

Injectable Contraceptives in Uniject

Health need

The World Health Organization (WHO) estimates that annually the reuse of injection devices may cause 20 million infections with hepatitis B virus, 2 million infections with hepatitis C virus, and 250,000 infections with HIV worldwide. International development and family planning agencies have been seeking feasible and affordable methods to reduce unsafe injection practices that could lead to the spread of bloodborne diseases. This is true for vaccines and medicines as well as injectable contraceptives that are becoming increasingly popular around the globe as women search for safe, highly effective, reversible methods of contraception that do not require compliance with a daily regimen.

Depot medroxyprogesterone acetate (DMPA, also known as Depo-provera) is administered by injection once every three months, making it highly convenient. While provision of sterile needles and syringes with every dose of contraceptive is the current standard, the risk of reuse still exists. Autodisable (AD) syringes prevent reuse, but like disposable syringes they can be diverted to other uses during the distribution process.

Technology solution

With guidance from WHO and a multitude of other collaborators, PATH developed an AD, prefilled syringe known as the Uniject^{®*} device. Today, the Uniject device, which is licensed to BD, prevents reuse, simplifies matching of syringes and supplies, ensures dose accuracy, and is simple to use in both clinic and community settings. Use of the Uniject device as a means of helping to increase safe community access to injectable contraceptives in developing countries has been a long-term goal at PATH, the United States Agency for International Development (USAID), and other international agencies.

Current status and results

BD has invested significant funds to develop large-scale manufacturing operations so it can supply empty Uniject devices to pharmaceutical companies in large quantities at reasonable prices. Pfizer is currently proceeding with a European Medicines Agency submission of depo-subQ provera 104 in the Uniject device (depo-subQ in Uniject) for regulatory approval. PATH is playing an increasingly large role in both global and country-level introduction planning for depo-subQ in Uniject and is coordinating planning activities of a range of external stakeholders on behalf of USAID. Activities by PATH and external partners are building the evidence base and country-level preparedness for eventual product introduction and scale-up. These activities include an acceptability study in Malawi, as well as demand modeling, logistics research, and detailed introduction planning for five countries: Kenya, Malawi, Pakistan, Rwanda, and Senegal.

**Uniject is a registered trademark of BD.*



Prefilled, single-use injection device filled with injectable contraceptives.

“The Uniject device has gone all the way from the drawing board to realization.”

Craig Stephens, Judge for Tech Museum Award given to PATH for Uniject in 2003.

Availability

Uniject devices and the associated equipment for filling and packaging are available to vaccine and pharmaceutical companies from BD Pharmaceutical Systems New Jersey, USA
Roderick Hausser
Tel: (201) 847-5185
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For more information regarding this project, contact Steve Brooke at sbrooke@path.org.

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