HEPATITIS C IS A DISEASE OF THE LIVER CAUSED by a virus called the hepatitis C virus, or HCV. The U.S. government estimates that about three million Americans have chronic HCV infection. The virus is spread by blood-to-blood contact; primarily through use of shared needles for illicit injection drug use. Sexual transmission and transmission from mother to child are also possible, but less common. Although many people with hepatitis C have no symptoms, over time the disease can cause serious liver damage including cirrhosis (scarring) and liver cancer. There is no vaccine to prevent HCV infection, but there are several important measures people can take to reduce the risk of transmission.

How is HCV Spread?
Hepatitis C is a blood-borne infection, which means it is spread through contact with the blood of an infected person. The most common method of transmitting HCV is through sharing needles used to inject drugs. Healthcare workers may contract HCV infection through needle-sticks with contaminated needles or other accidental exposures on the job. In at least 1 in 10 cases, people have no identifiable risk factors for infection; in other words, it is not known how they got hepatitis C.

Since HCV is a blood-borne virus, it can—at least in theory—be transmitted by contaminated personal items such as razors or nail care equipment. Any equipment used by manicurists, estheticians, barbers, and cosmetologists that may come into contact with HCV-infected blood might transmit the virus. This can happen when a small amount of HCV-containing blood—even a tiny amount that is too small to see—stays on the equipment after it is used on one person, and then comes into contact with the bloodstream (through a cut or other open area on the skin) or mucous membranes (such as the mouth or nostrils) of another person on whom the same equipment is later used. Personal equipment that is shared between persons and can come into contact with blood and spread HCV includes tattooing and body piercing needles and other equipment; cuticle scissors, nail files, and emery boards; razors and hair clippers; hair removal tools such as tweezers and electrolysis equipment; and even hair-cutting scissors and combs.

The transmission of viral hepatitis through personal care procedures has not been well studied. The U.S. Centers for Disease Control and Prevention (CDC) has not reported documented cases of HCV being transmitted this way. Nevertheless, the agency issued health and safety guidelines for personal care professionals in 1985. State laws regarding health and safety standards in personal care settings vary widely. The California Department of Health Services recently released a report about a woman whose only known risk factor for getting hepatitis C was regular visits to a nail salon.

Keeping it Safe
DISPOSABLE ITEMS
Some tools used by tattooists, piercers, manicurists, and barbers should be used only once, on a single person. Most professional tattooists, piercers, and electrologists use new, disposable needles for each customer; disposable ink pots should also be used. Paper emery boards, files, orange wood
sticks, cotton balls or swabs, sponges, neck strips, and other items that cannot be cleaned should be used on only one person and then thrown away. Whenever possible, substitute single-use items for reusable items.

**RISKY ITEMS**

Blade or scraper tools used to trim calluses (such as Credo blades) are especially likely to come into contact with blood. The California health code prohibits the use of such tools in nail salons. Needle-like instruments used to extract skin blemishes are also prohibited. Cutting cuticles presents a risk for contact with blood, and many experts recommend that nail salon workers should not cut cuticles. Straight razors are also likely to draw blood; therefore, disposable blades or safety razors should be used and discarded after each customer.

**CLEANING AND DISINFECTING**

Equipment that is used for more than one person should be properly cleaned and disinfected between users. For procedures that pierce the skin, disposable tools should be used unless they can be completely sterilized (that is, made completely germ-free). Sterilization can be done using steam or dry heat. An autoclave is a machine that sterilizes using both heat and pressure.

Other types of tools should be cleaned using a disinfectant solution. Commercial products such as Barbicide disinfect rather than sterilize. Although not well studied, research suggests that commercial solutions may not kill HCV. Look for an EPA-registered hospital grade product that kills bacteria (bactericide), viruses (virucide), and fungi (fungicide). Immerse items in the solution for at least 10 minutes (some experts recommend 20 minutes). Small items may be stored in the disinfectant solution between uses. Commercial solutions should be changed at least once per week or when visibly dirty. Alternatively, alcohol, chlorine, or a 10% solution of bleach and water may be used for disinfection. Although the effectiveness of bleach has not been studied, most experts recommend soaking items in a bleach solution for 10 minutes. Bleach solution should be made fresh daily and kept away from sunlight.

Although the actual needles and blades are disposable, tattoo guns, razor blade handles, and electrolysis machines should be cleaned with a disinfectant solution between users.

**WORK SPACE PRECAUTIONS**

Work-spaces should be set up so that new or clean and used or dirty equipment is separated and cannot be mixed up. Cover work surfaces with a clean cloth or paper towel or sheet before each customer. Lotions, powders, and other products should be kept in containers that allow for dispensing a portion of the product without contaminating the container, and sanitary applicators should be used for cosmetics.

Work surfaces should be disinfected between users. Manicurists should not use soaking water for more than one customer. Soaking bowls and foot spas should be disinfected after each user. Counters, chairs, lamps, and other surfaces should be cleaned regularly with a disinfectant solution. Used razor blades and other sharp items should be discarded in a puncture-proof container. Nail and hair cuttings should be disposed of properly. Used towels, sheets, and gowns should be placed in a covered receptacle and washed in hot water with detergent.

Personal care professionals should be educated about disease transmission and trained to use proper health and safety procedures. Manicurists, cosmetologists, barbers, estheticians, and electrologists must be licensed in most states. Workers should wash their hands with soap and water before each customer and, if appropriate, wear disposable gloves. Any cuts or sores should be covered with waterproof bandages.

**PERSONAL USE ITEMS**

To be as safe as possible, some customers prefer to bring their own equipment with them to the nail salon or barbershop. This is especially important for items like cuticle scissors and razors that are likely to come into contact with blood. Some professionals will keep personal client packs or kits at the salon with tools to be used only for a specific customer.

Finally, as is the case with equipment used in nail salons, hair salons, and barbershops, personal health and beauty items used at home, including nail files, razors, toothbrushes, and pierced earrings, should not be shared.