The Use and Handling of Toothbrushes

Tooth brushing with a fluoride toothpaste is a simple, widely recommended and widely practiced method of caring for one’s teeth. When done routinely and properly, tooth brushing can reduce the amount of plaque which contains the bacteria associated with gum disease and tooth decay, as well as provide the cavity-preventing benefits of fluoride.

To date, the Centers for Disease Control and Prevention is unaware of any adverse health effects directly related to toothbrush use, although people with bleeding disorders and those severely immuno-depressed may suffer trauma from tooth brushing and may need to seek alternate means of oral hygiene. The mouth is home to millions of microorganisms (germs). In removing plaque and other soft debris from the teeth, toothbrushes become contaminated with bacteria, blood, saliva, oral debris, and toothpaste. Because of this contamination, a common recommendation is to rinse one’s toothbrush thoroughly with tap water following brushing. Limited research has suggested that even after being rinsed visibly clean, toothbrushes can remain contaminated with potentially pathogenic organisms. In response to this, various means of cleaning, disinfecting or sterilizing toothbrushes between uses have been developed. To date, however, no published research data documents that brushing with a contaminated toothbrush has led to recontamination of a user’s mouth, oral infections, or other adverse health effects.

On this page—

- **Recommended Toothbrush Care**
- **Toothbrushing in Group Settings**

**Recommended Toothbrush Care**

- Do not share toothbrushes. The exchange of body fluids that such sharing would foster places toothbrush sharers at an increased risk for infections, a particularly important consideration for persons with compromised immune systems or infectious diseases.

- After brushing, rinse your toothbrush thoroughly with tap water to ensure the removal of toothpaste and debris, allow it to air-dry, and store it in an upright position. If multiple brushes are stored in the same holder, do not allow them to contact each other.

- It is not necessary to soak toothbrushes in disinfecting solutions or mouthwash. This practice actually may lead to cross-contamination of toothbrushes if the same disinfectant solution is used over a period of time or by multiple users.
• It is also unnecessary to use dishwashers, microwaves, or ultraviolet devices to disinfect toothbrushes. These measures may damage the toothbrush.

• Do not routinely cover toothbrushes or store them in closed containers. Such conditions (a humid environment) are more conducive to bacterial growth than the open air.

• Replace your toothbrush every 3-4 months, or sooner if the bristles appear worn or splayed. This recommendation of the American Dental Association is based on the expected wear of the toothbrush and its subsequent loss of mechanical effectiveness, not on its bacterial contamination.

A decision to purchase or use products for toothbrush disinfection requires careful consideration, as the scientific literature does not support this practice at the present time.

**Tooth brushing Programs in Schools and Group Settings**

Tooth brushing in group settings should always be supervised to ensure that toothbrushes are not shared and that they are handled properly. The likelihood of toothbrush cross-contamination in these environments is very high, either through children playing with them or toothbrushes being stored improperly. In addition a small chance exists that toothbrushes could become contaminated with blood during brushing. Although the risk for disease transmission through toothbrushes is still minimal, it is a potential cause for concern. Therefore, officials in charge of tooth brushing programs in these settings should evaluate their programs carefully.

Recommended measures for hygienic tooth brushing in schools:

• Ensure that each child has his or her own toothbrush, clearly marked with identification. Do not allow children to share or borrow toothbrushes.

• To prevent cross contamination of the toothpaste tube, ensure that a pea-sized amount of toothpaste is always dispensed onto a piece of wax paper before dispensing any onto the toothbrush.

• After the children finish brushing, ensure that they rinse their toothbrushes thoroughly with tap water, allow them to air-dry, and store them in an upright position so they cannot contact those of other children.

• Provide children with paper cups to use for rinsing after they finish brushing. Do not allow them to share cups, and ensure that they dispose of the cups properly after a single use.

Page Located on the Web at http://www.cdc.gov/oralhealth/infectioncontrol/factsheets/toothbrushes.htm