Safe-Inject provides an affordable, disposable solution to the concerns of cross-infection, needle stick injury and single patient use...
Safe-Inject is CE marked for use by all medical professionals qualified to administer local anaesthesia...

- **Fully disposable**
  Use it, lock it, bin it – including the handle.

- **Helps prevent needle stick injuries**
  Simple to use, Safe-Inject has an integral needle and a protective sheath which is retractable during treatment and locks fully after use.

- **Reduces the risk of cross infection**
  Safe-Inject is designed for single patient use only.

- **Sterile**
  The Safe-Inject syringe is packed sterile.

- **Cost effective**
  Safe-Inject offers excellent value which compares favourably to other methods of local anaesthetic administration – and no need to autoclave.

- **Fully traceable**
  Safe-Inject syringes are packed separately and have a batch number and expiry date on each pack.
Clinical benefits

- Available in four needle sizes
  - 27 gauge short (25mm length)
  - 30 gauge short (25mm length)
  - 27 gauge long (35mm length)
  - 30 gauge ultra-short (10mm length)

- Transparent barrel
  Aspiration is clearly visible

- Non-reflective and warm to the touch
  Less intimidating for children and nervous patients

- Clearly defined and tactile reversible first holding position
  Protects the Clinician from needle stick injury

- Re-engineered handle attachment to the barrel
  Correctly assembled, Safe-Inject requires 60 kilos of pressure to part the handle from the barrel

- Finger grips incorporated on the protective barrel
  Wet, gloved hands won’t slip

- Can be used with both 1.8ml and 2.2ml anaesthetic cartridges
  Gives Clinicians greater choice

- Bevel indicator
  Helps ensure correct insertion and reduces needle blockage
How to use

**Part A (needle) must be assembled with Part B (handle).**

**Step 1:** Remove Part A, by tearing it from its protective wrapping. Grip the barrel firmly and fully insert the cartridge into the open end of the device.

**Step 2:** Grip the handle plunger (Part B) and put your thumb behind the finger holder. Introduce the handle tip into the barrel of Part A, behind the cartridge.

**Step 3:** Now slide the sheath protecting the needle backwards towards the handle until it CLICKS (the click is made as the sheath hits the handle and locks the unit together).

**WARNING:** Failure to retract the sheath fully until you hear the click may result in the device disassembling during use.

**Step 4:** All movements now are away from the needle. Remove the needle cap and discard. The device is now ready to use. You should always ensure a minimum of 0.25 ml to 0.35 ml of solution has been previously expelled from the cartridge (providing space).

**Step 5:** After you have finished the injection, remove your fingers from the O-Ring Handle and grip the finger holder. Slide the protective sheath down the barrel of the syringe until you reach the first holding position (Position A), then grip the barrel of the syringe and pull the protective sheath down further to the final locking position (Position B).

**Step 6:** If you wish to remove the Cartridge from the Syringe then pull the Handle plunger back fully (i), and then peel off the Handle as shown below (ii). Then pull the finger grip back up the plunger until it comes to the O-Ring Handle then (iii) push the plunger back into the Cartridge and remove the Cartridge.

Now the injection device (Part A + Part B) can be disposed of safely.
Aspiration

**Self aspiration:** At the base of the cartridge barrel of the injection device you will see there is a small protuberance. It appears as a plastic tip holding the centred back end of the needle that penetrates the diaphragm of the cartridge when inserted. At the beginning of the injection, the diaphragm presses against the protuberance, and aspiration occurs as the diaphragm moves back away from the protuberance when released.

**Aspiration:** The second form of aspiration can be obtained by the pliable O-Ring situated at the end of the handle shaft (piston) this creates a vacuum when the handle is pulled back by the practitioner. The cartridge bung follows the piston providing active aspiration. It is best observed when a minimum of 0.25ml to 0.35ml of solution has been previously expelled from the cartridge (providing space).

**WARNING:** Should the device be inadvertently fully locked in position B, no attempt whatsoever should be made to unlock it. Use a new injection device.

Precautions for use

a) Ensure protective sheath is attached to the handle with an audible click confirming proper locked on position.

b) Prior to injection remove and dispose of needle cap. **Do not recap needle.**

c) Extreme physical pressure or force may cause the needle to break. Avoid extreme or repeated movement of the needle during injection as this may cause the needle to break. **Do not bend, break or otherwise manipulate needles by hand.**

d) Do not resterilise or reuse.

e) Should the device be inadvertently fully locked in position B, no attempt whatsoever should be made to unlock it. Use a new injection device.

f) When finished and protective sheath is moved to position B and locked by hearing an audible click, remove cartridge by using procedure described in Step 6. Dispose of the injection device then into a sharps container. The handle can be disposed of in the clinical waste bags.

g) Always place locked injection device with contaminated needle, “needle first” into the sharps bin.

h) Choose sharps container suitable for consumption, minimum size 6 litres or more.

**Warnings**

- **Do not try to force the protective sheath off the lock.**
- **Never tap instruments with the hand into a semi-full sharps bin.**
- **Use one device per injection in order to prevent blunting of the needle point.**
The manufacturing story

The illustrated story of how Safe-Inject and, in particular, the needles are manufactured.

Our story starts at the business end with the needle, made in France at Europe’s only needle manufacturing plant producing over 150 million needles every year…

Coiled strips of high purity stainless steel are passed through machine heads which gradually roll the flat strip until the edges meet in a perfect cylinder.

The join is then plasma welded and each roll tagged with its own quality control batch number.

Next, the tubing is stretched through four graduated precision tapered disks until the required external and internal diameters are achieved.

The tubing is now washed in a chlorine solution and annealed under nitrogen gas to eliminate brittleness.
It is then precision cut into 1m or 2m lengths without affecting either the internal or external dimensions; meticulously scrutinised and shrink-wrapped into bundles of 1500 before being cut to the required lengths.

All dimensions are rechecked, the needles washed again under high pressure and then sharpened with a single bevel at one end and triple bevel at the other.

A further high pressure wash inside and out follows, using a mixture of water and minute glass beads, before the needles are subjected to electrolysis to remove any remaining burr.

A final seven-stage washing process is undertaken before the needles are computer-checked and random samples microscopically examined.

The two-piece body and protective sheath of Safe-Inject is manufactured and assembled (at a purpose-built facility also in France) to the same exacting standards using modern polymer injection techniques.

The hubs are plasma treated and the needles secured in position using a high-strength bonding material.

The assembly process is fully automated.

Safe-Inject then goes through a final checking process before being sterilised using either gamma radiation or ethylene oxide.
How to order

Safe-Inject is available through NHS Supply Chain or direct from Kent Pharmaceuticals

NHS Supply Chain
Safe-Inject is distributed by Kent Pharmaceuticals under NHS Contract ID AA110860 with the following NPC Codes:

- 27 gauge short NPC Code: FSW 379 (Clean Handle) FSW 454 (Sterile Handle)
- 27 gauge long NPC Code: FSW 381 (Clean Handle) FSW 455 (Sterile Handle)
- 30 gauge short NPC Code: FSW 380 (Clean Handle) FSW 457 (Sterile Handle)
- 30 gauge ultra-short NPC Code: FSW 382 (Clean Handle) FSW 458 (Sterile Handle)

To order on-line please visit
www.supplychain.nhs.uk

Direct from Kent Pharmaceuticals
Orders may be placed via telephone on 0800 220280 or via our website: www.kentpharm.co.uk/safeinject

Please Note:
Anaesthetic cartridges suitable for use in Safe-Inject are also available from Kent Pharmaceuticals.