

Letter to Eyecare Practitioners from Professor Brien Holden, Sydney, Australia

Microbial Keratitis and Contact Lens Wear

There have been reports of corneal infections occurring in association with swimming and contact lenses. We don't yet know whether swimming while wearing lenses is a definite risk factor for microbial keratitis, but we do know that exposure of contact lenses to contaminated water should be avoided.

We have had two cases of MK in NSW in people who have swum recently. One was a daily wear patient, the other, extended wear, each with different types of soft lenses. We have no idea whether this has any relation to the quality of the water and the drought but we did previously find that the cycle of bacterial contamination in Sydney water did correlate with the frequency of bacteria driven adverse events (Willcox 1997).

Informing Patients

Until we know how to eliminate these problems all together we suggest that the following message be strongly delivered to every contact lens patient.

Dear Contact Lens Wearer

There have been a number of recent reports of contact lens wearers having eye infections after swimming. We don't know if water quality is an issue, especially during times of drought, however we urge you to adopt some simple rules:

- 1. Do not swim in your lenses without swimming goggles - you could get an infection, which if left untreated could lead to a scar or, in rare cases, loss of vision.**
- 2. If you remove your lenses and store them for any period of time, make sure that they are properly cleaned and disinfected before putting them back in your eyes.**
 - Our preferred methods are:**
 - Clean and disinfect using a peroxide system with a 4-6 hour soak prior to wear, or**
 - Thoroughly rub and rinse the lens with multipurpose solution followed by a 4-6 hour soak in fresh solution prior to wear**
- 3. Use a new disposable case for storage.**
- 4. Never use 'old' lenses, solutions or cases.**
- 5. Do not wear lenses if your eyes become red or sore. Remove them immediately and call your practitioner without delay. Don't wait.**
- 6. Do not wear lenses if you are sick.**
- 7. Have an up-to-date pair of spectacles available for you to wear if you need to remove your lenses.**

This advice is issued by the Vision Cooperative Research Centre in cooperation with Australian contact lens practitioners and the contact lens industry in the interests of promoting safe, trouble free contact lens wear.

Please contact us

You can download the patient card free of charge for use in your practice direct from the silicone hydrogels website <http://www.siliconehydrogels.org>, or can order copies of the card from Vision CRC by phoning +61 2 9385 7516 or through email k.evans@visioncrc.org. If you wish, the cards can be customized to your practice at minimal expense.

We are interested in every case of microbial keratitis that occurs in contact lens wearers in Australia and New Zealand. We would like you to telephone (1800 883365) or email us at MK@crCERT.unsw.edu.au as soon as possible if you hear of any case of suspected MK.

We will maintain the strictest confidentiality, obtain all the appropriate permissions and cooperate with you to find out why such events occur. It is critical that we hear as soon as possible so that we can have the best chance of understanding the related environmental risk factors.

Reference: Willcox MDP, Power KN, Stapleton F, Leitch C, Harmis N, Sweeney DF. 1997. Potential sources of bacteria that are isolated from contact lenses during wear. *Optom Vis Sci.* 74: 1030-1038.