

Guidance Note on Managing Public Health Risks Associated with Fish Pedicures

(Based on Guidance issued by HPA UK)

Over the last number of years a number of establishments/salons have begun to offer “Fish Pedicures” - a well established procedure in the Middle and Far East - to clients. During this procedure, clients immerse their feet into a tank of water containing *Garra rufa* fish (which is a small toothless species of carp) which are attracted to the skin of the feet. The fish nibble off any dead or thickened skin. The process usually takes from 15 to 30 minutes. Any longer and the possibility is raised of damage to the skin and subsequent bleeding.

As the fish are alive, and in an aquatic environment, it is not possible to ensure absolute hygiene and so the question of infection risk has been raised regarding this procedure, since the water in which the fish are contained will potentially contain aquatic microorganisms including bacteria, viruses and parasites, and these may pose a potential risk to human health.

The HPA in the UK have produced extensive Guidance in relation to this procedure (http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1317131045549) and HSE-HPSC would endorse the findings and guidance produced by the UK.

The possibility exists that infection may be transmitted from fish and the water to the clients undergoing the pedicure, including:

Transmission from the fish or fish tank:

- *Aeromonas*: a bacterium that causes quite a severe gastroenteritis
- *Mycobacterium marinum*: a bacterium that causes a chronic skin condition
- *Salmonellae*: a bacterium that causes gastroenteritis
- *Vibrio cholerae*: bacterium that causes serious gastroenteritis

Transmission from the water:

- *Pseudomonas aeruginosa*: this can lead to infection in the lungs, the urinary tract, and kidneys and skin, especially in those with weakened immune systems
- *Staphylococcus aureus*: a bacterium that causes skin infection

Transmission from person to person via water:

- *Hepatitis B* : this can lead to a sometimes very severe hepatitis or inflammation of the liver

- [Hepatitis C](#): this can lead to a sometimes very severe hepatitis or inflammation of the liver
- [HIV](#): HIV is the virus that causes AIDS.

Transmission from person-to person via surface contact:

- Athlete's foot
- [Human Papillomaviruses](#): these can cause verrucae.

In general, the risk of infection from fish pedicures in which *Garra rufa* fish are used is likely to be very low, but cannot be completely excluded. This is especially true in those with weakened immune systems.

It is crucial that adequate standards of hygiene are maintained in fish pedicure salons. **Staff should always wear single-use latex gloves during all foot inspections.** In addition, staff should wash their hands regularly especially after touching clients' feet and after any contact with fish or tank water. In addition, after the procedure, the clients' feet should be washed thoroughly with soap and hand-hot water.

A) Pre-immersion

- Clients attending fish pedicure spas should be provided with information about fish pedicures including those conditions which are contraindications (absolutely not recommended) to having a fish pedicure these include:
 - Leg waxing or shaving in last 24 hours
 - Any open/weeping cuts/wounds/abrasions/broken skin on the feet or lower legs.
 - Infection on the feet (such as athlete's foot, verruca)
 - Psoriasis, eczema or dermatitis (including pompholyx) affecting the feet or lower legs
 - Diabetes
 - Infection with a blood-borne virus such as hepatitis B, hepatitis C or HIV
 - Any immune deficiency due to illness or medication (including patients with cancer or on anticancer medication)
 - Bleeding disorders or on anticoagulant medication (e.g. heparin or warfarin)
- Clients should be asked to sign a form to confirm they have read and understood the information given, and are not aware of any contraindications to the treatment.
- Foot inspection: feet should be inspected for signs of cuts/wounds/abrasions/broken skin. Particular attention should be paid to the skin of the cuticle, the nail groove and beneath the nails. If breaks in the skin are detected the client should be given another appointment for a time when the skin will have fully healed. Staff inspections should be carried out by suitably qualified personnel.

- Jewellery, nail polish, false nails should be removed as they may impede an accurate assessment of the condition of the skin and nails.
- Prior to immersion, clients feet should be washed in hand hot soapy water and rinsed thoroughly afterwards.

B) Post-immersion

- Clients' feet should be washed after the procedure and inspected for any signs of bleeding.

Clients and staff should wash their hands in hand-hot soapy water following immersion to prevent any potential spread of infection.

C) Post-procedure Bleeding

- If bleeding is observed from the feet of clients following the pedicure or blood is noted in the tank, the fish should be removed to a fresh tank and the original tank emptied and cleaned with detergent and warm water. The tank should be disinfected with hypochlorite solution (at a concentration of 1000 parts per million) and then rinsed thoroughly before being used to house fish again.
- If bleeding has occurred, any visible blood on surfaces where other clients could walk barefoot should be cleaned and then the area disinfected with hypochlorite solution at 10,000 parts per million available chlorine. The hypochlorite solution should be left in contact with the surface for 10 minutes before rinsing.

D) After effects

- If, following the pedicure, clients develop problems with their feet or heels; they should be advised to seek advice from their GP.