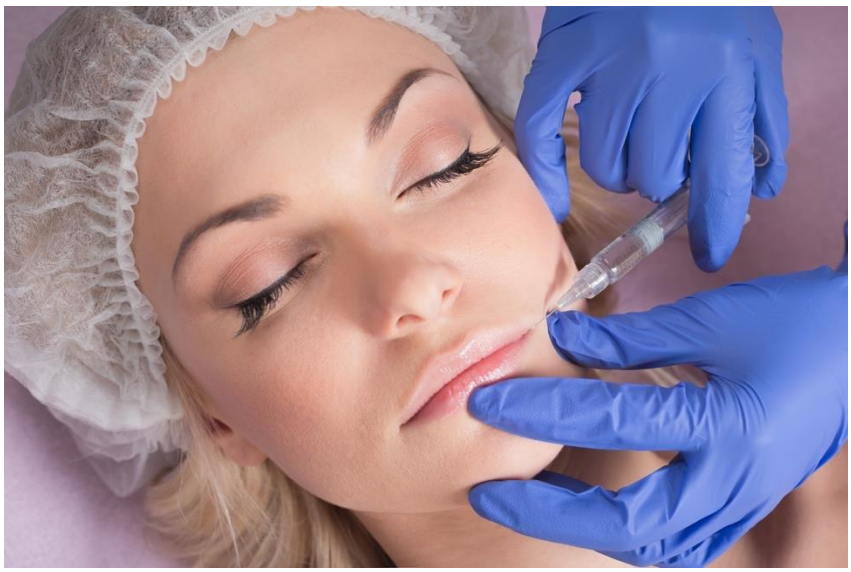
Dermal Filler Training Manual



Health & Safety at Work Act

The purpose of this act is to promote, stimulate and encourage high standards of health and safety at work. It protects not only all people at work – whether employers, employees, or self-employed – but also the health and safety of the general public who may be affected by your work activities.

Main Duties of employers

Employers must safeguard so far as reasonably practicable the health, safety and welfare of the people who work for them. This also applies in particular to the provision and maintenance of safe systems of work, and covers all machinery, equipment and products used.
All reasonable precautions must be taken in the use and handling of any substance likely to cause a risk to health. All storage and transport arrangements should be kept under review.
Employers need to provide any necessary information, instruction and training in safe practices. Consider specific training needs with particular reference to processes and activities with special hazards.

Provide a safe place of work including safe means of access to and from it. Welfare facilities and arrangements must be adequate.

Duties to others

An employer must carry out his work in such a way that it does not affect the health and safety of others i.e. other employees, members of the public.

Duties of employees

All employees must take reasonable care for the health and safety of themselves and of other persons who may be affected by what they do, or fail to do, at work. This duty implies positive steps to understand the hazards in the workplace, to comply with safety rules and procedures, and to ensure that nothing they do or fail to do puts themselves or others at risk.

Action Plan

1. If you have 5 or more employees, do you have a written Health & Safety policy?
2. Does your policy state who is responsible for carrying out the policy?
3. Have you explained the policy to your staff, and do they understand it?
4. Is your policy reviewed regularly?
5. Are all your staff trained in Health & Safety?
6. Do you provide all the correct PPE (personal protective equipment)?

Workplace (Health, Safety and Welfare) Regulations 1992

The Workplace (Health, Safety and Welfare) Regulations 1992 cover a wide range of basic health, safety and welfare issues and apply to most workplaces.

Under these regulations, an employer must comply with the following –

- Maintenance - the workplace and equipment must be maintained in good condition. Where appropriate, there must be a planned system of regular maintenance
- Ventilation - enclosed workplaces must be provided with fresh or purified air
- Temperature - a reasonable temperature must be maintained inside the building during working hours. Thermometers must be provided for staff to consult.
- Lighting - suitable and sufficient lighting must be provided. Natural light should be used where possible. Emergency lighting must also be provided where necessary
- Cleanliness - the workplace and equipment must be kept clean. Waste should not be allowed to accumulate (except in suitable receptacles)
- Space - room dimensions should provide sufficient floor area, height and unoccupied space for the health safety and welfare of the staff
- Workstations - workstations must be suitable for the workers who use them and the work which is done
- Seating - where work can be done sitting, suitable seating must be provided for each person doing that work
- Floors - floors should be suitable and not uneven, holed or slippery. They should be kept free from obstruction or contamination likely to cause slipping. Staircases should normally have a hand-rail
- Falls - precautions should be taken to prevent people from falling or being struck by falling objects.
- Windows - transparent or translucent doors or walls must be made of a safety material or protected against breakage and must be clearly marked. Opening windows must be safe to use. All windows and skylights must be designed to allow safe cleaning
- Traffic routes - design must allow safe circulation of pedestrians and vehicles and traffic routes should be clearly indicated
- Doors and gates - doors and gates must be suitably constructed. Devices should be fitted to keep sliding doors on their tracks, to prevent upward opening doors from falling back, and to ensure safe operation of powered doors. Doors which can be pushed from either side should have panes to provide a clear view of the space around the door
- Escalators - escalators and moving walkways shall be safe in use, and fitted with necessary safety devices, including emergency stop controls
- Sanitary conveniences - suitable and sufficient toilets shall be provided at readily accessible places. They must be well ventilated and lit and kept clean. A schedule to the Regulations specifies how many are needed, depending on the number of workers
- Washing facilities - washing facilities, including showers if needed, with hot and cold water, soap and hygienic means of drying must be provided
- Drinking water - a supply of drinking water must be provided for all workers at readily accessible places
- Clothing - accommodation must be provided for storage of a person's own clothing not worn at work, work clothing kept at the workplace, and for changing facilities
- Rest and meals - suitable rest facilities must be provided at conveniently accessible places. Arrangements must be made to protect non-smokers from discomfort from tobacco smoke in rest rooms and rest areas. Pregnant women and nursing mothers must be given suitable facilities. Facilities for eating meals must be provided where meals are normally taken at work

Action Plan

1. Ensure you have adequate ventilation in place. When doing Micropigmentation, you may be required to have an enclosed room free from contaminating factors such as hair, spray tan solution and other chemicals/dirt that may settle on your equipment/work area.
2. Do you have adequate means of keeping the premises warm? A working temperature of at least 16 degrees centigrade in all working areas.
3. Is your lighting adequate for the tasks you are carrying out? Are bulbs changed on a regular basis and light fittings cleaned?
4. Are all your floors cleaned at least once a week?
5. Do you keep all parts of the salon clean and tidy at all times?
6. Do you have adequate procedures to cover your storage of waste and its disposal? Do you have a waste removal and sharps removal contract?

7. Are all your floors in good condition with no possible chance of trips or slips? Are steps or changes in floor heights adequately marked with hazard tape?
8. Are all your fixtures and fittings in good condition and in a good state of repair?
9. Are all stairs, corridors and path ways cleared of any obstruction or trailing wires that could cause trips or falls?
10. Does all the glazing in your doors and windows comply with regulations? Are they suitably marked in the instant of clear glass, to prevent clients or employees walking into them?
11. Do you have adequate toilet facilities and are they kept clean and in good condition?
    A room with a toilet must not open directly into a room where food is prepared or eaten.
12. Do you have adequate hand and equipment washing facilities including a hot and cold-water supply? Some councils require separate hand washing facilities to where you wash pots or equipment. You may also need to have a tap that is operated by your elbow or by foot pedal.
13. Do your staff have access to a supply of drinking water?
14. Do you have adequate rest facilities for you and your staff? Do you have a suitable place to consume food and drink?
15. Do you have 'No Smoking' signs displayed so that employees and visitors know that smoking is not allowed on the premises? Do you have a dedicated outdoor smoking area and a suitable receptacle to dispose or cigarettes?

Management of Health and Safety at Work Regulations 1999

The Management of Health and Safety at Work Regulations 1999 place an obligation on the employer to actively carry out a risk assessment of the work place and act accordingly. The assessment must be reviewed when necessary and recorded where there are 5 or more employees. It is intended to identify health and safety

risks.

The regulations require an assessment of ALL working activities.

The regulations require that certain measures need to be followed:

- avoid risk where possible
- assess risks that cannot be avoided
- combat risks at source
- adapt the working environment of the individual
- use technology to reduce risk
- implement risk prevention measures to form a coherent policy and approach
- give priority to measure that protect the whole workforce rather than one person
- ensure employees understand the control measures
- encourage a positive health and safety culture

Action Plan

1. Have you carried out a general health and safety risk assessment?
2. Have you kept a copy of the assessments?
3. Have you drawn up an action plan to eliminate or reduce any risks that you have identified?
4. Have you informed your staff of the risks and the control methods put in place?

Data Protection Act

Data protection laws exist to strike a balance between the rights of individuals to privacy and the ability of organisations to use data for the purposes of their business. The Data Protection Act 1984 introduced basic rules

of registration for users of data and rights of access to that data for the individuals to which it related. These rules and rights were revised and superseded by the Data Protection Act 1998 which came into force on 1st March 2000.

Data must put into a place adequate technical and organisational measures to safeguard personal data which they are processing from destruction, adequate loss, unauthorised access or disclosure. This would include, for example, using a secure server when payments are made online.
Furthermore, all data controllers must put in place processing contracts with their 'data processors'. A data processor is a third party appointed by the data controller to process personal data on its behalf, although it will still be the data controller who ultimately decides what happens to the data. These processing contracts must be in writing and must set out what the data processor may or may not do with the personal data, including what security measures should be taken to safeguard the data. Data controllers should reserve for themselves the right to audit data processors to ensure compliance with the contract.

To give a practical example, if a website collects e-mail addresses, this could constitute personal data – so the data controller not only has to register with the Commissioner but ensure that security be put in place to guard against hacking. If the website is actually hosted by a third party on behalf of the data controller, then the data controller will have to contractually oblige that third party to put the relevant security in place. Of course, the data controller will also have to comply with other principles.

How to do a Risk Assessment

1. List the hazards that may be incurred when a task, job or process is completed in your workplace. To identify a hazard, you may observe it, experience it or learn about it by interviewing other workers. Examples might include slipping obstacles or fire hazards.

2. Determine the level of risk of each hazard identified. Risk may be determined by multiplying the likelihood of an accident occurring times the severity of the result. Likelihood is rated on a scale from 1 to 5, 1 being highly unlikely and 5 being certain to occur. Severity is also rated on a scale from 1 to 5, with 1 being trivial injury to 5 being death. The higher the multiplication sum, the higher the risk.
3. Document the groups of people who may be at risk. Various personnel, including members of the public, office staff, machine operators, loading dock employees or maintenance personnel, may be affected by identified hazards. Special consideration should be given to employees who work individually, young employees, temporary staff and disabled workers.
4. Identify precautions already used to avoid hazards within the workplace. Safety gear, automatic shut-off functions and protective guards may already be in place to prevent accidents. Many workplaces use rubber mats to reduce slipping chances and install fire extinguishers within feet of machines.
5. Coordinate new control methods for high risk situations. Many risk assessments recommend the elimination of a certain task or job in order to rid the workplace of that particular risk. Sometimes a new method can be substituted for a current activity. Many risk assessments suggest physical controls be put into place, such as guards to avoid access to machine parts or automatic shut-off switches on machines. Administrative controls that include new rules or policies may help avoid a hazard. Other times, employees are required to wear protective gear such as safety glasses, hard hats, gloves or protective body wear. Many risks can be avoided simply by identifying other methods to keep employees safe.

Preventing Legionella

Legionella Pneumophila, commonly referred to simply as 'legionella', is a bacterium that causes the infection Legionella's. Legionella bacteria are common in natural watercourses such as rivers and ponds.

The disease has two distinct forms:

- severe – Legionnaires' Disease, a well-known potentially fatal pneumonia
- mild – less severe illness, also known as Pontiac fever and Lochgoilhead fever

Legionnaires' Disease acquired its name in 1976 when an outbreak of pneumonia occurred among persons attending a convention of the American Legion in Philadelphia. Later, the bacterium causing the illness was named legionella.

Who is at risk from legionella?

Infection is caused by breathing in small droplets of water contaminated by the bacteria. The disease cannot be passed from one person to another.

Everyone is potentially susceptible to infection, but some people are at higher risk, e.g. those over 45 years of age, smokers and heavy drinkers, those suffering from chronic respiratory or kidney disease, and people whose immune system is impaired.

Legionnaires' Disease is serious in elderly and infirm patients; pneumonia is a common cause of death in people over 70 who contract Legionnaires' Disease.

Legionnaires' Disease can be very serious and is fatal in 5% to 30% of cases. Most cases can be treated successfully with antibiotics and healthy people usually recover.

Where is legionella a potential problem?

Since legionella bacteria are widespread in the environment, they may contaminate and grow in other water systems such as cooling towers, evaporative condensers and hot and cold-water services.

They can survive low temperatures but are killed by high temperatures. Legionella thrives between 20°C- 45°C if the conditions are right, e.g. if a supply of nutrients is present, such as rust, sludge, scale, algae and other bacteria.

Simple steps can be taken by the owners of premises to ensure these unfavourable conditions are avoided.

Legal duties and obligations around legionella

As well as the moral duty of employers to protect employees and members of the public, General Health and Safety Legislation covers all employers and workplaces.

This includes protecting employees and the public from risks associated with legionella.
Employers should consider the risks from legionella that may affect staff or members of the public and take suitable precautions.
Employers or persons in control of premises should:

- identify and assess sources of risk
- prepare a scheme (or course of action) for preventing or controlling the risk
- implement and manage the scheme – appointing a person to be managerially responsible, sometimes referred to as the 'responsible person'
- keep records and check that what has been done is effective
- if appropriate, notify the local authority of any a cooling tower(s) on site.
- The Control of Substances Hazardous to Health (COSHH) Regulations the COSHH regulations apply to micro-organisms such as legionella. The Health and Safety Executive's Approved Code of Practice and guidance, Legionnaires' Disease – The Control of legionella bacteria in water systems (L8) gives guidance in relation to the COSHH regulations.

The Reporting of Incidents and Dangerous Occurrences Regulations (RIDDOR) Cases of legionella's at work are reportable under RIDDOR.

How to reduce the risks from legionella

There are a number of ways to avoid or reduce risks from legionella:

- Assess the risks and implement controls as with all other workplace hazards, potential exposure to legionella should be risk assessed. Based on the risk assessment, employers or responsible persons may have to implement a water treatment, cleaning and disinfection regime as controls. If this is done by an outside contractor, they must be competent to do the job.
- Use alternative systems, consider the type of water system needed. For example, is it possible to replace a wet cooling tower with a dry air-cooled system?
- Design, maintenance and operation Design, maintain and operate your water services under conditions that prevent or control the growth and multiplication of legionella. Keeping the water in a cooling tower system clean will not only control legionella, but also reduces scale and fouling and ensures that the cooling process operates efficiently.
- Keep water hot One way of controlling legionella is to keep water hot, which may already happen for other reasons.
- Conduct routine weekly sampling Health and Safety Executive guidance recommends that dip slides used to monitor total microbiological activity in wet cooling systems are taken and examined every week.
- Routine sampling for legionella should be included as part of monitoring regimes for wet cooling tower systems.
- Observe the Approved Code of Practice (ACoP) Updated in 2000, the Health and Safety Executive's Approved Code of Practice now applies to all water systems from which there is a risk from legionella, including all hot water systems in the workplace, regardless of their capacity, and wet cooling systems.

Action Plan

1. Run hot and cold taps in your premises for three minutes each morning.
2. Clean Air Conditioning units regularly.
3. If you use showers on your premises are these run on hot for three minutes every day?

Control of Substances Hazardous to Health Regulations 2002 (COSHH)

COSHH stands for the Control of Substances Hazardous to Health and includes many chemicals, fumes, dusts and biological agents. Under the Control of Substances Hazardous to Health Regulations there is a requirement for employers to control the exposure to these substances in order to prevent ill health in employees and others who may be exposed.

The effects of exposure to these to these substances can range from minor skin irritations to eye injuries, lung diseases, cancers and even death. A failure to control exposure can lead to employers facing enforcement action, loss of business and civil claims.

COSHH Assessments

The Control of Substances Hazardous to Health Regulations specify what substances must be controlled. Suppliers of these substances must provide a safety data sheet for the substance which specifies the hazards and suggested precautionary measures. These should be referred to when carrying out an assessment under these regulations. There are several steps that must be taken when carrying out an assessment under these regulations.

Step 1 - Assess the risks: Identify the hazardous substances and the risks that they present. Consider how the chemical is used and by whom. This will allow you to determine how people could be exposed to harm (e.g. inhalation, ingestion, and skin contact)

Step 2 - Decide what precautions are needed: Precautions should be considered in the following order and the highest possible on the list adopted.

1. Substituting the substance with a less harmful one
2. Change the process (e.g. eliminate the release of fume)
3. Use a safer form of the substance (e.g. pellets not powder)
4. Enclose the process
5. Provide specific or general ventilation
6. Provide Personal Protective Equipment (PPE) as a last resort (e.g. gloves, masks, goggles)

Step 3 - Prevent or control exposure: It may be necessary to measure the concentration of substances in the air from time to time to ensure that employees are not exposed to unacceptable levels of hazardous substances.

Step 4 - Ensure that controls are used and maintained: Measuring the concentration of substances in the air may also show whether the control measures are working properly.

Step 5 - Monitor employee exposure: It may be necessary to monitor individual employee's exposure to certain substances.

Step 6 - Carry out Health Surveillance: This is required where employees are working with certain substances and full details are provided in the Control of Substances Hazardous to Health Regulations.

Step 7 - Inform and train employees: You must ensure that employees understand the risks associated with the substances used, use the control measures and report any concerns or faults.

Action Plan

1. Do you and all your staff understand COSHH?
2. Have you carried out a COSHH risk assessment?
3. Have you listed all hazardous chemicals/products that you use in your salon?
4. Have you assessed which of your staff is at risk from hazardous chemicals or products?
5. Do you have copies of manufacturers or supplier's data sheets for all chemicals or products that you use?
6. Have you tried to replace products or chemicals with less hazardous ones?
7. Have all your staff been trained in the safe use and handling of chemicals?
8. Do you provide all your staff with correct and adequate PPE?
9. Have you instructed staff on how to use PPE correctly and when it should be used?
10. Are all chemicals and products labelled and stored correctly according to the manufacturer's instructions?
11. Are all glass bottles stored below eye level?
12. Are all new chemicals and products assessed prior to use?
13. Do you have means to sterile all equipment used adequately?
14. Do you have adequate ventilation in all work areas?

Code of practice for Hygiene in Beauty Salons

Hygiene is not so much a set of rules as an attitude of mind and common sense. The stricter the rules, the less risk there is of error causing complications.
In the Beauty Industry we are working in a close body contact situation where the risk of cross infection exists between the client and the therapist, as well as between the clients. Clients have a right to expect that in all such

personal treatments there will be a high standard of hygiene and cleanliness of surfaces and instruments, and the washing of hands prior to treatment should become second nature.

Remember that there are many infections that afflict client's, which may not just be of AIDS proportions, but are nonetheless avoidable.

Hands

The therapist should always ensure that waterproof plasters cover any obvious cuts or abrasions on their hands. In addition, any obvious cuts or abrasions on the client in areas to be treated must be similarly covered or additional care taken in cleaning and disinfecting. The therapist should wash their hands before and after treatment and wear disposable gloves.

Footwear

It is recommended that floors should be cleaned daily with a cleaner that destroys protein. The therapist should wear closed shoes as to protect the feet from any accidents such as needle prick injuries if you were to drop the needle or pen.

Hygiene

Surgical spirit is useful for cleansing skin, instruments and surfaces to remove grease and organic matter. A concentration of 70% alcohol should be considered minimal for most other purposes. Items such as blankets, towels and headbands have been commonly used and cleansed by washing, several councils will not allow the use of material items within the room. Areas that will come into contact with blood or used product should be barrier wrapped where appropriate. Again, this is not always a recommendation of your local council, however we believe that the best practice is the only way to remove risk of infection or cross contamination.
Your trolley should also be covered, or you can use disposable surgery packs or dentist bibs to put down the items you will be using. Dentist bibs are absorbent on one side and waterproof on the other. These can then be disposed of straight after the treatment in a biohazard waste bag.

Dispensing of products

Everything that you will need for your treatment should be dispensed before you pierce the skin. Products, anaesthetics and wet wipes or cotton wool should all be to hand in the quantity you need.

Action Plan

1. Do you have a sink in your room that you will be working from, and does it have an elbow lever tap or foot pedal?
2. Have you ensured all absorbent materials are removed from the rom that you will be working from?
3. Do you have cleaning products that dissolve protein?
4. Do you have drawers and/or closed containers to store products and anaesthetics to reduce cross contamination?

The Appearance of the Therapist

A beauty therapist should be an example to her trade.
A client will look to her therapist as a professional and this will be reflected not only in how she looks, but also her attitude and deportment.

A therapist is a reflection on the company in which she works. If a client does not feel satisfied with the hygiene of either the therapist or the salon, she is not likely to return.

Overall or uniform:

- Should be worn at all times during working hours.
- Should be clean and smell fresh. Ideally a clean uniform should be worn each day.
- Should not be decorated with anything other than a name badge or that of a professional organization to which the therapist is a member.
- A disposable apron should be worn for each client to help reduce cross contamination and keep your uniform clean.

Hair:

- Should be clean and secured off the face.

Nails:

- Should be of a workable length.
- If nail extensions are worn, these should be cleaned underneath every time you wash your hands and they should be of a decent length and shape so as not to piece your gloves.

Footwear:

- No high heels to be worn for health and safety and comfort reasons.
- You should have closed in back and no peep toes.
- Should be clean. It is good practice to keep a pair of shoes in work and travel to and from work in outdoor shoes.

Personal Hygiene:

- Deodorant should be worn at all times.
- No heavy perfumes should be worn.
- Smokers must take extra care with their personal hygiene. The smell of cigarette smoke clings to fingers, clothes and hair. Clients may find this offensive.
- Be aware of fresh smelling breath. If having close contact with a client, avoid garlic and excessively spicy food the previous night. Face masks also help mask smells and allow you to work at close contact with your client.

Action Plan

1. What will your uniform be? And do you have enough uniform or washing facilities to wear clean uniform each day?
2. Do you have a supply of gloves, aprons and face masks?
3. Do you have appropriate footwear?

Sterilisation and Disinfecting

Sterilisation: This is the complete destruction or removal of living organisms on an object. Micro-organisms (bacteria, viruses and fungi) may be destroyed by heat, chemical disinfectants and ultra violet radiation. All tools must, however, be cleaned to remove grease before disinfection is to take place.

Autoclave: This is similar to a pressure cooker, with the water contained inside it reaches temperatures of 121 – 134 C. This is the most effective method for the sterilisation of tools within the salon.

Not all objects can safely be placed in an autoclave; check your tools can withstand the heating process. To avoid damage to the autoclave, distilled water must be used. Metal tools placed in the autoclave must be of a good quality to avoid rusting. Take care when removing tools from the autoclave –as they will be very hot.

Glass bead steriliser: Small glass beads are retained in a beaker and heated to a temperature of 190C. Tools are placed in these beads for 10 minutes. A disadvantage of glass bead sterilizer is that it cannot hold large items.

UV Steriliser: UV light will only be effective on surfaces that are exposed to the UV light. Tools will therefore need turning during the process to ensure that all surfaces are thoroughly sterilised. UV sterilisation is not suitable for brushes.

Disinfection: This is the destruction of micro-organisms, but not usually bacterial spores, reducing the number of microorganisms to a level, which will not be harmful to health. (Inhibits the growth of micro-organisms)

In most salons, 'Barbicide' is a recognised name as a germicide and disinfectant liquid in which tools can be stored.

Surgical spirit can also be used.

Antiseptic: Is a substance that inhibits the growth of bacteria but not kill the bacteria.

Bacteria: A single cell organism without a nucleus, which produces a compound called a toxin.

Fungus: This is a low form of vegetable life, which includes mushrooms and moulds. Some varieties cause disease, such as ringworm. A fungi stat will inhibit growth of any fungus while a fungicide will kill fungus outright.

Virus: A small part of a group of infectious agents. They have the ability to copy themselves outside of a living host cell. Viruses can be classed as pathogenic – causing disease as opposed to non-pathogenic (not causing disease)

Infestations: This is the presence of animal parasites, e.g. Mites, ticks or worms, either in the body, clothing or house.

Action Plan

1. Do you have adequate means to sterilise and disinfect your equipment and surfaces?

The Manual Handling Operations Regulations 1992

If you lift a heavy object carelessly you can end up pulling muscles or even worse, suffer long-term damage to your back or upper limbs.

So, it's vital that if your job involves lifting, you know how to do it properly. Many employers have short training sessions for this but if not, you should at least be able to give your employees a leaflet with the main rules for manual handling.

Manual handling can be described as lowering, lifting, pulling, pushing, holding, restraining, carrying, throwing or handling.

75% of injuries caused by manual lifting could be prevented. In the food and drinks industry, manual handling and lifting causes 30% of all acute injuries.

How to Lift Heavy Objects Safely:

1. Make sure you are standing directly in front of the item you wish to lift.
2. Check if the item has handles which you could use.
3. Know where you are taking the object before you begin.
4. Position your feet evenly (shoulder width apart).
5. Keep your back straight and stand up tall.
6. Tighten your stomach muscles.
7. Squat to the floor by bending your knees- DO NOT move your upper body.
8. Take hold of the object firmly with both hands.
9. Distribute the weight evenly - make sure you are not unbalanced.
10. Keeping the object close to your body, begin to stand up by straightening your legs (This will use your leg muscles and shouldn't put strain on other areas).
11. Stand up slowly. Do not move quickly or jerk when doing this.
12. You can now walk with the object (but be careful not to twist your body unnecessarily). Take small steps if possible.
13. If you are carrying a large object which restricts your view, ask if someone can guide you. This will prevent you from tripping or bumping into objects
14. When placing the item down, bend your legs.
15. Remember to keep your back straight as you bend down again.
16. Be careful to lower each side of the object to the floor separately- this will avoid trapping your fingers under the weight

Before attempting to lift any object, it is a good idea to warm-up your muscles. Perform some simple stretches beforehand to reduce the risk of injury.

General Guidelines for Lifting

There are general guidelines - or maximum weights - for men and women. If applying these, no man should attempt to lift anything heavier than 25kg and a woman's maximum limit is 16kg.

But it's important to take into account other factors which can change the maximum safe weight - such as how high an object will need to be lifted.

If lifting above shoulder height (stocking high shelves for example) men should not lift items heavier than 10kg and women, 7kg – but this maximum weight drops yet again for objects that need to be held away from the body – 5kg for men and 3kg for women.

Employers should carry out risk assessments for all lifting since the safe limit depends on so many variables such as the individual involved, the height that you will be lifting and the distance you will be required to carry the object.

Never assume that because a larger workmate can lift an object without injury that it is a safe weight for you to attempt. Everyone is a different size and we all differ in body strength.

When You Should Take Extra Care:

- Stacking items above shoulder height
- Carrying items up or down stairs
- Carrying items for long distances
- Lifting in a small work space – this could mean you have to twist or stoop

Things to Check:

- Is the weight of the item within your physical capability?
- Have you allowed reasonable rest periods between manual lifting tasks?
- Is there adequate space to lift safely?

Action Plan

1. Have you looked at reducing risk in your workplace from lifting heavy objects, such as deliveries?
2. Can you get deliveries dropped straight into the room that it is needed?
3. Do you understand the correct way to lift and carry heavy objects?

Ergonomics

Posture is important, whether you are sitting or standing up to do a treatment. Try to find a working position that is comfortable for you and reduces the need to lean over to just one side.

Using height adjustable treatment couches and chairs. Choose a height that reduces your need for bending over the client. Ideally your back should be at a 90-degree angle. Your chair should be comfortable to avoid pressure point sores or injury.

Try to avoid twisting the neck, keep your head upright and keep your shoulders relaxed.

Never ignore pain, look at ways to alleviate the symptoms. If you cannot take a break during a treatment, then you can adopt gentle stretching techniques.

Repetitive strain injuries can be caused by using the same movements over and over again. Try to avoid repetitive flexing of the wrist and instead alternate by bending elbows or shoulders instead.

Action Plan

1. Height adjustable couches or treatment beds are perfect to ensure you work at the right height and position for you. Look at investing in a good bed.
2. Height adjustable stools should be comfortable to sit on for prolonged periods of time. Is yours comfortable?

The Personal Protective Equipment at Work Regulations 1992

This act covers your requirements under the COSHH regulations. You are required to wear or provide to your employees protective clothing or equipment (PPE) to ensure their health and safety when handling chemicals or coming into contact with bodily fluids.

What PPE will you need?

- Powder free non-latex Gloves that must be changed for each new client.
- Disposable aprons.
- Face Masks
- Eye wear (optional)

Some therapists like to wear eye protection although the risk is very low from spillages or splashes. However, a new apron, facemask and gloves should be worn before each new client.

Action Plan

1. Do you have adequate supplies of non-latex powder free gloves, aprons and facemasks?
2. Have you informed your staff of what PPE is and why it is important?

The Provisions and Use of Work Equipment Regulations 1998

Under these regulations all electrical equipment used in your workplace must be suitable for the purpose for which it is used. Equipment must be properly maintained, and all staff should be trained in the use of the equipment. These regulations apply to both new and second-hand equipment.

Action Plan

1. Have you checked that all electrical equipment in your salon is regularly checked to ensure that it is safe to use?
2. Have you got a maintenance log for electrical equipment?
3. If you purchase second hand equipment is this checked by a competent person before using?

The Environmental Protection Act 1990

Under this act, anyone that disposes of waste has a duty of care to ensure that waste is disposed of safely.

Subjects covered by the Environmental Protection Act 1990 are as follows:

- Waste management
- Noise pollution
- Neighbourhood pollution
- Radioactive substances
- Genetically Modified organisms
- Nature Conservation

Under the Environmental Protection Act 1990 it is unlawful to deposit, recover or dispose of controlled (including clinical) waste without a waste management licence, contrary to the conditions of a licence or the terms of an exemption, or in a way which causes pollution of the environment or harm to human health. Contravention of waste controls is a criminal offence. Section 34 of the act, places people concerned with controlled (including clinical) waste under a duty of care to ensure that the waste is managed properly, recovered or disposed of safely and is only transferred to someone who is authorised to keep it. Householders are exempt for their own household waste.

Hazardous healthcare waste is subject to the requirements of the Hazardous Waste Regulations 2005. ***[Extract taken from Gov.UK website*** *https://www.gov.uk/healthcare-waste* ***30th June 2014]***

All commercial businesses must have a waste removal contract with either the council, or a private waste removal company. If you produce less than one bin bag full of clinical waste per collection then you can dispose of clinical waste such as pigment pots, cotton wool and tissues in with a normal waste collection. If you produce more than this per collection, then a suitable clinical waste contract must be obtained.

Safe Disposal of Sharps

EU Directive 2010/32/EU on the prevention of sharps injuries in the health care sector. Does it mean anything to you?

As set out in the Health and Safety Executive the aims of the Directive are as follows:

- To achieve the safest possible working environment
- To prevent workers' injuries caused by all medical sharps
- To protect workers at risk
- To set up an integrated approach establishing policies in risk assessment, risk prevention, training, information, awareness raising and monitoring
- To put in place response and follow up procedures.

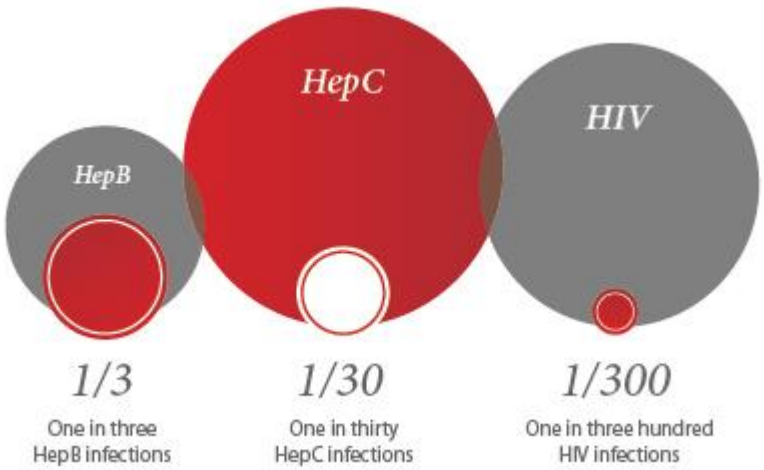
So how does the EU Directive affect me?

The EU Directive is aimed at employers, requiring them to make appropriate provisions for staff in respect of the risk of sharps injuries. It is the employer's duty to ensure the health and safety of workers. The directive reinforces the need for appropriate levels of training and equipment. A risk assessment must be carried out and where there is a risk of exposure, employers need to identify how exposure can be eliminated. Where exposure cannot be eliminated exposure should be prevented through:

- Providing sharps disposal equipment as close as possible to where sharps are being used
- Banning the practice of re-sheathing
- Implementing safe procedures for using and disposing of sharp medical instruments and contaminated waste
- Eliminating the unnecessary use of sharps

Employers should be aware of their legal duties under existing legislation and the new directive, which emphasise carrying out risk assessments on the prevention of sharps injuries. There should be a strategic level commitment to reducing sharps injuries.

Health and safety law are criminal law, and companies can be subject to enforcement action if they fail to comply with the legal requirements relating to the prevention of sharps injuries.



According to www.needlestickforum.net 100,000 needle-stick injuries occur each year in the UK[1].

What do I need to know?

- Only one needle, lancet or scalpel/razor to be used per client.
- Be careful when working on your clients so as not to catch yourself with the needle.
- Dispose of your needles as soon as you have finished your treatment in a sharps box.
- Your sharps box must be close to hand and ideally wall mounted.
- Sharps boxes must be disposed of as soon as they are three quarters the way full and closed with the safety seal.
- Have a needle prick procedure policy to hand in case of injury to remind you of what to do.

Action Plan

1. Have you undertaken a risk assessment of your current waste and sharps disposal?
2. Have you worked out whether or not you need a clinical waste contract and/or how you will store waste in-between collections and how often collections will be required? Have you got evidence to hand of the company in charge of your waste disposal?
3. Do you have a company to dispose of your used sharps box?
4. Have you got a Needle Prick Policy in place?

W.E.E.E. Regulations 2006

Under this act anyone that disposes of waste has a duty of care to ensure that all waste is disposed of responsibly.

Any chemicals that you may use in a salon will be considered waste. However, most of these may be diluted with water and often disposed of down the sink. However, you should ask the manufacturer of the best and correct way of disposal. You can also seek advice and guidance from your local council.

The Waste Electrical and Electronic Equipment Regulations places a duty on Manufacturers, importers and retailers with regards to safe disposable of products. There is also a duty on salons to ensure that you only purchase from respectable suppliers and dispose of any unwanted equipment at registered sites which are able to take electrical waste.

Action Plan

1. Do you dispose of unwanted chemicals safely in your business?
2. Do you know where your local waste disposal site is for when you wish to discard unwanted or broken electrical equipment?
3. Does your supplier have a take back scheme when you purchase new equipment?

The Regulatory Reform (Fire Safety) Order 2005

The Government is committed to regulating only where necessary and in a way that is more suited to the needs of a modern business. That is why the order was made, under the Regulatory Reform Act 2001. It replaces most fire safety legislation with one simple order. It means that any person who has some level of control in premises must take reasonable steps to reduce the risk from fire and make sure people can safely escape if there is a fire. [Extract from A short guide to making your premises safe from fire]

Your responsibility as an employer:

- Carry out a fire risk assessment for the premises
- Develop evacuation procedures
- Provide and maintain clear means of escape, signs and notices
- Provide emergency lighting
- Provide fire detection and alarm systems
- Provide adequate means of fighting fires
- Train Staff
- Consult with all staff on the fire procedures.

To Action

1. Have you undertaken a full fire risk assessment?
2. Have you got adequate fire extinguishers in case of fire?
3. Do you have an escape plan and means of raising an alarm, and are all staff trained on the correct procedures to follow?
4. Have you considered doing a fire marshal training course?
5. Are your fire extinguishers maintained annually?
6. Are all fire exits kept open and clean from objects during opening hours?

Types of Fire Extinguishers

There are five classes of fire:

Class A:	Fires which involve solids such as paper, wood and hair.
Class B:	Fires which involve liquids such as solvents.
Class C:	Fires which involve gases such as propane and butane.
Class D:	Fires which involves metals.
Class F:	Fires which involve hot oil such as cooking oil.

Water

There are Red with a label on that indicates that it can only be used for class A fires. This must not be used on electrical fires and can cause quite a lot of damage.

Foam

Red extinguisher with a cream label on the front and used for class B fires or small class A fires. These extinguishers cannot be used on electrical fires and can also cause quite a bit of damage.

Carbon Dioxide

These are Red with a Black label and can be used on all fires especially class B and electrical.

Dry Powder

Red extinguishers with a blue label and can be used on all classes of fires but especially suitable for class B, C and electrical fires. The big disadvantage to this type of extinguisher is the mess left over from the residual powder that has to be cleaned up and the powder can also damage other electrical equipment.

Wet Chemical Extinguisher

Red extinguisher with a yellow patch and it used for extinguishing cooking fats and oils.

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995

These regulations are commonly referred to as RIDDOR and their main purpose is to alert the enforcing authorities to incidents and causes of ill health that may need further investigation. There second role is to collate statistics and to assist in the implementation of initiatives to reduce accidents in the work place.

If any of your employees or trainees suffers a personal injury at work that results in either;

- Major Injury
- Death

Then you must contact the Incident Contact Centre on 0845 3009923.

Less serious injuries have to be reported using form F2508 available on the HSE website. Less serious injuries include:

- More than 24 hours in hospital
- Incapacity for more than 7 days.

Other incidences that are reportable include:

- A member of the public or client is injured and admitted to hospital.
- Any member of staff that is injured due to an act of violence that is work related.

All records of injuries minor or major must be recorded in your accident book.

Further guidance can be found on the HSE website www.hse.gov.uk/riddor.

Health & Safety (First Aid) Regulations 1981

Your environmental health officer may ask if you have a completed First Aid training. The HSE recommends that businesses with fewer than 50 staff members should have at least one qualified and appointed First Aider.

First Aid courses can last anything from half a day to 3 days. The half day courses are not usually accredited so it is highly recommended to at least complete a full days of First Aid training.

These regulations also require that every employer provides equipment or facilities for providing First Aid to their employees. Even if you do not have employees, having a First Aid Kit to hand when required is good practice.

A First Aid box and an eye wash bottle or pods should be enough with extra items kept aside for restocking.

Your First Aid box should contain the following:

Number of Employees	1-5	6-10	11-50
Contents	QTY	QTY	QTY
First Aid Guidance Notes	1	1	1
Individually wrapped sterile adhesive dressings	20	20	40
Sterile Eye Pads, with attachment	1	2	4
Sterile triangular bandages	1	2	4
Safety Pins	6	6	12
Medium sized sterile unmedicated dressings	3	6	8
Large sterile unmedicated dressings	1	2	4
Extra Large sterile unmedicated dressings	1	2	4

First Aid boxes must not include any form of medication. Such as Paracetamol or Ibuprofen

Action Plan

1. Have you booked on to a one day First Aid course?
2. Do you have a well-stocked First Aid Kit and Eye wash?
3. Is the First Aid kit located in an easy to reach place and clearly marked?
4. Do you have an accident book to report any injuries?
5. Do you have a safe place to store completed accident forms?

Public Liability insurance and employer's liability insurance

It's important to understand the differences between types of liability insurance you can take out. Public liability insurance refers to insurance that will cover you and your business for any inconvenience you may cause a customer, such as through damage or loss of goods and damage to their property while work is being carried out.

Conversely, employer's liability insurance protects the people who work for you, ensuring you are able to pay damages if an employee becomes injured while carrying out their work.

Both types of liability insurance can be considered essential for safeguarding your business and ensuring you don't have to pay significant amounts for damages, but it's not just about the money involved: by demonstrating to workers and customers that you have their safety and convenience in mind, you can develop trust and a stronger working relationship, as well as being able to provide documentation in cases where liability insurance is a legal requirement.

It's a good idea to find out as much as you can about liability insurance and the requirements of the sector you work in before taking out a policy, as various levels of cover can be required depending on the type of work you carry out.

Public liability claims tend to be expensive, meaning cover of up to at least £1 million can be considered a minimum, but if you work in areas such as the public sector you could be required to prove that your business is covered upwards of £5 million for damages. Employer's liability is typically combined with public liability insurance to provide upwards of £10 million cover for everyone in your business - bearing in mind that even top-level company directors are classed as employees under the policy.

Employer's liability insurance is more than just a good idea; in many cases, even if you only have a single employee under you, it's required by law. If your business is not insured and one of your employees files an injury claim, the costs could soon add up, as you may even have to pay legal fees if your case is not successful. Don't risk working yourself out of business to pay debts - take out a comprehensive liability insurance policy to provide effective cover throughout the working day.

Electricity at Work Regulations 1989

The most common causes of accidents in the salon environment include:

- Electrical Fires
- Electrical Shock
- Electrical Burns

There are simple precautions that you can follow to reduce these risks to you and your employees or clients.

The Law requires that electrical equipment should be maintained to prevent danger. Regular checks should be undertaken on all electrical equipment. This should include:

- Checking that there are no frays or tears in the leads.
- Checking that plugs have no damage or bent pins.
- Looking for damage to the outer cover of the equipment.
- Looking for any signs of overheating, such as burn marks or stained plugs.
- Check that cables are not trapped under trolleys, seats or furniture.

Annually (or on the 1st anniversary of any new equipment) you should get a Portable Appliance Test (PAT) done on all your electrical equipment. This may form part of your licencing requirements. PAT testing costs as little as 30p per item and a sticker will be placed on the item to state whether it has passed or failed the test.

Action Plan

1. Have you checked all your electrical equipment is safe to use and do you check this on a regular basis?
2. Do you have an RCD plugged into the wall to reduce down power surges and preventing damage to your equipment as well as reducing risk of electric shock?
3. Has any equipment over a year old been PAT tested?
4. Have you reduced the risk of trailing wires?

The Local Authority Licencing Application

The registration and bye law requirements vary from council to council. We offer you the best guidance to ensure a smooth application for any area that you may live. However, it is important that you call the Environmental Health department and ask them what their requirements are prior to application.

Why should I register?

It is a legal requirement for anyone offering invasive treatments (that break the skin) to register for a Licence with their Local Authority.

Having a licence and displaying it for your clients to see will only add to your professionalism. Councils are there to work with you, not against you. Don't be afraid of speaking to them, they will give you all the advice you need and allow you to put things in place.

How should I prepare for a council visit?

You should be as prepared as possible for a visit from the council. The following is just a basic list of what they will expect to see:

The Room

The Environmental Health Officer (EHO) will first want to inspect your room. They will look at what type of flooring you have. Wipe clean flooring is preferred and they will ask how you clean it and how often. Your room should be free from curtains, drapes, towels and cushions and anything else such as absorbent woods and material.

You should have a sink in the room that has hot and cold running water. A soap and towel dispenser are also handy to have next to the sink and a 'How to Wash your Hands' guide. Sinks should be operated by an elbow lever tap or foot pedal.

Your trolley, mag lamp and beauty couch should be barrier wrapped. You will be asked how often this is changed (between clients or wiped down with special cleaners). They will expect to see a sharps box close to hand and usually hanging from the wall.

Your stool should also be wrapped and no trailing wires anywhere in the room other than those you need to use your machine. Mag Lamp cables can be clipped to the wall or taped out of the way or use cable grips to attached loose trailing wires to trolleys. You can purchase Velcro fasteners from eBay.

The room should be self-contained and have no contamination from spray tans, hair or nails. You should have adequate ventilation and lighting and changes in floor height clearly marked.

No smoking signs should also be clearly displayed.

Keeping Records

The EHO will ask you to provide a copy of your consultation form and whether or not you keep photographs of the clients. They may also ask how you store this information and for how long.

They will also ask to see copies of Medical Safety Data Sheets (MSDS or SDS) for any pigments or anaesthetics you may use during the treatment.

They will also want to see how you dispose of your waste and copies of the contract with your waste removal contract.

Cleaning

The EHO will ask what products you use to clean your work surfaces and floors with and how you use the product. Make sure you are familiar with how long a product has to be left on for and what PPE you may need when using such products.

They will also ask how you dispose of needles and other items you use during the treatment. As most are now disposable it is easy enough to just throw these items away and you will not need to have a cleaning procedure for these.

Preventing Cross Contamination

Your EHO will want to know how you prevent cross contamination. A few basic points should cover any questions that she/he may have:

- You protect your trolley with fresh barrier film or dental bibs before every new client.
- You have a foot pedal operated metal bin to hand to dispose of rubbish or a clinical waste bag attached to your trolley.
- You use a new needle for each client and open this up in front of them before starting the procedure.
- You get out everything you need so you have it to hand, such as wet wipes, cotton wool, needles and products.
- Use a new pair of powder free latex free gloves on each new client. Make sure you wash hands before and after putting on or removing gloves.
- Products should contain a Lot or Batch number and an expiry date.
- You may be required to produce proof of your Hepatitis B Vaccinations.

What else may I be asked?

- The EHO will ask to see what anaesthetics you use and how you use them.
- They will require to see a copy of your aftercare form.
- You may be asked what you use post treatment and how this is applied.
- Have you displayed your training certificates?
- They will ask for copies of your liability insurance.
- Proof of your first aid training and if you have spill kits for cleaning up sick or blood.
- Do you have an up to date tetanus?

Action Plan

1. Contact your Local Authority and find out what your requirements are.
2. Sort out client consultation forms and aftercare forms.
3. Display your first aid certificate.
4. Book into your GP for your Hepatitis B and Tetanus Vaccinations.

Effective Cleaning

When working within the beauty industry it is important to ensure high standards of hygiene. This becomes increasingly more important when you are performing invasive procedures.

Having a good cleaning routine not only protects yourself, but also prevents cross contamination between clients.

It is best practice to clean your room between clients, with a thorough clean being done at least once a week, if not more dependent on the amount of how many clients you treat each week.

Cleaning physically removes contamination which includes microorganisms but will not kill all microorganisms even if the surface look clean.

You can clean all work surfaces using a detergent and warm water. Read the instructions carefully on any products you use to make sure they won't damage your work surfaces.

Ultrasonication

Is a liquid-based method of cleaning that is recommended for some types of micropigmentation equipment. The process is performed in a lidded tank and can clean in between apertures and recesses. The tank of the Ultrasonic cleaner should be cleaned twice a day and kept clean and dry overnight.

Disinfection

This reduces the number of living microorganisms, but may not necessarily kill all fungi, viruses, bacteria and spores. Disinfection is not the same as sterilisation. Items or surfaces must be cleaned before disinfection can occur.

Sterilisation

Sterilisation kills all microorganisms and also bacterial and fungal spores that may survive the disinfection process. Steam sterilisation is the preferred method of sterilising any equipment you may use as it fast, easy to use and non-toxic. UV sterilisers and glass bead sterilisers are not considered to be adequate methods of sterilisation.

Types of cleaning agents

Agent	Instruments	Skin	Work Surfaces
Powder or liquid based detergents that are diluted in hot water as per the manufacturer's instructions.	This can be used for initial cleaning of instruments before disinfection or steam sterilisation	No	Effective enough to use on all work surfaces between clients or at the end of the day before disinfection
Bleach or Hypochlorite. On application bleach products must contain minimum 1000ppm available chlorine. For example, from sodium dichloroisocyanurate (NaDCC) soluble tablets.	No	No	Yes, on hard man-made work surfaces.
60-80% alcohol is available as spray or as wipes.	No	Yes	Yes, however the surface must be cleaned beforehand.
Halogenated Tertiary Amines and quaternary ammonium compounds (e.g. Trigene); these products are available as spray or wipes.	Yes, but may cause damage to metal surfaces with prolonged use	No	Yes
Chlorhexidine based products often combined with alcohol such as Hibisol.	No	Yes	No
Glutaraldehyde based products	This substance should never be used on the skin and is an irritant and Allegan. Exposure is strictly controlled under COSHH. Its use is not recommended unless appropriate measures are in place.		

Blood Bourne Pathogens

What are blood borne pathogens?

Blood borne pathogens are infectious microorganisms in human blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV). Needle sticks and other sharps-related injuries may expose workers to blood borne pathogens. Workers in many occupations, including first aid team members, housekeeping personnel in some industries, nurses and other healthcare personnel may be at risk of exposure to blood borne pathogens.

What can be done to control exposure to blood borne pathogens?

In order to reduce or eliminate the hazards of occupational exposure to blood borne pathogens, an employer must implement an exposure control plan for the worksite with details on employee protection measures. The plan must also describe how an employer will use a combination of good work practice and ensure the use of personal protective clothing and equipment, provide training, medical surveillance, hepatitis B vaccinations, and signs and labels, among other provisions. Engineering controls are the primary means of eliminating or minimizing employee exposure and include the use of safer medical devices, such as needleless devices and shielded needle devices.

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AIDS – Acquired Immune Deficiency Disease:

AIDS is caused by a human immune-deficiency virus (HIV). The virus attacks the body's natural immune system and makes it vulnerable to infections, which will eventually cause death. Some people are known to be HIV positive, which means that they are carrying the virus without any symptoms of AIDS. HIV carriers are able to pass on the virus to someone else through infected blood or tissue fluid, for example through cuts or broken skin. The virus does not live for long outside the body.

Hepatitis B:

This is a disease of the liver caused by a Virus (HBV) that is transmitted by infected blood and tissue fluids.

The virus is very resistant and can survive outside the body. People can be very ill for a long time with Hepatitis B infection. It is a very weakening disease, which can be fatal.

Strict hygiene practices are essential to prevent Hepatitis B from spreading in the salon.

Dealing with body fluids:

If blood or body fluids have to be mopped, ensure that disposable gloves, apron and disposable paper are used. All disposable items should then be placed in a yellow plastic sack and destroyed by incineration.

Neat chlorine bleach should be used as the sterilizing agent on blood spills. The bleach treatment will destroy the viruses, which will cause AIDS and Hepatitis B.

Action Plan

1. Do you have a needle stick policy clearly displayed in your room, and have you informed all staff of what to do in the event of a needle stick injury?
2. Do you have the correct methods of sterilisation and cleaning products to clean you're your work area between clients and at the end of every day? Do you have a cleaning Rota if you employ staff?
3. Have you and any staff had a Hepatitis B Vaccination?
4. Do you have all the correct PPE in your room?
5. Do you have the ability to clean up any blood or vomit such as a biohazard clean up kits?

Gloves

We prefer to use Nitrile gloves when performing Micro-pigmentation treatments. They fit snugly on the hand like latex gloves but without the allergy risk.
You should always wash your hands prior to putting on your gloves following the NHS guidelines.
How to properly remove gloves:

1. Using your right hand grasp the rim of the left glove and remove it turning it inside out.
2. Whilst holding onto the glove turned inside out, use your left hand, grasp the rim of your right glove and pull it off of your hand without touching anything.
3. Dispose of the gloves in your bio-hazard waste bag.
4. Wash your hands following the recommended guidelines.

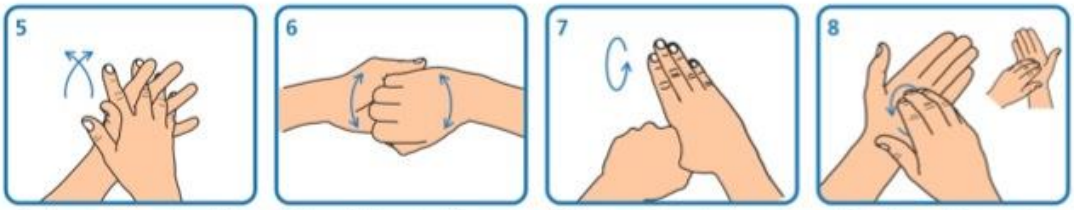
Hand-washing technique with soap and water

Wet hands with water

Apply enough soap to cover all hand surfaces

Rub hands palm to palm

Rub back of each hand with palm of other hand with fingers interlaced

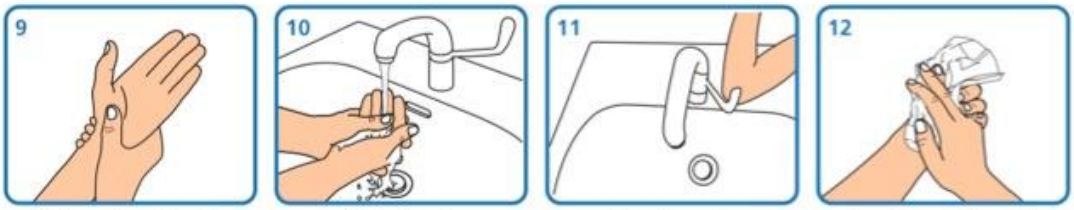


Rub palm to palm with fingers interlaced

Rub with back of fingers to opposing palms with fingers interlocked

Rub each thumb clasped in opposite hand using a rotational movement

Rub tips of fingers in opposite palm in a circular motion



Rub each wrist with opposite hand

Rinse hands with water

Use elbow to turn off tap

Dry thoroughly with a single-use towel

Hand washing should take 15–30 seconds

cleanyourhands campaign

NHS National Patient Safety Agency

Adapted from World Health Organization *Guidelines on Hand Hygiene in Health Care*

Blood borne and Body Fluid Exposure Policy and Procedures

BLOODBORNE PATHOGENS POLICY AND PROCEDURE
HBV IMMUNIZATION AND PREVENTION TRAINING

Before engaging in a treatment where exposure to human blood and/or Other Potentially Infectious Materials is probable or possible, each student, trainer or therapist must present either evidence of HBV immunisation against hepatitis B virus disease (HBV) and undergo training to prevent or minimise exposure. Each person should check with their local GP or Health Clinic about such costs and must produce evidence of such costs for reimbursement. Students, Trainers or Therapists who want to forego such immunisation must sign a formal disclaimer statement.

DEFINITIONS

Bloodborne Pathogens- pathogenic microorganisms present in the human blood and other body fluids which can cause disease in humans.

Potentially Infectious Material- include:

1. human body fluids including; semen, vaginal secretions, pleural fluid, amniotic fluid, saliva.
2. anybody fluid/excretion that is contaminated with blood.

Universal Precautions - Strict adherence to standard precautions is required in all treatment situations.

All staff and students are required to use appropriate personal protective equipment whenever contact with blood or other infectious material is expected. Personal protective equipment includes, but is not limited to, gloves, masks, gowns, face shields, and eye protection.

WASH HANDS before and after all contact with clients. Consider all blood, visibly bloody secretions and fluids and genital secretions from **ALL CLIENTS** to be infectious

GLOVES are required for all anticipated contact with human blood, body fluids, or mucous membranes.

CHANGE GLOVES and wash your hands after each procedure and before contact with another Client.

WEAR MASK OR GOGGLES when blood or body fluids may splash into your face.
WEAR WATERPROOF APRONS when blood or body fluids may soak through a cloth gown.
YOU ARE RESPONSIBLE for properly disposing of any sharps or infectious materials you have us ed in designated containers.

Definition of blood and body fluids (for blood borne pathogens):

- Human blood and blood products
- Semen and vaginal secretions
- Cerebrospinal fluid (CSF), synovial fluid, peritoneal fluid, pericardial fluid, amniotic fluid
- Saliva in dental procedures (assume blood contamination)
- Any body fluid visibly contaminated with blood (especially from spots)

Notice that other body excretions such as saliva, urine, stool, vomitus, and respiratory secretions are n ot included on this list (unless visibly contaminated with blood). However, many of these excretions' present other infectious hazards. Bloodborne and Body Fluid Exposure Policy and Procedures

Needle Prick or Cross contamination Procedure

1) Immediately wash wounds and skin sites that have been in contact with blood or body fluids with soap and water or flush mucous membranes with water. (No evidence exists that using a ntiseptics for wound care or expressing fluid by squeezing the wound further reduces the risk of Bloodborne pathogen transmission; however, the use of antiseptics is not contra-indicated). Or After any exposure, the first thing to do under every circumstance is to tend to the exposure to minimize your contact to blood or body fluid. Wash the area with soap and water for five minutes, or if a mucosal exposure, rinse with water or saline for five minutes.

   Any other first aid should be begun as needed, e.g. direct pressure to the wound. DO NOT irrigate the wound.
2) Immediately inform your Manager or another member of the team.
3) Attend your nearest hospitals Accident and Emergency Department which is for care.

Help and Advice Contact Numbers for staff

GUM Clinic Mon – Fri 0000 000 0000 (office Hours)
A & E Hospital 0000 000 0000 24 Hour service
Health protection Agency 0000 000 0000

Other regulations

Health and Safety (Display Screen Equipment) Regulations (1992) This covers the use of display screens and computer screens. This specifies the acceptable levels of radiation emissions from the screen, as well as identifying the correct posture and the number of rest periods.

Cosmetic Products (Safety) Regulations (2008) These regulations require that cosmetics and toiletries are safe for their intended purpose and comply with labelling requirements.

Local Government (Miscellaneous Provisions) Act (1982) A special treatment licence will be required if you carry out any form of massage, electrolysis or ear piercing and tattooing as they may produce blood and body tissue fluid. Each borough council in the UK has different requirements, so you should contact them to see whether they require you to hold a licence for the treatments you offer.

Consumer Protection Act (1987) This Act aims to protect the customer from unsafe or defective services or products. All staff should be trained in using and maintaining products.

Sale and Supply of Goods Act (1994) This states that goods must be as described and of satisfactory quality. They should be fit for purpose and safe for use. It is the responsibility of the retailer to correct a problem where the goods are not as described.

Trade Descriptions Acts (1968 and 1972) These Acts prohibit the use of false descriptions of goods or services. Information must always be accurate, false comparisons must not be made and misleading price comparisons must not be made. A product may not be described as being of a 'reduced' price if it has not been available at the higher price for a minimum of 28 days.

Disability Discrimination Act (1996) You should ensure that clients are not discriminated against on the grounds of disability. You cannot use this as a reason to refuse to provide a service, provide a service to a lesser standard or fail to make reasonable adjustments. The premises must be able to facilitate access for disabled people.

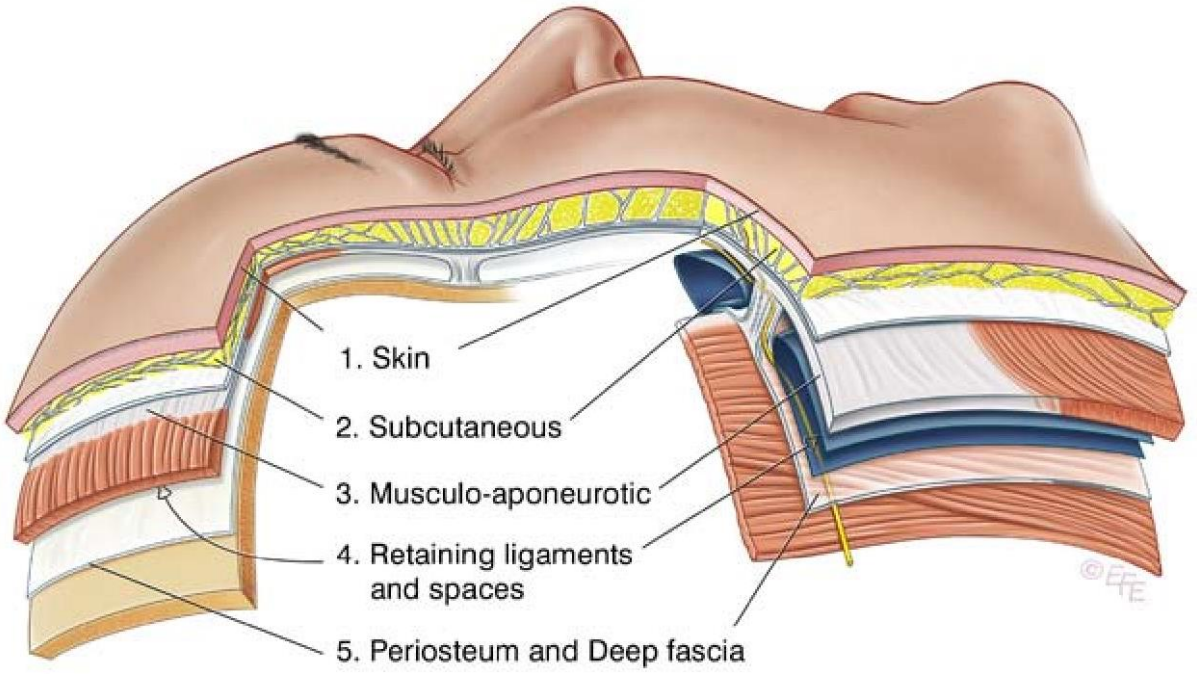
The Equality Act 2010 (EA) Gives disabled people important rights of access to everyday services. Service providers have an obligation to make reasonable adjustments to premises or to the way they provide a service. Sometimes it just takes minor changes to make a service accessible. What is considered a reasonable adjustment for a large business such as a bank, may be different from what is a reasonable adjustment for a small local salon. It is about what is practical in the service provider's individual situation and what resources the business may have. They will not be required to make adjustments that are not reasonable because they are unaffordable or impractical.

Essential Anatomy of the Face

When considering the anatomy of the face for rejuvenation with injectables, it is helpful to think of it in its entirety as a three-dimensional structure that consists of five unique layers running superficial to deep. This is important to understand, so that we know which structures we are aiming to treat are placed.

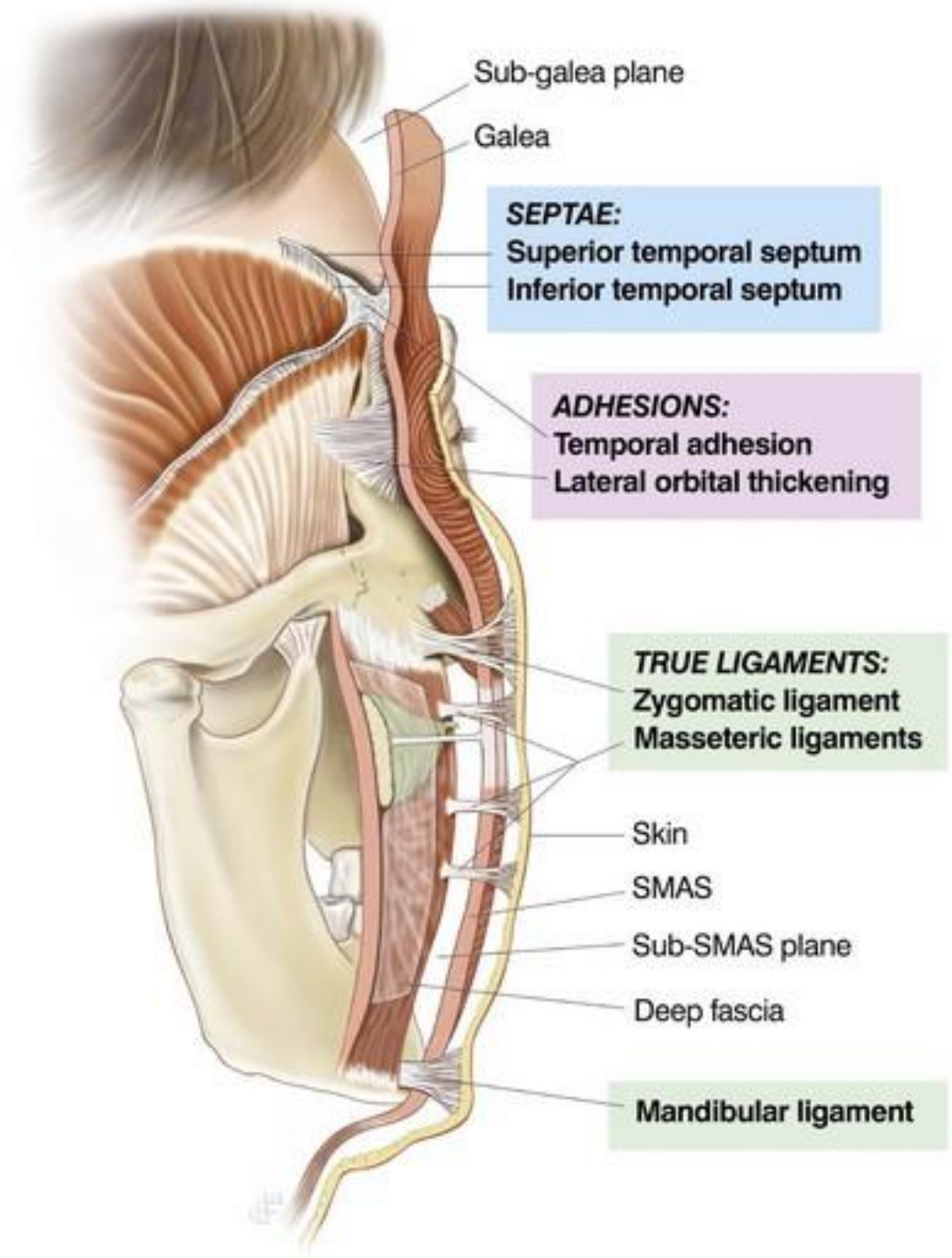
The first layer, the outer most layer of the face is the skin, that comprises of both the epidermis and dermis. Beneath this you will find the subcutaneous layer that comprises of fatty tissue. The subcutaneous layer sits on top of the fascial layer that varies depending on the area of the face. For example, in the forehead the fascial layer contains the frontalis muscle, the temporal region contains the temporal parietal fascia and below the zygoma in the mid and lower, the fascia becomes the SMAS (superficial muscular aponeurotic system) which is fibro fatty and lymphatic fascial tissue that contains the muscles for facial expressions.

Underneath the SMAS layer is a layer that has traditionally been considered to be a loose areola tissue layer. We now understand that this deeper layer comprises of multiple discrete fat compartments and can be sometimes referred to as the deep fat layer. Beneath this is the periosteum of the facial skeleton.



Ligaments

There are a number of ligaments that run through these tissue plane, from deep to superficial. The true retaining ligament run from the periosteum through the SMAS layer to insert into the dermis. These include the orbital retaining ligament, the zygomatic cutaneous ligament and the mandibular ligament. A number of smaller ligaments are also present which can be described as condensations of fascia which run from the SMAS layer superior to the skin. The role of these multiple myocutaneous ligaments is to allow the transmission of movements of the muscles of facial expressions to the skin.



Arterial Blood Supply

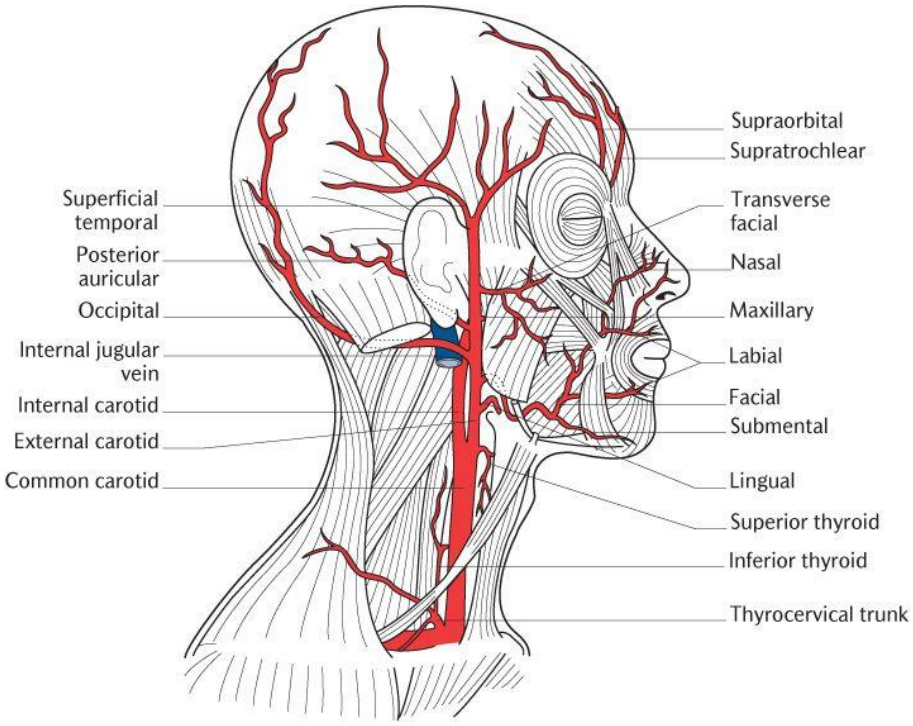
The face contains two main arterial blood supplies. One arising from the external carotid artery system and one arising from the internal carotid artery system.

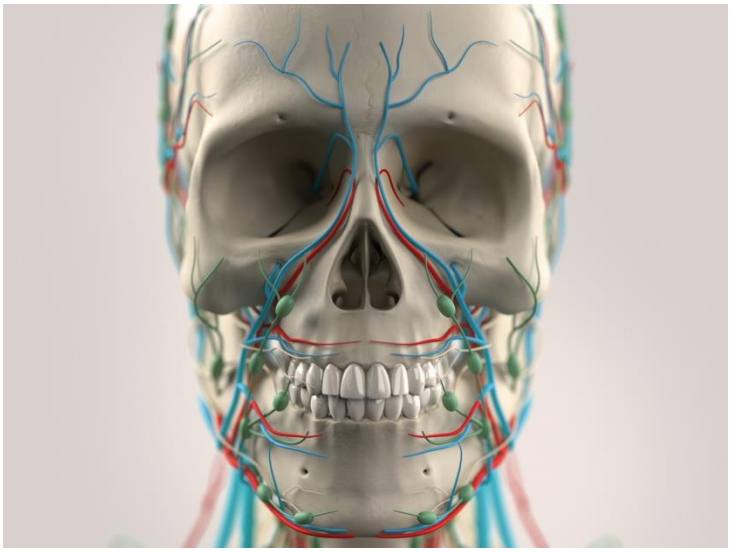
The external carotid artery gives rise to the facial artery which crosses the mandible, entering the face at the junction between the posterior one third and the anterior two thirds of the body of the mandible. This also corresponds to the anterior border of the masseter muscle and this can be palpated at this point as well as being identified by a facial artery notch that runs inferiorly along the edge of the mandible. This artery runs underneath the SMAS layer and traverses superiorly and medially towards the corner of the lip before giving rise to an inferior labial and superior labial artery, and then continuing in the deep nasal labial fat as the nasolabial artery. This

continues along the side of the nose, as the angular artery, and gives rise to an alar branch to supply the skin over the ala of the nose and a lateral nasal branch to supply the skin of the lateral nose.

A further branch of the carotid artery is its terminal branch, the superficial temporal artery which divides into two main branches and supplies the skin of the temporal and forehead area.

The second main supply to the face arises from the internal carotid artery which gives rise via its various branches to the supraorbital and supratrochlear artery.

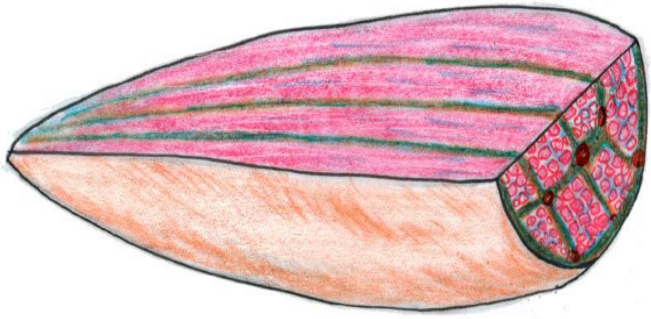




Muscles of the Face and Neck

Muscle Structure

Muscles are classified into three different types, which are skeletal, smooth and cardiac.



For the purpose of this course, we are mainly going to concentrate on Skeletal muscle, as smooth muscle is mainly found within hollow organs and cardiac muscle is found within the heart.

Skeletal muscles, also known as striated due to its appearance, or voluntary due to its action, are attached to bones and deal with movement. These muscles are made up of fine, thread like fibres of muscles, containing light and dark bands. Skeletal muscles can be made to contract and relax by voluntary will. They have striations due to the actin and myosin fibres and create movement when contracted. There are over 650 different types of muscles in the human body, making up nearly half of the body weight.

Muscles have the following properties:

Excitability – the muscle responds to stimuli
Contractibility – the muscle shortens due to a nerve impulse
Extensibility – the muscle can stretch and increase its length by half
Elasticity – the muscle will return to its normal length

Muscles consist mainly of muscle fibres which are held together by fibrous connective tissue, with numerous blood vessels and nerves penetrating through them. The muscle fibres are made up of muscle cells, which vary in length and are rod shaped. The fibres are called myofibrils and they get shorter (contract) in response to a nerve impulse. The protein strands then slide against each other when the muscle contracts.

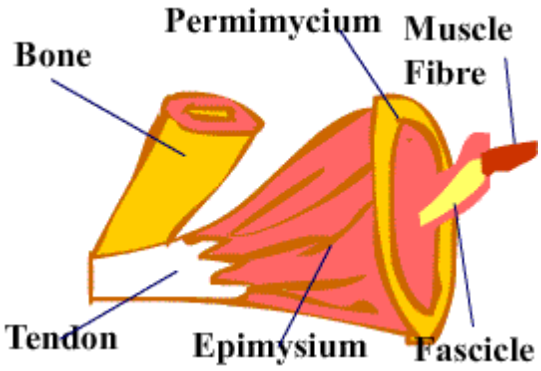
Each muscle fibre has an individual wrapping of a fine connective tissue called endomysium, which are then wrapped into bundles called fascicule and are covered by the perimysium. This is what forms the muscle belly, and has its own covering called the fascia epimysium. The fascia acts as a "Clingfilm" around muscles, giving them support and also acts as a pathway for nerves, blood and lymph vessels.

Muscle Shapes

The bundles of fibres within muscles will determine the shape of the muscle. The commonest muscle fibre arrangements are:

Parallel fibres – these muscles have fibres that run parallel to each other in length and can sometimes be called strap muscles. These muscles have great endurance but may not be that strong due to their length. An example would be the Sternocleidomastoid (SCM).

Circular muscles – these muscles are usually circular in shape and an example would be the muscles surrounding the mouth and eye.



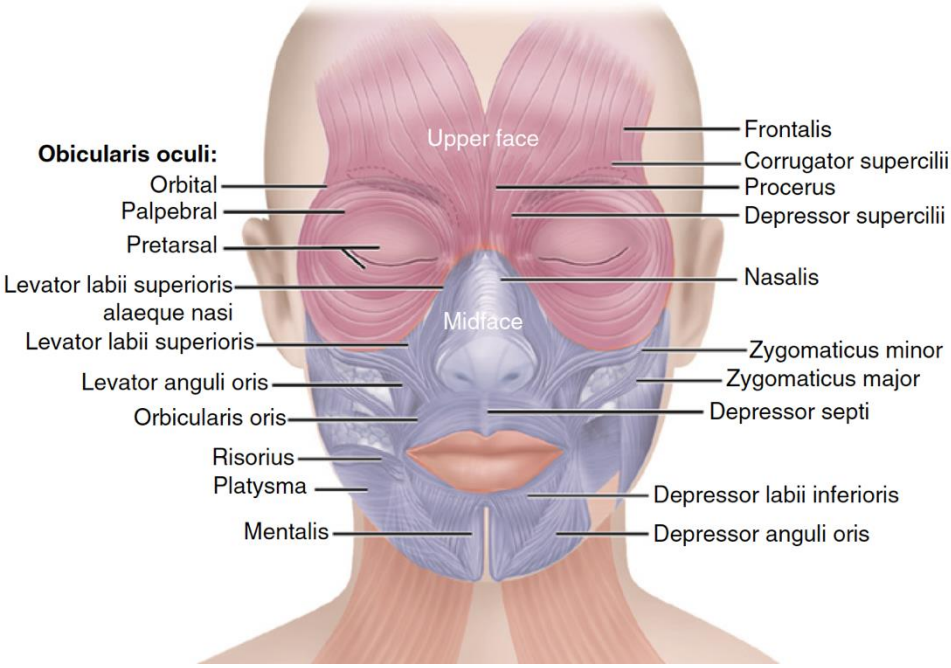
Convergent – this is where the muscle fibres converge to an attachment to a bone. The fibres are arranged to allow maximum force and can sometimes cross joints which have a large range of movement such as the Pectoralis Major.

Pennate – these are made up of short fibres, so the pull is short but also strong, though the muscle tires easily.

Fusiform – these are sometimes included within the parallel muscle group and are made up of spindle shaped fibres. A good example is the Biceps Brachii as the belly is wider than the origin and the insertion.

Muscle Movement

Muscles are only every able to contract or pull. This means they have to work in groups and even when carrying out an action, do not work alone. A joint, therefore has to have two or more muscles working together. As a muscle contracts, the second muscle relaxes, and as this second muscle contracts, the first muscle relaxes. This is called Antagonistic action as they are pulling in the opposite direction to each other but without working against each other. One end of the muscle needs to be fixed, which is known as the origin and as that muscle contracts, the other end of the muscle moves towards the origin. The name given to the end of the muscle that moves towards the origin is called the insertion.



Name	Position	Action
Frontalis	Upper part of the cranium	Elevates eyebrows; draws the scalp forwards
Corrugator	Inner corner of eyebrows	Draws eyebrows together (frowning)
Procerus	Top of nose between eyebrows	Depresses the eyebrows (forms wrinkles over the nose)
Orbicularis Oculi	Surrounds the eye	Closes the eye (blinking)
Nasalis	Over the front of nose	Compresses nose (causing wrinkles)
Temporalis	Runs downs the side of face towards jaw	Aids chewing; closes mouth
Masseter	Runs down and back to the angle of the jaw	Lifts the jaw; gives strength for biting (clenches the teeth)
Buccinator	Forms most of the cheek and gives it shape	Puffs out cheeks when blowing; keeps food in mouth when chewing
Risorius	Lower cheek	Pulls back angles of the mouth (smiling)
Zygomaticus	Runs down the cheek towards the corner of the mouth	Pulls corner of the month upwards and sideways
Quadratus labii superiorus	Runs upward from the upper lip	Lifts the upper lip; helps open the mouth
Orbicularis Oris	Surrounds the lip and forms the mouth	Closes the mouth; pushes lips forwards
Mentalis	Forms the chin	Lifts the chin; moves the lower lip outwards
Triangularis	Corner of the lower lip, extends over the chin	Pulls the corner of the chin down
Platysma	Front of throat	Pulls down the lower jaw; angles the mouth
Sterno – mastoid	Either side of the neck	Pulls head down to shoulders; rotates head to side; pulls chin onto chest

Skin Anatomy

- The skin is the largest organ of the body.
- Cells have an average life span of 19 – 34 days.
- The average person is covered by 2 ½ square yards of skin that weighs around 9 pounds.
- The average human grows about 1000 completely new outer skins during a lifetime.
- Red blood cells wear out at a rate of 3 million every second, requiring the body to make over 200 billion new ones every day.
- The body's entire supply of red blood cells is completely renewed every four months.
- Blood platelets last only 7-10 days in the body. They are one of the shortest-lived elements in the human body.

The Skin

Skin has two major tissue layers, The Epidermis, a thin layer of nonvascular tissue and the dermis, a dense layer of vascular connective tissue the subcutaneous layer (below the dermis) is a thick layer composed of fatty connective tissue that varies in thickness in each person.

A unique characteristic of the epidermis is its ability to regenerate tissue continuously. This process of shedding and renewing and renewing of epidermal tissue is called desquamation, taken from the Latin 'desquamatous' that means to scale off.

The outer layer of healthy skin is moist and approximately 10% water.

Intercellular cement is the lipid substance between the cells of the epidermis that keep the skin from dehydrating and helps to shield the skin from aggravating substances.

The layers of the epidermis have no blood vessels.

In order of their distance from the surface:

Stratum Corneum: Horny Layer: The outer layer of skin. This layer is the thickest of the epidermal layers and is exposed to the outer elements. The cells in this layer are dry and flat. This layer may have between 18-23 layers of flat dry cells that are cemented together by lipids, peptides, sebum and ceramides.

Stratum Lucidum: Is only present on the palms and soles of the feet. Thickness may vary from 0.5 to 0.8MM on the palms and soles of the feet and can be less than 0.1mm on the eyelids.

Stratum Granulosum: In this layer the lipids separate from the keratin (a non-living substance), ands cells lose a considerable amount of fat and moisture. These cells are approximately 80% keratin and less than 20% water.

Stratum Spinosum: This layer is several layers thick and flattens out as it rises upward. It is called the spiny or prickle cell layer due to the spiky appearance of the cells.

Stratum Germinativum: The basel layer is the only living layer of the epidermis where mitosis takes place. Mitosis is the process by which body cells divide to form two identical cells. This layer of skin does not have any blood vessels in it. Melanin is also in this layer.

Layers of the Dermis

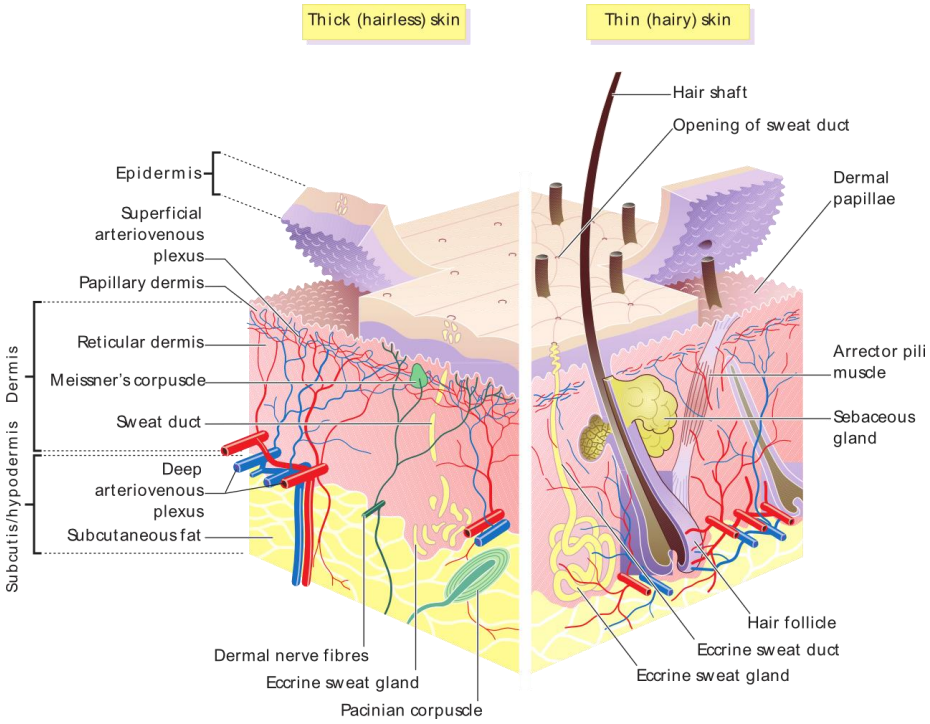
Papillary Layer: This Layer of skin is directly below the epidermis.

Reticular Layer: This Layer contains the following:

- Nerves.
- Lymph Vessels.
- Oil Glands.
- Elastin.
- Blood Vessels.
- Hair Follicles.
- Sweat Glands.
- Fat Cells.
- Arrector pili muscles.
- Collagen

One Square inch of skin contains:

- 9,500,000 Cells
- 65 Hairs
- 19-20 Yards of Blood Vessels
- 13 Sensory apparatuses for cold
- 19,500 Sensory cells at the ends of nerve fibres
- 1,300 nerve endings to record pain
- 650 Sweat glands
- 95-100 Sebaceous glands
- 78 sensory apparatuses for heat
- 78 yards of nerves
- 160-165 pressure apparatuses for the perception of tactile stimuli.



Skin Facts

- The skin guards the body from injury and bacterial invasion.
- The perceived colour of a person's skin depends on the intensity of the state of contraction or dilation of the superficial vessels and on the extent of oxygenation of the blood.
- Our skin has a limited capacity for absorption.
- Freckles are an uneven distribution of melanin in the epidermis.
- Skin is about 1mm thick on your eyelids, 3mm thick on the palms of your hands and the soles of your feet and about 2mm thick everywhere on the body.
- The nerve endings are small and separate so that sensation is distributed not uniformly but in small areas. Individuals who are insensitive to pain have defective development of certain nerve structures.
- When cells are injured, histamine (a chemical that dissolves protein) is released and these irritate the sensory nerve endings to cause varied degrees of discomfort.
- When ice is applied to the skin the capillaries constrict, less blood and histamine flows and pain is alleviated.
- When the skin is stroked firmly, the contractile cells of the vessels are mechanically stimulated, and capillary constriction produces immediate blanching. When these cells relax, the vessels dilate, and redness appears that flares to a small distance from the actual site of the stimulus. The flare depends on the integrity of nerve tissue and does not occur when the skin nerves have degenerated. If the stroke is injurious, histamine is released from damaged cells, water moves from the capillaries into the tissues and a swelling ensues. This is called a wheal and flare reaction or a hive.
- Keratin in the basal layer is a protein that aids in protecting the skin against invasion.

The Function of the Skin

The skin has many functions, these include:

Secretion – The skin secretes sebum from the underlying sebaceous glands. This natural oil helps to keep the skin supple.

Heat Regulation – The body temperature is regulated through the skin. Sweating helps to cool the skin, while shivering helps to warm the body up.

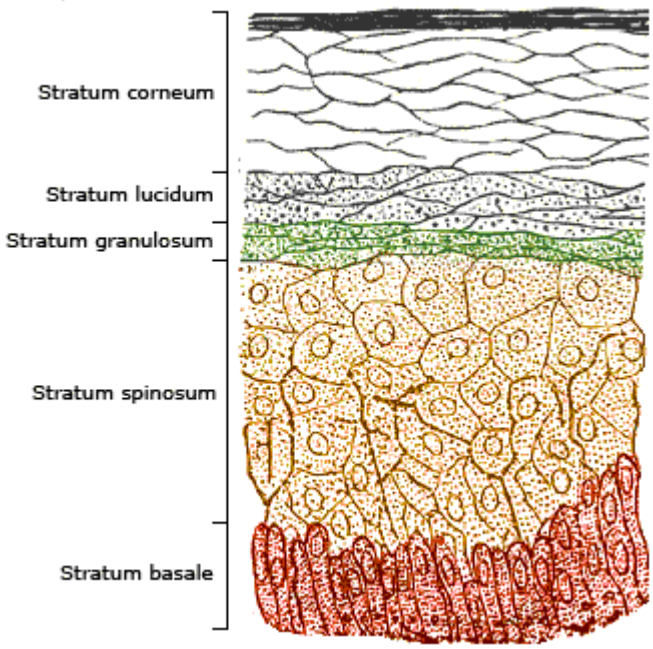
Absorption – Substances can be absorbed through the skin which can be transported into the blood stream.

Protection – The skin acts as a protective barrier against germs and bacteria. The skin also contains Melanocytes which produce Melanin, and this helps protect the skin against UV radiation.

Excretion – The skin contains sweat glands which help to excrete excess waste and toxins out of the body.

Sensation – The skin contains thousands of nerve endings which act as sensors for pain. Heat or cold.

Vitamins – The skin helps make Vitamin D which Is created by a chemical reaction to Sunlight



About Fillers

Injection of filler agents for facial rejuvenation is by no means a new procedure. Substances such as mineral oil, liquid silicone, collagen and even paraffin have been used as soft tissue filler to improve soft tissue imperfections. Due to high incidences of complications, which includes chronic oedema, granuloma formations, lymphadenopathy, scarring and ulcer formation new safer products made from Hyaluronic Acid (HA) have been developed which have less complications for the client. With the development of these new, safer fillers the demand for injectable fillers has grown in recent years as more and more clients seek nonsurgical means for correcting age-related changes to their facial skin. The increased popularity of Botox injections has aided the growth and demand for filler injections, which are able to provide results for areas where Botox cannot.

There are two basic types of wrinkles or rhytides: dynamic and static. They can occur separately or in combination. Dynamic wrinkles appear within the skin due to repeated contractures of the underlying muscles of facial expressions. Static rhytides appear, regardless of facial dynamics and are largely due to both intrinsic changes in the components of the dermal ground substance and from external and ageing factors from smoking, sun exposure and gravity.

The formation of both dynamic and static wrinkles is influenced by the quality of the clients natural collagen support layer with the dermal layers of the skin. Wrinkle grade can be assessed using The Wrinkle Assessment Scale (WAS) which was developed by surgeons to correlate their patients wrinkle grade with reference photographs and assigning a classification of 0-5. The WAS guide can be a useful tool in assessing your clients wrinkle grade when discussing treatment options, product types and when assessing injection depths and frequency of treatments.

In the upper face for the most part, dynamic rhytides and combination rhytides are best treated with Botox injections. However, for deeper wrinkles and furrows that cannot be resolved with Botox injections alone, a filler substance can be used in combination with Botox. In the lower face, injectable fillers are often the treatment of choice for treating both dynamic and static wrinkles. The choice of the correct filler substance can be difficult. New products are continuously introduced and may not always meet anticipated expectations by client and therapist. The ideal fillers are those that are biocompatible, noncarcinogenic and nonteratogenic. It is better to choose fillers with long and well researched track records and should be nonmigratory and free from adverse reactions and provide consistent results. Filler should be easy to use, widely available and require very little preparation and provide consistency. The end result should be natural looking, nonpalpable, be long lasting and have a short period of downtime. Although there is no perfect product with all of these attributes many fillers exist that provide satisfactory results and have excellent safety profiles.

Hyaluronic Acid (HA) fillers are compounded from a glycosaminoglycan polymer that occurs naturally within the body. Hyaluronic Acid fillers are manufactured by cross linking molecules into a 3-dimensional network. This cross-linking method is what determines the type and extent of the fillers viscosity and stability. Cross-linking of the molecule prevents oxidative stress and enzymatic degradation.

With so many fillers to choose from it is better to conceptualise and organise the choice of filler agents available into categories according to their physical properties and the duration of their effect. There are essentially three main categories of dermal fillers on the market. These include temporary biodegradable agents that last less than 1 year, semi permanent biodegradable fillers that last 1-2 years and permanent fillers which are nonbiodegradable agents and last more than 2 years.

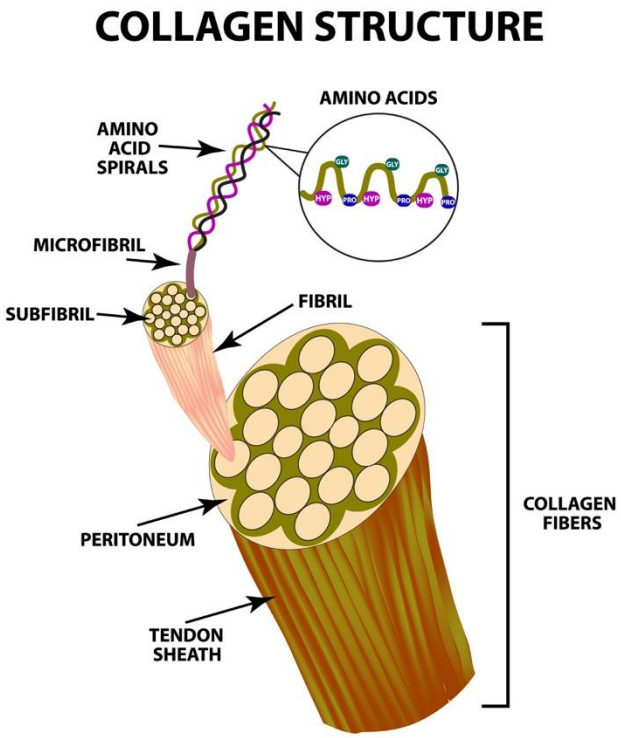
Temporary Biodegradable Compounds

Temporary biodegradable compound fillers work by increasing volume in the treated area and can typically last up to 1 year. There has been a huge shift over the years from using collagen-based fillers to HA fillers. HA have two main advantages, the first is a low incidence of allergic reaction to HA products over the use of bovine collagen and the second is that the duration and effect is far more superior compared to using either bovine or human collagen fillers. Another reason that collagen fillers fell out of favour was due to the requirement of a skin test prior to us which has led to the increase and popularity of HA fillers.

Bovine and human collagen

Although not commonly used today we will briefly introduce bovine and human collagen. Collagen is the most abundant protein found in the body and much of the dermis is composed of collagen proteins. Collagen proteins are trimers that involve 3 individual polypeptide chains, known as alpha chains. Each alpha chain is composed of around 1000 amino acids with glycine occupying every third position. Around 96% of the collagen molecule is helical and these helices are attached to nonhelical telopeptides at the amino and carboxyl ends. Collagen molecules are cross linked to form collagen fibrils, which then associate to form collagen fibres (see diagram below).

There are several types of collagen with the most common being type I collagen which accounts for roughly 60-80% of all collagen and type III collagen which accounts for around 15%-20%. The original collagen fillers were made from bovine collagen. This required a skin test prior to use, where as human collagen and HA do not, as the risk of allergic reaction is very low. The demand for collagen injections declined rapidly with the invention of the new temporary hyaluronic acid fillers.



Hyaluronic Acid Fillers

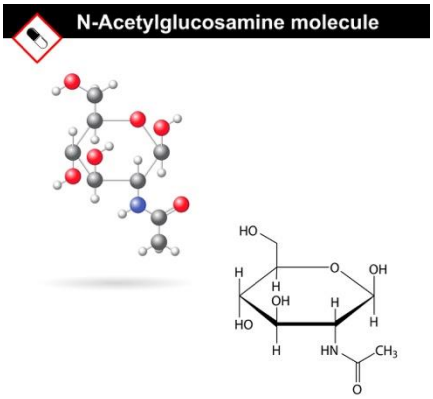
The popularity of HA fillers is based on the low risks of allergic reactions over previous fillers. The derivatives of HA vary between the source or HA, the particle size of the HA and the concentration as well as to whether or not the HA is cross-linked or not along with the type of crosslinking again used and the viscosity.

Hyaluronic Acid is a naturally occurring glycosaminoglycan that is the building block of the dermis and a major component of all connective tissue. The chemical structure of this polysaccharide is uniform throughout all mammals. There is no potential for immunologic reactions to Hyaluronic Acid in humans. The HA molecules in the skin bind water and create volume.

HA is a monomer that is composed of sodium glucuronate combined with N-acetylglucosamine. The HA filler is manufactured as a polymer that is composed of multiple monomers bound together like a string of beads. When HA is in a non-cross linked from it is essentially a liquid because the molecules are suspended individually in the

solution. When HA is cross-linked it increases the cohesiveness of the product and the liquid and product are transformed into a gel. The hardness of the gel correlates with the amount of cross-linking present in the compound. Other factors that affect the hardness of the gel include the concentration of HA as well as the sizing of the gel particles within the compound itself. The hardness of the gel is typically altered by adding non-cross-linked HA to cross-linked HA to thin the compound and increase flow. Another way this is accomplished is by adding smaller HA gel particles.

The amount of HA in the skin decreases with age and its subsequent loss results in reduced dermal hydration and an increase in skin wrinkles.



Examples of available Hyaluronic Fillers

Restylane

Restylane by Galderma Laboratories is a soft tissue filler made of hyaluronic acid that is biosynthetically produced through a bacterial fermentation process. Restylane is referred to as a nonanimal sourced HA (NASHA) compound dues to the fact that it is produced in a lab by a bacterial (streptococcus) fermentation process.

It is minimally cross-linked or stabilised with 1, 4-butanediol diglycidy ether (BDDE). Upon injection into the tissue, the NASHA gel dissipates, binds water and then increases in volumes. This volume is maintained until the HA disappears by degradation over a period of time.

Designed to be injected into mid-to-deep dermal layers of the skin the product consists of two forms, Restylane and Restylane-L. The product can also be purchased with 0.3% lidocaine added. Restylane & Restylane-L are also approved for lip augmentation. Restylane has a particle size of 250 µm. The HA concentrate of Restylane is 20 mg/ml of which 80% of this exists in cross-linked form and 20% of the compound is non-cross-linked to increase flow tendencies. The product lasts up to 12 months. Skin testing is not required as there are no species or tissue specificity there is a very limited risk for immunologic reactions. Local injection related reactions may occur that include erythema, pain, itching and tenderness in the treated area.

Perlane

Perlane is also manufactured by Gladerma Laboratories. Perlane-L contains 0.3% lidocaine. The difference between Restylane and Perlane is that Perlane has a different sized gel particle approximately three times thicker than Restylane and is ideal for deeper folds (such as the nasolabial) and volume augmentation (for lips). The product is marketed for the use in the correction of deep-to-superficial subcutis of facial folds and wrinkles. With a HA concentration of 20 mg/ml and a larger particle size, Perlane is a good choice for deep nasolabial fold correction and can be injected below the dermis in preperiosteal plane to correct deeper volume deficits.

Juvéderm

Produced by Allergan, Inc, Juvéderm comes in 5 variants, Juvéderm – Ultra, Juvéderm Ultra XC, Juvéderm Ultra Plus, Juvéderm Ultra Plus XC and Juvéderm Voluma XC. The products are formulated in France and are approved for the treatment of moderate to severe facial rhytides. Juvéderm is of nonanimal origin and has a patented cross-linked hyaluronic acid that is phosphate buffered to a pH of 6.5 to 7.3. These products are ideal for nasolabial folds and subdermal facial sculpting, lasting 6-9 months. Juvéderm has the highest concentration of HA at 24mg/ml and it is 90% cross linked, despite the high cross linkage the product is smooth and consistent. The difference between Juvéderm Ultra and Juvéderm Ultra Plus is the percentage of cross linking between the HA molecules. Juvéderm Ultra Plus XC and Juvéderm Ultra XC both contain 0.3% lidocaine.

Juvéderm Voluma Xc is intended for use on deep subcutaneous and supraperiosteal injections for cheek augmentation. Juvéderm Voluma is manufactured with Vycross™ technology which is a proprietary manufacturing technique that results in a high concentration of cross-linked HA which minimizes product degradation that lasts up to 2 years.

The major difference between Juvéderm and Restylane and other NASHA forms of HA relates to variable particle sizing. Restylane for example is comprised of equal sized gel particles with around 100,000 gel particles per ml. Juvéderm is however, comprised of a variety of gel particle sizes of which some of these particles are smaller than those found within Restylane, although some are also larger. The particle size heterogeneity provides a smoother consistency to the product which reduces the percentage on non-crossed linked HA that is needed to reduce gel hardness and improve the injection flow. As mentioned previously Restylane has 20% non-cross-linked HA whereas Juvéderm has only 10% whilst still maintaining a good flow consistency.

Belotero Balance

A recent addition to the market, Belotero Balance, produced by Merz Aesthetics, Inc has a HA concentration of 22.5 mg/ml. It has been formulated with a two-step cross-linking process that results in different density zones, distributing homogeneously into the dermis and resulting in a cohesive polydensified matrix gel. Belotero Balance does not contain lidocaine but may be used in combination with topical anesthetic products or regional nerve blocks.

Indications for Filler

- Fine lines and wrinkles
- Medium to very deep wrinkles
- Glabella
- Forehead lines
- Cheek lines
- Marionette lines and wrinkles
- Nasolabial lines and wrinkles
- Tear trough
- Acne scars
- Nose Bridge
- Cheek volumisation
- Vermillion border
- Lip augmentation
- Perioral lines
- Jawline
- Chin augmentation
- Neck Lines
- Hands

Contraindications

Contraindications for derma filler treatments are:

- Acne
- Herpes
- Pregnancy or breastfeeding
- Diabetics
- Inflammation of the skin
- Known allergies to any of the ingredients
- Hypertrophic scars
- Previous use of permanent fillers

Pre-treatment contraindications

To prevent the risks of bruising from over stretching the skin during treatment, clients should avoid:

- Alcohol consumption 24 hours before treatment, after and on the day of the treatment
- Taking Aspirin unless medically prescribed
- Avoid the use of vitamin E and products containing gingko extracts

Side effect and complications

Early Side Effects	Cause	Treatment
Bruise	Piercing a blood vessel	Heals over time, use arnica gel to speed up healing
Redness	Normal inflammatory response	Resolves within several hours
Swelling	Normal inflammatory response	Resolves over a couple of days, application of ice packs may help
Detectable filler	The client will feel the presence of filler	If the filler is irritating or uneven the client can massage it.
Pain	Will resolve within minutes	If not resolves within minutes then consider complications.

Early Complications	Cause	Treatment
Anaphylaxis	Immune hypersensitivity	If trained to do so use an epi-pen and call 999.
Allergic Reaction	Immune hypersensitivity	Ensure this isn't anaphylaxis, refer to prescriber for prescription of steroids or antihistamines. Reversal may be required.
Herpes Simplex	Existing HSV is triggered into action by minor trauma in the infected area.	Allow to heal over the following week or client can treat with Acyclovir ointment or tablets recommended by their pharmacist, GP or your prescriber.
Discolouration	Filler is placed superficially above the papillary dermis	Massage the area or allow to dissolve on its own or treat with hyaluronidase.
Under correction	Inexperience or too little filler used	Further treatment with more filler will resolve this issue.
Over correction	Poor judgement when applying filler or due to attraction of water, more commonly around the eyes and upper lip lines.	Massage the area in clinic and ask the client to continue this at home or reverse the filler with hyaluronidase.
Asymmetry	Poor injection technique or pre-existing asymmetry	If it is pre-existing then this may be possible to fix. A firm massage on the over treated side or apply more filler on the under treated side to create symmetry.
Filler nodules (appear after 4-8 weeks)	Poor injection techniques, product migration or collection	Massage the area or may need to be removed manually. This can occur commonly in lips.
Emobolisation	This is when the filler has blocked a major arterial	Reverse immediately and refer.
Infection	Infection usually caused by staph aureas	If the area appears red and indurated any point post procedure then: i) Inject hyaluronidase to break down the filler. ii) Have the prescriber prescribe antibiotics for a minimum of 14 days.

		iii) Avoid taking steroids of NSAIDS. iv) If problems persist or steroids have been used, refer the client for medical attention.
Impending necrosis	Caused by an undetected embolization or compression of an arterial.	Dissolve the filler immediately with hyaluronidase. Seek further medical advice.
Necrosis	Blood supply to the area has stopped and the tissues die.	Reverse the filler with hyaluronidase to prevent further necrosis. Seek medical advice.

Late Complications	Cause	Treatment
Migration	Repetitive mechanical force	Can sometimes be relieved with massage or may need to be dissolved
Infection	An infection that has spread from superficial skin lesions into the filler.	Dissolve the filler than have a course of antibiotics prescribed by your prescriber
Swelling/Puffiness	Late onset fluid attraction by hyaluronic acid	Regular gentle massage away from the area or dissolve
Telangiectasia	Can be caused by repeated inflammation from low grade trauma.	Electrolysis or laser
Granuloma after 4 months of treatment	Late onset red smooth bump that can persist for several years	Refer for intralesional steroid injections.

The Pathogenesis of Necrosis

Necrosis is the most serious side effect after anaphylaxis. Necrosis can occur in two possible ways, the first is from a direct embolization of an artery and the second is from compression.

Embolisation is where the needle cannulates the artery whilst injecting filler and fills the arterial tree. It is believed that worse case scenarios are caused by retrograde embolisation where the filler flows back down the arterial tree into a bigger vessel which can cause the filler to travel to other parts of the anatomy such as the eye.

Another way in which necrosis occurs is when there is atypical anatomy, for example it is postulated that the anastomoses between the super trochlear artery, ophthalmic and the facial artery in some cases can mean a significant portion of blood flows to the eye from the facial artery. Arteries and veins all have varying importance and can vary significantly to that seen in stock images or text books. It is possible to cannulate and cause serious trauma to facial arteries.

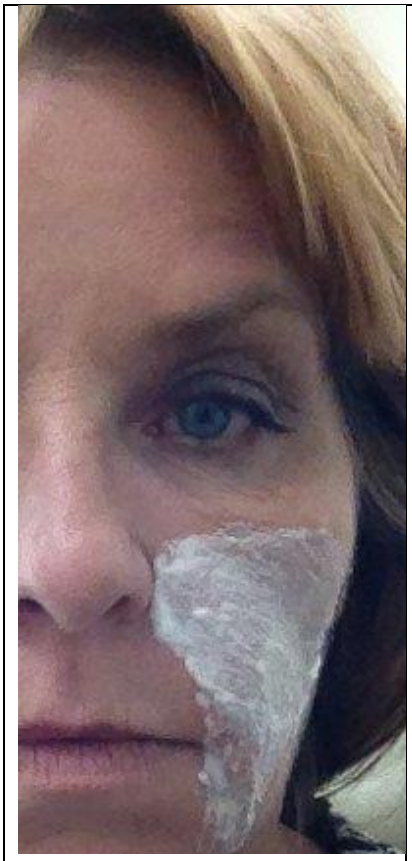
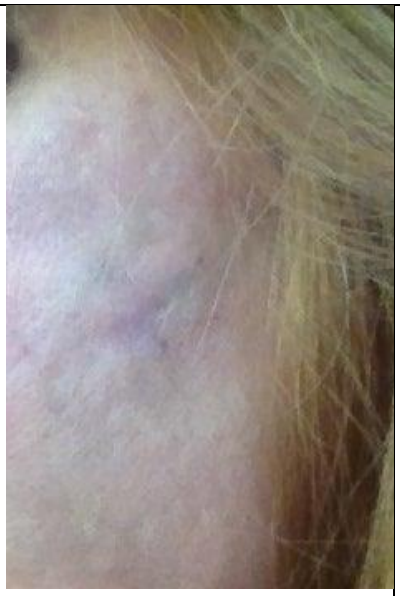
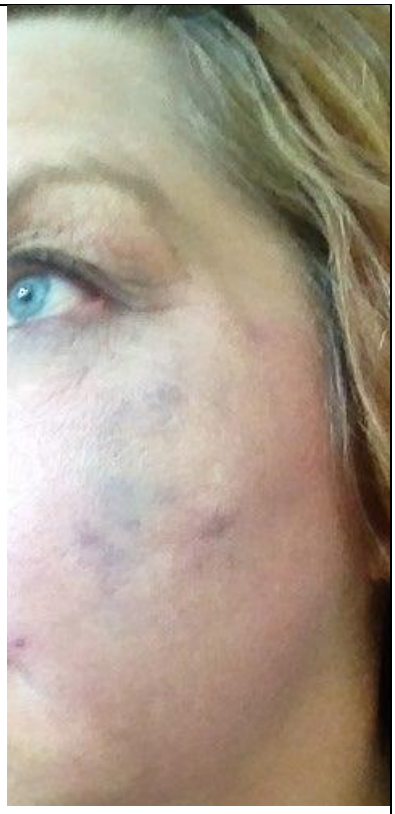
Tips to prevent vascular compromise

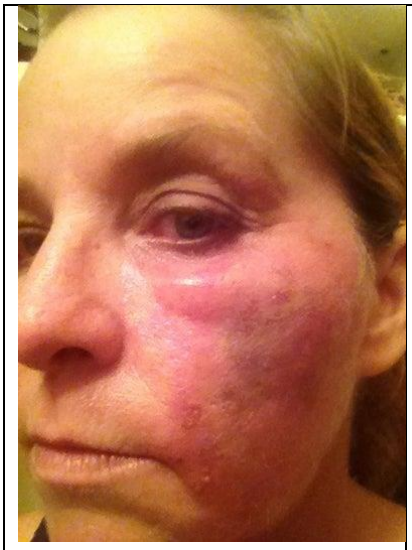
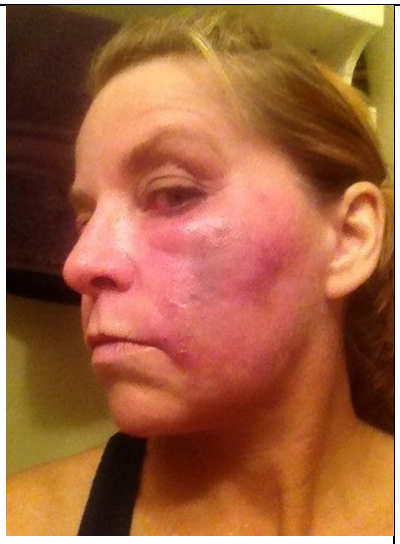
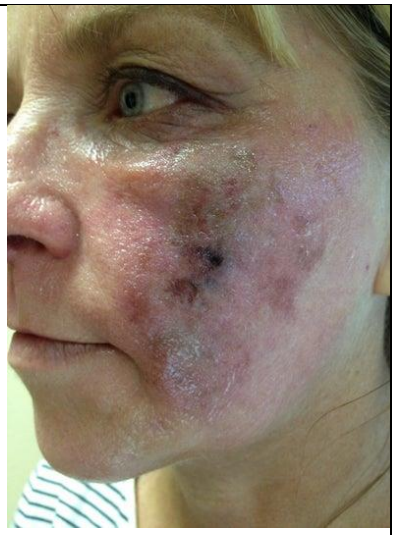
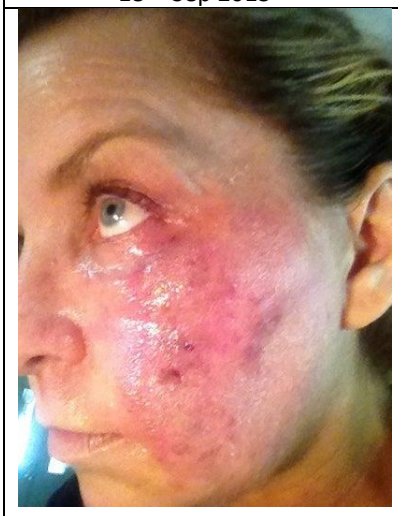
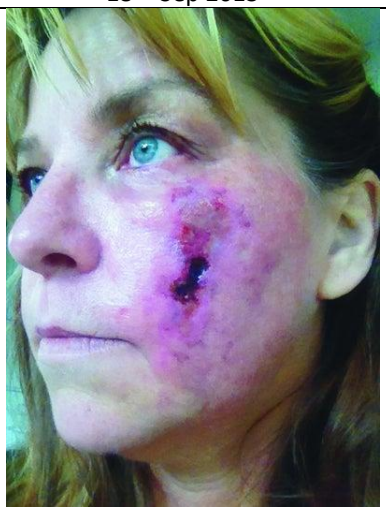
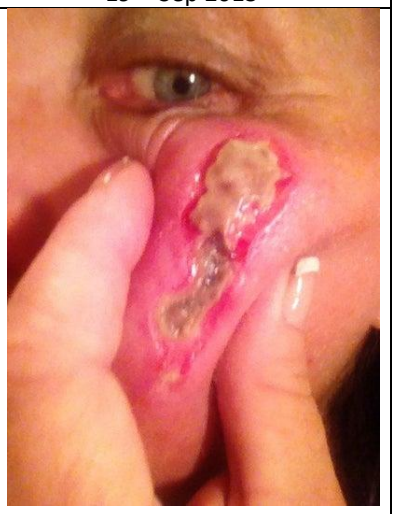
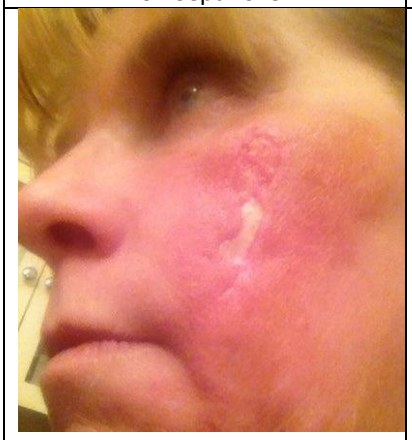
1. Know your anatomy well and understand that everyone is different.
2. Look for a flash back before injecting.
3. Never inject deeper than necessary.
4. Inject the filler slowly.
5. Inject small amounts of filler at a time.
6. Be careful with the total volume used as compression is more likely to occur when you use a lot of a firmer filler.
7. Check capillary refill after treatment.
8. Keep an emergency pack to hand at all times.
9. Ensure you advise your clients of how to seek medical attention if required.
10. Give appropriate after care advise.

Necrosis Time Line

Client had been having Radiesse in their left cheek for several years to correct muscle loss from a car accident. On this particular occasion white bumps formed at the site of injection and she was advised that it was from the lidocaine in the Radiesse and that it would resolve itself over the next hour. A few hours later she contacted the practitioner who advised her to massage it. The following morning, she woke up with severe swelling and bruising. She called the practitioner again, only to be advised that this would go down in the following days.

Visit https://www.realself.com/review/redding-ca-radiesse-side-effects?sort=oldest for the full story.

		
Numbing cream before Radiesse (notice the muscle loss)	Few hours after injections	4th Day after injections
12th Sep 2013	**12th Sep 2013**	**16th Sep 2013**

		
Raw and burning skin! Day 6	Fluid building under the eye. Day	Patient was told to wait before seeking medical attention.
18th Sep 2013	18th Sep 2013	19th Sep 2013
		
20th Sept 2013	22nd Sept 2013	30th Sept 2013
		
14th Oct 2013	13th Dec 2013	

Emergency Kit

When working with fillers an emergency pack should be kept to hand in the event of any complications.

This should include:

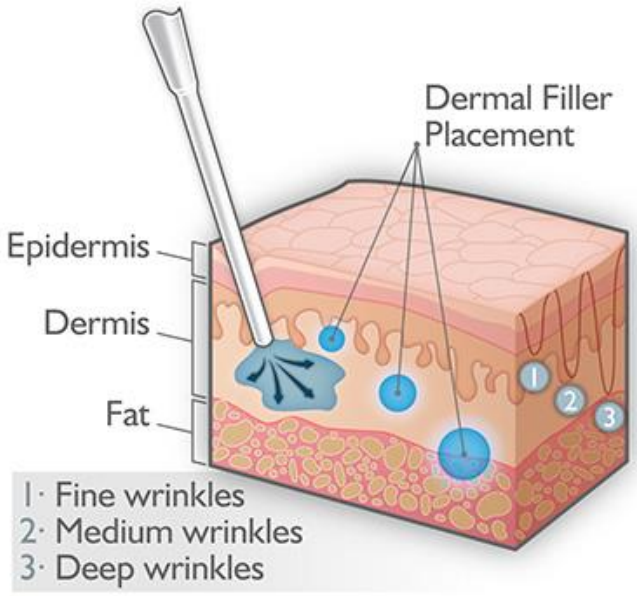
Adrenaline auto ejector (EpiPen)
Hyalase
Gloves
Bacteriostatic Saline
5ml syringe and needle
Aspirin
Rectogesic GTN Paste
Heat Pack
Ice Pack

Allergy test recommended before using Hyalase. Once mixed, draw up a small amount in Botox syringe and inject small bleb intradermally on inner forearm and leave for a few minutes to see if reaction.

Hyalase		
Emergency Reversal	1500 units	5ml Saline
Planned Reversal	1500 units	15ml Saline

Placement of Dermal Fillers

Placement of dermal fillers is important in order to maximise the effect of lines. Deep lines that are caused by volume loss are best corrected using deeper injections in the lower dermis. Fine wrinkles are better corrected using shallower injection techniques in the mid dermis. If you inject into the fat these may not have as much impact. Injections to shallow into the papillary dermis will discolour the skin.

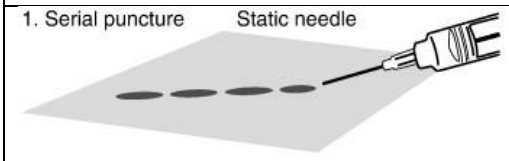
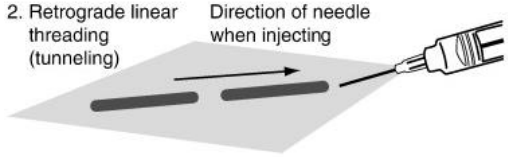
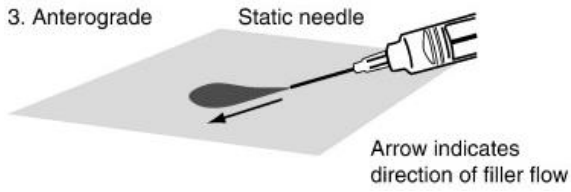
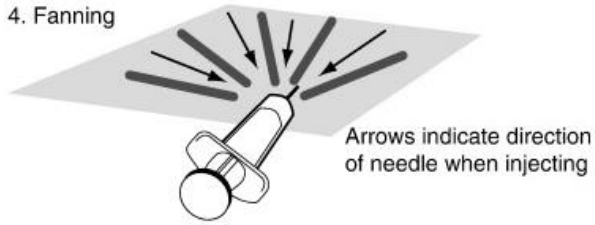
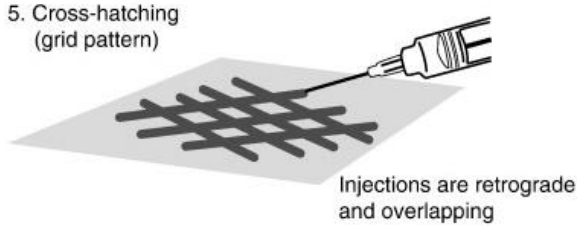


1. To ensure ease of flexibility and comfort for you and the client, hold the needle correctly with your wrist above and your thumb on the plunger of the syringe.
2. Line up the needle with the point on the skin where you want the needle to terminate. Once you know this you can choose your position of entry so the needle tip will reach the point where you want to inject filler.
3. Make sure you use the correct angle of entry. This is 45 degrees for deep lines and loss of volume and 30 degrees for more superficial creases.
4. After inserting the needle at the chosen angle until a third of the needle has penetrated the skin, your needle tip should now be at the correct depth.
5. Change the angle of your needle slowly so that it is parallel to the surface of the skin. As you advance your depth you will remain at the desired level.
6. Move the needle into the desired position.
7. Do a depth check. Once you have established that you are at the correct depth then check for a flashback by pulling back on the syringe. If you cannot see any blood then you are ok to proceed.
8. Inject the area as per the treatment area guidelines and the product guidelines chosen.
9. Remove the needle and massage the area so that it is smooth.
10. Check for capillary refill.

Performing a depth check:

Too Shallow: Skin blanches without lifting. If you inject here the filler will be visible as you are too superficial.
Fine Lines: If you lift the needle slightly under the skin and you can clearly see the shape of the needle as a defined line then you are at the right depth for injecting a low viscosity filler.
Deep Lines: For deeper lines or volume replacement, you should see a defined but rough shape of the needle you are at the right depth.
Too Deep: If you can only see the skin lifting in general and can't see the shape of your needle then you are more than likely in the subcutaneous fat which is not ideal.

Injection techniques

	Serial Puncture	
	Suitable for fine lines or superficial creases on top of deeper liners	30-degree entry angle 0.925 to 0.5ml dose
	Retrograde Linear Threading	
	This technique can be used on medium lines and volume loss	With deeper lines you should use a 45-degree angle and entry of 1/3 of the needle. Once in position, change the angle to 0 degrees and advanced down to the desired depth. Can be held at a 90-degree angle or parallel under the line
	Anterograde	
	This is an advanced technique and useful if you need to keep the needle tip away from important structures giving you limited control of flow of the filler.	The needles should be inserted at a 45-degree angle until the needle point is in the required position. Check flashback and then inject the filler slowly whilst closely monitoring the direction of the filler flow.
	Fanning	
	Fanning is a good technique that reduces pain as only one initial hole is created in the skin. Good for using on top of the nasolabial folds and the marionette lines when adding volume.	The injections should be done at a 45-degree angle until only a third of the needle is in the skin. Change to 0-degree angle with the skin and advance, check for flashback and then retrograde linear thread in each direction you need to fill.
	Cross Hatching	
	Cross hatching is a good method for widely spread fine lines or for lines under continuous pressure from tissues resting above them.	A superficial technique uses a 30-degree entry angle starting with an injection directly under the line that makes little improvement. Additional injections

Equipment Needed

General

- Gloves
- Alcohol wipes
- Gauze
- Wooden cotton-tipped applicators
- Surgical marker or white eyeliner pencil
- Handheld mirror

Aneasthesia

- 1ml, 3ml & 5ml Luer-Lok tip syringes
- Selection of Lidocaine
- Sodium Bicarbonate
- 18-gauge, 1 ½ inch needle
- 30-gauge ½ inch needle
- Topical anaesthetic
- Ice Packs

Filler

- Selection of fillers
- 30-gauge, ½ inch needles
- 27-gauge, ½ inch needles
- 28-gauge, ¾ inch needles

Anaesthesia

Providing adequate anaesthesia is an important part of performing dermal filler procedures. Providing a better and more comfortable procedure for your client.

Anaesthesia methods for dermal filler

- Injectable
    - Local infiltration
    - Ring blocks
- Topical
- Ice and other coolants

The anaesthetic method used is largely dependent on the sensitivity of the treatment area and the pain tolerance of the client as well as the need to preserve the baseline anatomy. Clients who have never had injectable cosmetic treatments previously may have higher anxiety levels and a lower pain tolerance and may require injectable anaesthetics for a more comfortable procedure. Clients with high pain thresholds can be made more comfortable with the use of topical anaesthetics or topical coolants, especially when lidocaine-based dermal fillers are used which have less treatment discomfort. Sensitive areas such as the lips, almost always require injectable anaesthesia regardless of the client's pain threshold.

Before using anaesthetic:

- Confirm that the client has no previous allergies to anaesthetics or adverse responses with injectable procedures.
- Confirm that the client has eaten in the last 3-4 hours to reduce the risk of hypoglycemia.
- Address anxiety symptoms and defer the procedure if the client is particularly apprehensive.
- Obtain informed consent

Injectable anaesthetics

Lidocaine is the most commonly used injectable anaesthetic used for dermal filler treatments. It has a fast onset of effect for pain reduction within a few minutes of being injected. Pressure, temperature and touch sensations are also reduced.

Complications with injectable anaesthetic

- Vasovagal episode
- Hypoglycemia
- Anxiety
- Bruising
- Infection
- Nerve injury
- Allergic reaction
- Anaphylaxis
- Lidocaine toxicity of the central nervous system
    - Dizziness
    - Tongue numbness
    - Tinnitus
    - Diplopia
    - Nystagmus
    - Slurred speech
    - Seizures
    - Respiratory distress

- Lidocaine toxicity of the cardiovascular system
    - Arrhythmias
    - Hypotension
    - Cardiac Arrest
- Epinephrine adverse response
    - Tachycardia
    - Tremor
    - Anxiety
    - Local hypoperfusion

Topical anaesthetics

Topical anaesthetics are often used with dermal filler treatments due to their ease of use. With the incorporation of lidocaine into dermal filler products, discomfort is greatly reduced. Those clients with high pain thresholds can tolerate treatments with a topical anaesthetic and a dermal filler product with lidocaine.

Topical anaesthetics have the same mechanism of action as injectable anaesthetics by blocking sensory nerves through neuronal impulse inhibition and they reduce discomfort associated with the insertion of the needle.

Commonly used topical anaesthetics

- L-M-X (lidocaine 4%-5%)
- EMLA (lidocaine 2.5%. prilocaine 2.5%)

Complications of topical anaesthetics

- Allergic reactions
- Lidocaine toxicity of the central nervous system
    - Dizziness
    - Tongue numbness
    - Tinnitus
    - Diplopia
    - Nystagmus
    - Slurred speech
    - Seizures
    - Respiratory distress
- Lidocaine toxicity of the cardiovascular system
    - Arrhythmias
    - Hypotension
    - Cardiac Arrest

Ice and other coolants

Ice may be applied to the skin immediately before injection for approximately 1-2 minutes, until the skin is erythematous but not blanched

Nasolabial Folds

Safety

When treating the nasolabial fold, you should understand how to prevent and recognise as well as treat serious complications of impending alar necrosis.

Anatomy

The nasolabial fold is present from birth, but as we age this becomes longer and deeper acquires creases that are accompanied by loss of volume and skin laxity. The deepening of these lines is one of the first signs of the ageing mid face and also one of the easiest to rejuvenate.

When we smile the action of the zygomatic muscles accentuates the fold which over time impacts the surface of the skin where creases and fine lines appear. The fold should still be present when we smile and over treatment reduces this too much and can look unnatural.

The deepest part of the shadow is just inferior to the alar junction and a small shadow can be seen at this point. Removing this line can give the appearance that the nose is just stuck on and not integrated into the face.

You will need to be aware of the lateral nasal artery branching from the angular artery as dermal filler placement near this artery can either compress the artery or cause necrosis if the filler is injected inadvertently.

The nasolabial fold tends to inferior medial to the facial artery and the lateral nasal artery that supplies the corner of the nose tends to be superior to the end of the fold.

Surface Anatomy

Before treatment you should examine the length and depth of the cline and the superficial creases as well as the volume loss. Both features should be treated with their appropriate techniques

Underlying causes

Loss of volume under the skin
Loss of volume of the malar fat pad of the cheek
An increase in skin laxity due to ageing and sun damage
Rapid or significant weight loss

Safety Margins

Many of the important structures lie superiorly to the nasolabial fold. Anatomy can vary between individuals so you cannot always rely on reference guides to be certain of the positioning of the lateral nasal artery to the nasolabial fold.

When injecting filler, you should always assume that there are arteries under every injection point and you must always check for a flash back.

Desired treatment outcomes

Removes the shadows in the mid face
Elevates the cheek slightly
Widens the mouth slightly

Choice of filler

Medium viscosity fillers such as Juvéderm 3 or on some occasions 4. You can use a low viscosity filler like Juvéderm 2 for surface creases in the same area.

Common site-specific side effects

Bruising laterally to the mouth
Asymmetry which is usually pre-existing

Common injection techniques

Volume Loss

- Fanning – to spread the volume evenly
- Layering – for severe volume loss and to spread the filler evenly
- 90 degree supports – to lift tissue significantly which has been displaced down by gravity.

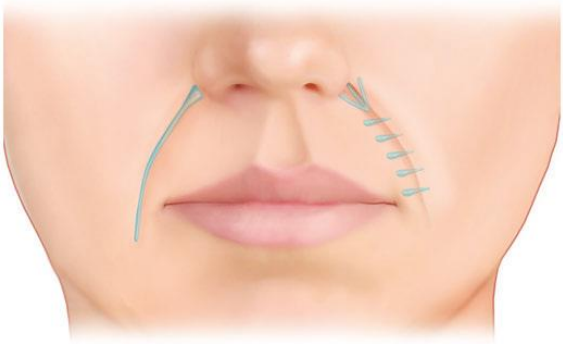
Surface Creases

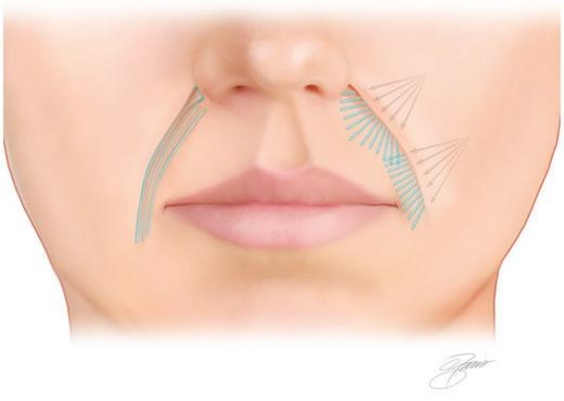
- Serial Puncture – Suitable for fine surface lines
- Cross-hatching – for more resistant fine lines or as part of a 90 degree supporting injections.

Volumes

There are no recommended volumes as every client will have varying needs.

Superficial creases with a minimal loss of volume may only require 0.3-0.6mls of filler where very deep lines that need more advanced techniques may require 2-4mls.





Melo labial Fold

Safety

When injecting filler into the Melo labial fold it Is important to understand the positioning of the mental and inferior labial arteries.

Anatomy

A reduction in tissue elasticity as we age, causes skin laxity and couple with a loss of volume above and below the oral commissures contributes to the ageing of the lower face and the development of marionette lines or Melo labial folds.

Surface Anatomy

Before beginning to inject filler the length and depths of the lines should be examined for superficial creases as well as loss of volume. The different features will need to be treated with different techniques. The Melo labial fold starts as a weak line at the start of the ageing process and eventually extends all the way to the jawline.

The chin area will also suffer from a loss of volume contributing to the overall appearance of the line.

Underlying causes

Loss of volume of the skin
Loss of volume of the malar fat pad in the cheek
Volume loss in the chin
An increase in skin laxity due to aging and sun damage
Loss of teeth in the lower jaw

Safety margins

Many of the important structures lateral to the fold including the facial artery. Another artery called the metal artery runs more medial and this area has many branches of the facial vein. As with all injection sites, remember to check for flash back before injecting filler.

Desired treatment outcomes

Lifts the jowl
Helps to lift up the corners or the mouth
Improves the jaw line
Softens and removes the pre-jowl sulcus

Choice of filler

Volume loss of the chin – Juvéderm 3 or 4
Treating the lines themselves – Juvéderm 3
Fine creases in the surface of the skin – Juvéderm 2

Common site-specific side effects

Bruising
Formation of a ledge where the line is removed but meets the tissue above the line rested on the cheek

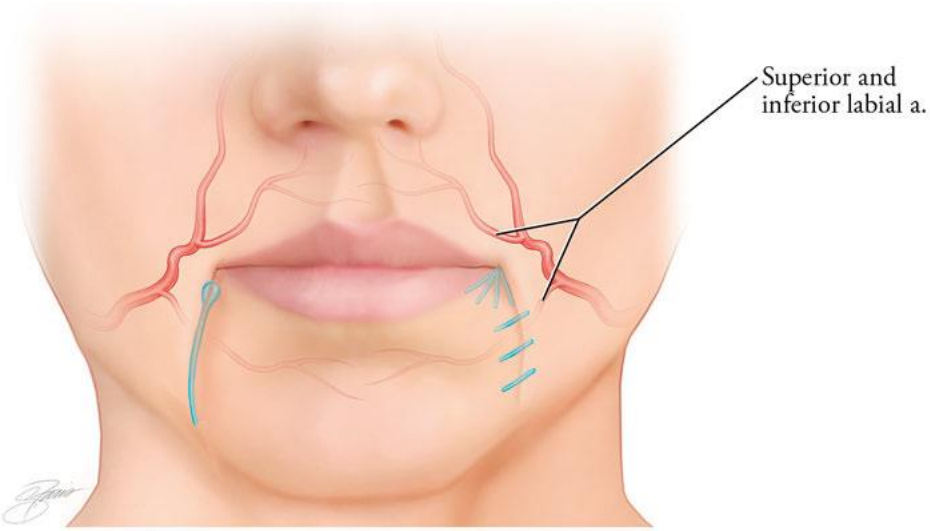
Injection techniques

Volume Loss

- Fanning – which evenly spreads the filler for volume replacement
- Layering – technique ideal for spreading filler in areas of severe loss of volume
- 90 degree supports – lifts tissue that has been significantly displaced by gravity.

Filler Volumes

Superficial wrinkles at the corner of the mouth may only require less than 0.2ml of filler, whereas more moderate loss of volume and wrinkles may require up to 1ml.



Rejuvenation of the upper lip

Safety

When treating the upper lip area be aware that deeper to the line is the superior labial artery. Injections in this area should always be superficial but below the papillary dermis. Swelling and bruising are common, more so than in other areas.

Ageing Anatomy

During the ageing process there is a significant reduction in tissue elasticity and an increase in skin laxity and loss of volume especially above the lip. The repeated mechanical movement of the orbicularis oculi muscle causes wrinkles to form around the mouth. Coupled with a loss in bone density and gum atrophy that can result in the loss of teeth dramatically adds to the problem. Fine lines in the area are often accompanied by a loss of definition of the philtrum and vermillion border.

Safety Margins

The most important structure to be aware of in this area is the superior labial artery. Injections in this area should be superficial but below the papillary dermis.

Desired treatment outcomes

This is dependent on each client and can include re-definition of the mouth's structures including the philtrum, vermillion boarder and softening of or removing of the fine lines around the upper lip.

Common site-specific side effects

Bruising is very common in this area due to the amount of fine lines that need to be treated. Swelling will also be more noticeable.

Injection techniques

Surface creases and volume loss

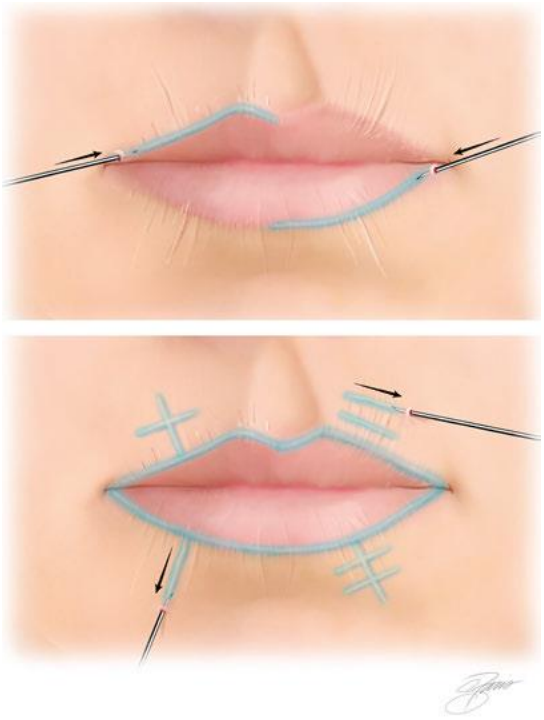
- Serial puncture – suitable for milder fine, surface lines
- Cross hatching – linear threading technique at 90 degrees to the line. Helps to resist the mechanical forces that cause the lines
- Linear threading – inject directly under the deep or resistant lines

Volumes

Volumes vary between clients with 0.5ml required for mild restoration to 0.6ml for complete restoration.

Treatment specific side effects

Not enough filler
Asymmetry
Lumpiness of filler
Over treatment – too much filler
Herpes simplex outbreak
Telangiectasia
Infection
Granulomas
Arterial compromise



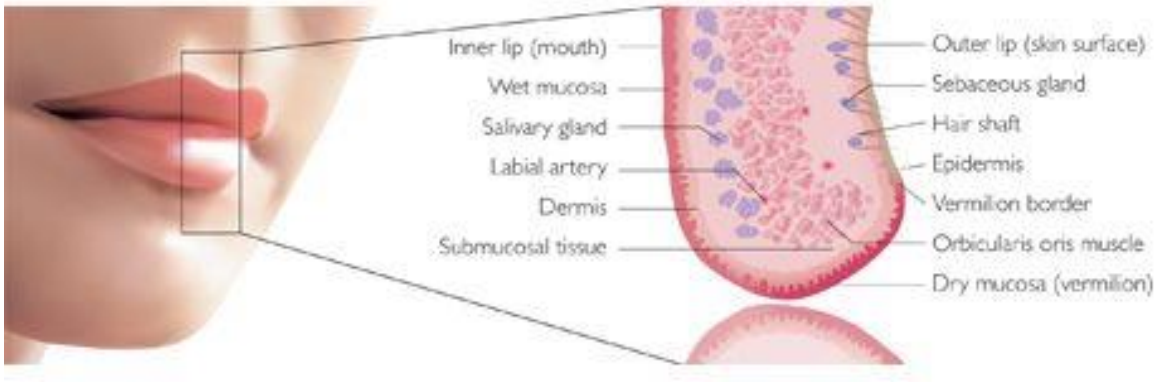
Lip Injections

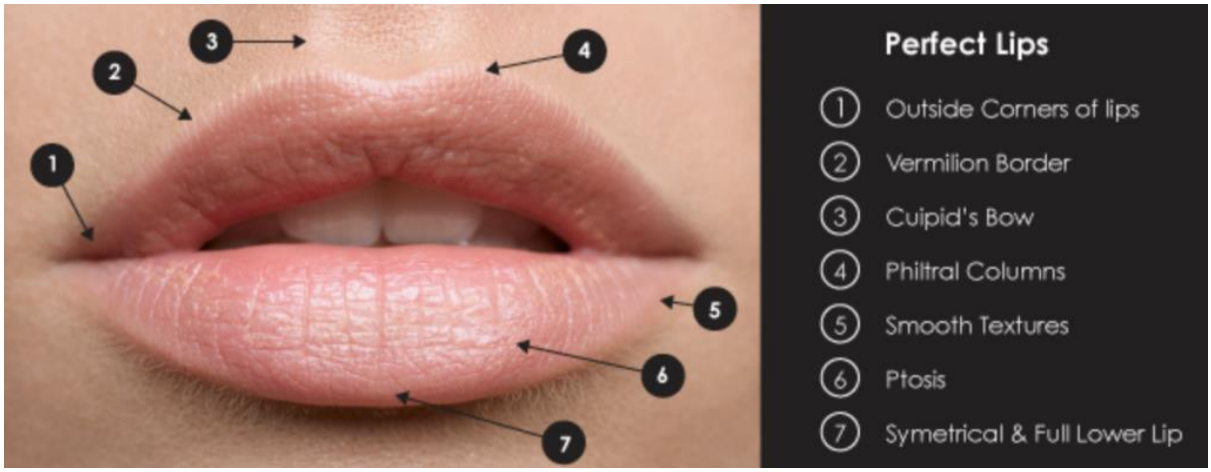
This technique improves less defined lip shape and diminished lip volume from aging.

Anatomy

The vermillion border is the demarcation between the less keritinised pink vermillion of the lip epidermis and the highly keratinised skin of the epidermis. The cupids bow is the central part of the upper lip with two peaks at the philtral column. The cupids bow contributes to the natural shape of the lip and is typically enhanced as part of the dermal filler lip augmentation.

The pink area of the lip is called the vermillion and is comprised of dry and wet mucosa. When the mouth is closed, the dry mucosa is exposed to air and the wet mucosa remains inside the mouth. The junction between these two portions of the lip vermillion is called the wet-dry border. Lip shape and volume varies greatly. In general, the lower lip is fuller than the upper lip, however many clients, prefer the upper lip to be fuller. This is where a balance should be achieved to ensure the lips remain looking natural.





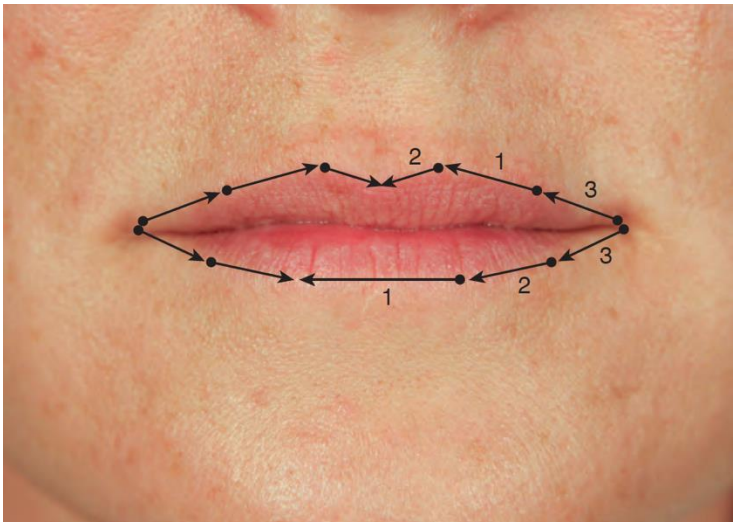
Recommended products

Products with a soft tissue filling effect such as Juvéderm Ultra XC is recommended for clients with atrophic lips. Juvéderm Ultra Plus XC or Restylane-L is recommended for younger clients with a greater baseline tissue density and lip volumes.

Lip Border Procedure

The treatment is performed by six linear thread injections for the upper lip border and five linear thread injections on the lower lip border. Injections are place in the superficial dermis of the vermillion border.

1. Attach a 30-gauge, ½ inch gauge needle to the prefilled filler syringe. Ensuring the needle is firmly fixed to the dermal filler syringe to prevent the needle coming off when pressure of the filler is applied.
2. Prime the needle by depressing the syringe plunger until a small amount of dermal filled extrudes from the needle tip.
3. The therapist should be positioned on the same side as the lip to be injected.
4. Identify the first injection point in the upper lid border by laying the needle against the vermillion border so that the needle tip ends at the ipsilateral peak of the cupids bow.
5. Insert the needle into the vermillion border at a 30-degree angle to the skin and direct it towards the ipsilateral peak of the cupids bow, firmly press the syringe plunger while gradually withdrawing the needle to inject a thin linear thread of filler. The filler should flow easily into the lip and a roller border will be visible on the lip vermillion as the product is injected.
6. The second injection will be in the upper lip border at the ipsilateral peak of the cupids bow. Insert the needle and advance inferior-medially to the nadir of the cupids bow. Inject the filler as you withdraw the needle, paying attention to symmetry.
7. The next injection point is in the upper lip border and is one needle length lateral to the first injection point. Insert the needle until the tip is adjacent to the linear thread from the previous injection, repeat in the same way, pressing down on the plunger of the syringe as you remove the needle.
8. Compress the area gently with thumb on the skin and first finger intraorally and massage the lip border to smooth any visible palpable bumps of filler.
9. Reposition to the other side of the client and repeat steps 7 & 8.
10. Identify where you will place the first lower lip border injection point by laying the needle against the vermillion border so that the length of the needle spans the centre portion of the lower lip, the hub of the needle should be lateral to the ipsilateral peak of the cupids bow.
11. Insert the needle on the vermillion border at a 30-degree angle to the lip epidermis and directed towards the opposite side, filler is smoothly injected as the needle is withdrawn.
12. The second lower lip border injection is one needle length lateral to the first injection point.
13. The next lower lip border injection point is at the corner of the lip. The needle is inserted until the tip is adjacent to the linear thread of the previous injection.
14. Compress the lip gently from medial to lateral.
15. Repeat steps on the opposite side of the lip.



Side effects of lip filler

- Swelling
- Bruising
- Necrosis
- Herpes simplex

Lip body

Using proper techniques and products, lip fullness can be achieved with dermal filler in a natural way. Treatment is suitable for those with a loss of volume in their lips or for the purpose of enhancement.

Depth of injection

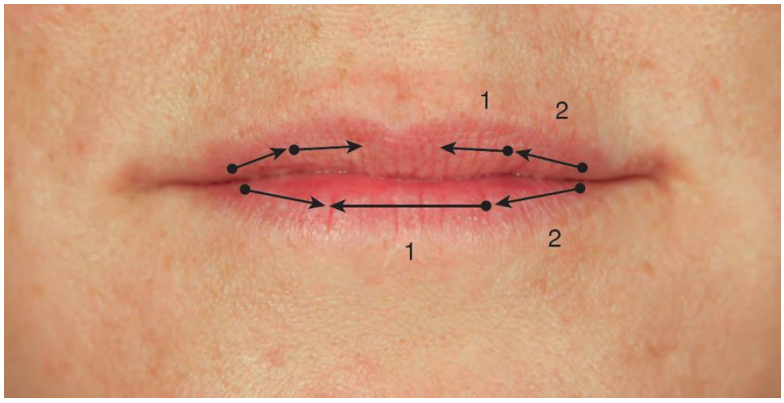
Dermal filler is injected 2–3 mm deep in the mucosa, at or just superior to the wet–dry border, for treatment of the lip body.

Cautions and observations

- Watch filler volumes closely during treatment and ensure equal volumes or filler are injected on both sides of the lips.
- Lip oedema occurs quickly. At the end of the treatment the side injected first may appear larger due to oedema. As long as the same volumes injected on both sides of the lip, and there was no previous asymmetry, allow the lips swelling to go down before correcting.
- Care must be taken to avoid the labial arteries that are located deep in the labial mucosa as this can cause vascular occlusion and necrosis. Remember to use your flashback techniques.

Treatment protocol

1. Attach a 30-gauge, ½ inch needle to the filler syringe, ensuring the needle is attached firmly to prevent it coming off during the procedure.
2. Prime the needle by depressing the syringe plunger until a small amount of dermal filler extrudes from the needle tip.
3. Identify the first injection point in the upper lip by laying the needle against the mucosa at the wet/dry border so that the needle tip ends at the ipsilateral peak of the cupids bow.
4. Insert the needle into the lip mucosa at a 30-degree angle to the lip, directing it parallel to the body of the lop and medially toward the ipsilateral peak of the cupids bow. The needle is inserted to the hub and a linear thread of filler is injected by applying firm and constant pressure on the plunger whilst withdrawing the needle.
5. The next injection point is the body of the upper lip and is one needle length lateral to the first injection point. The needle is again inserted to the hub and filler is smoothly injected as the needle is removed.
6. Massage the lip with the thumb on the skin and the first finger intraorally and compress from medial to lateral along the length of the lip to smooth the filler and compress any bumps.
7. Repeat on the opposite side of the upper lip.
8. For the first injection point on the bottom of the lip, lay the needle against the mucosa at the wet and dry border so that the length of the needle spans the centre portion of the body of the bottom lip.
9. Insert the needle into the lip's mucosa at a 30-degree angle to the lip and direct parallel to the lip and medially across the centre portion of the lower lip body. Apply filler smoothly and slowly as you withdraw the needle.
10. The next injection point on the bottom lip is one needle length lateral to the first injection point. Again, apply filler smoothly as you withdraw the needle.
11. Repeat on the opposite side of the lip.
12. Massage both the top and bottom of the lips to ensure filler smoothness.



Side effects of lip filler

- Swelling
- Bruising
- Necrosis
- Herpes simplex

CONSENT FORM FOR DERMAL FILLER TREATMENT

1. The Patient…….. confirms that he/she understands the risks and conditions associated with dermal filler treatment and that it is an elective cosmetic procedure.
2. The Patient acknowledges that the practice of medicine and surgery is not an exact science and therefore that no guarantee can be given as to the results of the treatment referred to in this document. The patient accepts and understands that the goal of this treatment is improvement, not perfection, and that there is no guarantee that the anticipated results will be achieved.
3. The Patient acknowledges that whilst complications from this procedure are uncommon, they do sometimes occur. Side effects may (depending on the product used) include redness, swelling, bruising, discomfort, tenderness, swelling, and itchiness – these side effects may last from a few seconds up to a couple of weeks or more. The Patient acknowledges that he/she has read and fully understood the list of potential side effects.
4. The Patient has provided the practitioner with all his/her medical history and/ or medication details. The Patient confirms such information and any other information provided by medical practitioner is complete and correct. The Patient fully accepts any consequences of not providing full details and will not hold practitioner liable in respect of the same.
5. The Patient acknowledges that medical practitioner, as part of his/her medical procedures and guidelines, may take photograph(s) of the area to be treated for inclusion in the Patient's records and understands that the Patient's identity will be kept strictly confidential. The Patient hereby unconditionally, irrevocably and expressly consents to practitioner to take a photograph(s) of the area(s) to be treated.
6. The Patient has had explained and understands that each treatment session will cost ……for dermal filler treatment. Medical practitioner reserves the right to change this charge from time to time without prior notice where the Patient does not have treatment within 6 months of his/her last treatment. The charge includes time for any preparation required for this treatment.
7. The Patient acknowledges receipt of dermal filler Post Treatment Advice sheet regarding dermal filler treatment and a copy of this Agreement and has had a complete consultation regarding the same. He/she confirms that he/she has had sufficient opportunity to read the same and raise any queries resulting from the consultation itself or from reading the Post Treatment Advice Sheet or this Agreement. The Patient further confirms that such queries have been satisfactorily answered.
8. The Patient acknowledges that he/she completely understands this Agreement and the consultation and is undergoing the treatment of his/her own volition.
9. The Patient irrevocably agrees that for each and every treatment he/she will be deemed to have acknowledged the above paragraphs.

.....	.....
Patient's signature	Practitioner's signature
Date:	Date:

CLIENT AFTERCARE

Following your dermal filler treatment some common injection related reactions may occur:

- Redness - Any redness should decrease over 6/24-hour period. A clean, light make-up can be applied to cover any redness approximately 4 hours post treatment.
- Swelling - do not expose the treated area to intense heat or to extreme cold for two weeks following treatment. A clean cool pack can be applied directly to the treated area. Nonprescription anti-inflammatories may prove useful in the reduction of swelling so long as you are medically suitable to take them. However, bruising may be enhanced and/or prolonged with the use of anti-inflammatories.
- Bruising – dermal filler injections can cause areas of bruising although this would not normally be expected to occur, the eye contour being the area at most risk. Any such bruising will be temporary. If you are taking any medication or dietary supplements that can affect platelet function and bleeding time, the severity and period of bruising can be extended. Be aware that taking aspirin or similar medication may increase the likelihood of bruising. Arnica cream and/or tablets can help to minimise and resolve bruising more quickly. Make-up can be applied to cover bruising approximately 4 hours post treatment.
- Tenderness or discomfort at injection site for 24-72 hours following treatment – nonprescription analgesia can be taken.
- Itching may occur for 7-14 days following treatment - Non-prescription anti-histamines may alleviate any itching. These sensations will usually typically resolve within days and many people are able to return to their normal activities the same day. Some people may react differently and may experience these reactions for longer. However, these reactions are temporary and typically resolve within 7-14 days as the skin returns to normal.

It is advisable to:

- Refrain from touching the treated areas with your hands until the pores have had chance to close. This is to reduce the risk of infection at the site of injection.
- Make up can be applied approximately 4 hours post treatment - mineral is recommended.
- It is recommended that the use of soaps, other than those recommended by your practitioner, on the treated skin area is restricted until the redness subsides and where possible warm / tepid water and / or gentle skin cleansers are used for cleansing. Do not scrub. Pat to dry only.
- Refrain from intensive sun light (e.g. sunbeds and sunbathing), saunas, steam bath for a period of at least 2 weeks.
- Avoid electrolysis, waxing, bleaching of treated area for 72 hours.
- Do not swim in chlorinated water for approximately 14 days.