, cracked or chipped

When to insert your lenses:

Right before you go to sleep. If you wear your lenses while your eyes are open, gravity will pull the lenses downward and they will stick off center. This will drastically affect your treatment success.

Follow Up Visits:

These are essential for proper corneal molding. Please always bring your lenses to each visit. Bring them to the office in a regular (non Clear Care) case filled with Boston Conditioning or Boston Simplus Solution. We will be checking your corneal health, the treatment success and the condition of your lenses. We will also answer any questions or concerns you have (so write them down do you won’t forget). If visits are missed, this could jeopardize the treatment or your eye’s health.
**SPARE PAIR**

We recommend a spare pair of therapeutic mold lenses to insure uninterrupted treatment. Therapy will be compromised or disrupted due to lost or damaged lenses. However, if you need to replace a mold lens due to loss or damage, it can be ordered for $150 per lens.

**PATIENT RESPONSIBILITIES**

- Follow all verbal and written instructions.
- Attend all scheduled appointments.
- Report all problems, concerns and questions to the doctor at your follow up visit.
- Provide the office with advanced notification should you be unable to attend one of your follow-up visits.
- Use only the prescribed lens care solutions system.
- Comply with the prescribed wearing schedule of the lenses.
- Report all treatment related emergencies immediately by calling the office or the emergency numbers provided.

**FOR YOUR CONTINUED SUCCESS**

Professional care does not end with the dispensing of your final lenses. In order to maximize success, we recommend the following:

**Sunglasses:**

Always wear high quality UV absorbing lenses while outdoors-even on cloudy days.

**Up-To-Date Eyeglasses:**

Do not discard your old glasses. You may become ill and unable to wear your lenses for a while. In that case, your treatment will regress and you will need glasses to see until you are better.

**Periodic Eye Health and Contact Lens Evaluation:**

You will be asked to return to our office every 6 months to have the health of your eyes and the fit of your lenses evaluated. In addition, we will inspect your lenses and deep clean them. The eye shape may change, altering the fit of the lens. This could jeopardize the health of your eye. Further, the ability of your eye to tolerate a lens may change. This could result in progressive scarring of the eye. If detected early at your regular examination this can be remedied. If left undetected, this may cause damage to your eye and vision.
EMERGENCY CARE

You have after hours access to Dr. Fenn for eye health emergencies. If problems occur during normal office hours, call 519-673-0210. However, if after hours you experience any of the below signs or symptoms you can call me at (519) 673-9201 or if no response (519) 754-8841. In addition urgent care at St. Joseph’s Hospital always has an ophthalmologist on call for ocular emergencies. Call if you have:

- Severe redness
- Light sensitivity
- Eye pain
- Blurred or foggy vision
- Significant tearing or discharge