

WHO global injection safety campaign SUMMARY

Background

Unsafe injection practices such as reuse of syringes and needles can lead to the transmission of bloodborne pathogens such as human immunodeficiency virus (HIV), hepatitis B virus (HBV) and hepatitis C virus (HCV).

The magnitude of the problem of unsafe care due to injections given with reused needles and syringes has been estimated by WHO in 2000, as follows:

- There were 16.7 billion injections worldwide, out of which 6.6 billion (39.6%) were made with reused equipment. The reuse rate may be as high as 75% in some countries and in some regions over 70% of injections are considered unnecessary.
- These unsafe injection practices cause 260,000 HIV infections per year (5% of global burden), 21 million HBV infections per year (32% of global burden) and 2 million HCV infections per year (40% of global burden).

A recent publication by Pepin et al reported 2010 unsafe injection indicators estimates and made comparisons with WHO's 2000 data.¹ Although direct comparisons of the 2000 and 2010 are not possible because of different methodologies used in these studies, the 2010 estimates on injection use and device reuse indicators show that the problem is still very significant in a number of regions (e.g. in the Eastern Mediterranean, African, Eastern European and South-east Asian WHO Regions) and requires urgent action. Pepin et al estimated a reduction from 39.8% to 5.5% in the proportion of the global re-use of injection devices, however, without any change in the average number of injections per person per year. This would also assume a reduction of HIV, HBV and HCV infections attributable to unsafe injection to 33 900, 1.7 million, and 315 000, respectively. While the study suggests that injection safety is effective in reducing reuse in the countries included in the analysis, the heterogeneity of the available data also highlights the need for regular monitoring and consistent reporting to ensure that results can be measured.

In addition, in terms of impact, a WHO study published in 2003² estimated that every year unsafe injections cause 1.3 million early deaths, a loss of 26 million years of life, and direct medical costs of 535 million US dollars.

Safety engineered injection devices ["Auto Disable" (AD) and "Reuse Prevention" (RUP) syringes] specifically designed for immunization and for therapeutic injections have been developed and identified as one of the strategies to avoid syringes and needles reuse. **These syringes can also have Sharp Injury Protection mechanisms (RUP/SIP syringes) for the prevention of needle-stick injury among health-care workers.**

According to a WHO preliminary cost-effectiveness analysis based on 2010 data, by implementing a new global policy recommending exclusive use of RUP or RUP-SIP syringes for therapeutic purposes and aimed at reducing unnecessary injections worldwide, for every dollar invested an average of \$ 14.57 could be saved mainly from reduced costs in treatment of HIV, HBV and HCV.

Proposed initiative

Together with other stakeholders, WHO and the Safe Injection Global Network (SIGN) have facilitated technology transfer for AD syringes for immunization in several countries and fostered strategies for reducing injections worldwide. Until now it has not been possible to achieve the same level of progress for the safe use of therapeutic syringes.

Considering that about 90% of injections are given for therapeutic purposes, ensuring safety of all therapeutic injections needs to be urgently addressed. Based on directions from ADG HIS and the Director General for WHO, the WHO Service Delivery and Safety department plan to launch a ***new initiative promoting the safe use of syringes and needles, especially for therapeutic purposes.***

¹ Pepin J, Abou Chakra CN, Pepin E, Nault V. Evolution of the Global Use of Unsafe Medical Injections, 2000–2010. PLoS ONE 2013;8: e80948. doi:10.1371/journal.pone.0080948

² Miller MA, Pisani E. The cost of unsafe injections. Bulletin of the World Health Organization, 2003, 77(10):808–811.



The **main objectives** of the initiative will be:

- to adapt and consolidate results achieved by WHO's SIGN network in the immunization field over the last decade;
- to prevent unsafe therapeutic injections through the use of safety engineered injection devices and healthcare workers' training;
- to avoid unnecessary injections.

The **key elements** of the initiative will be:

- a new WHO **policy document**
- a **global advocacy campaign** to promote rational and safe use of injections, in particular through use of safety engineered injection devices in therapeutic services. **This effort will also include a call for the use of needle stick injury prevention technology.**

The **policy** includes the following **key aspects**:

- Recommendation for transition to the exclusive use of WHO prequalified AD/RUP/SIP devices for therapeutic injections in all countries and development of related national policies
- Recommendation to develop standards for rational use and supply of standard disposable syringes for specific procedures and settings where they remain necessary
- Request to donor agencies and development partners to fund procurement of safety engineered injection devices in all projects including injectable medications and to finance appropriate quantities of safety engineered injection devices, single dose diluents, safety boxes and the cost of sharps waste management and health-care workers' training
- Request to international and local manufacturers to switch to safety engineered injection devices production as soon as possible and to seek PQS prequalification for their products
- Recommendation for countries to develop and put in place a strategy for implementing their national policies, based on WHO-recommended key components

Main targets for the new policy are Ministries of Health, international donor programmes (e.g. USAID, UNICEF, Global Fund, etc) and umbrella organizations of injection devices manufacturers.

The following **key components** were identified for the **global campaign**:

- Political commitment through the signature of a document pledging country engagement in the campaign
- A sound communication strategy based on social marketing and innovative concepts
- WHO global injection safety initiative branding to mark, among other uses, PQS prequalified safety engineered injection devices
- International donors' engagement
- Industry engagement
- Key stakeholders engagement
- Emphasis on health-care workers' safety, education and training
- Public awareness raising and patient education and involvement
- Evaluation plan and indicators



Benefits for Member States

In addition to accomplishing the goals of WHO, this initiative will provide benefits for member states in advancing injection safety:

- Reduction/elimination of the burden of blood-borne infections due to unsafe injections in patients and healthcare workers
- Savings on health expenditures for diagnosis, treatment and care of these infections
- Savings through the reduction of unnecessary injections
- Ensuring the quality and safety of health care through the adoption of best practices and appropriate behaviour during patient treatment

Interest expressed by Member States

During WHA 2013 a number of country delegations were contacted to gather comments on the main features of the new initiative and to assess their potential interest in actively participating in its implementation. For instance, from the Eastern Mediterranean region, Egypt and Pakistan representatives considered the proposed approach as a very suitable solution and showed great interest in being pilot countries for implementation. While evaluating the initiative, countries pointed out the need for standardized methods to measure the burden of infection due to unsafe injections and practices and they emphasized the expected challenges in engaging industry. For the success of this new initiative, they highlighted the importance of WHO leadership and technical support, as well as the need for involving key players in the field of injection safety, both internationally and locally.

Planned timeline

WHO will launch the new global policy on 23 February 2015. The associated global campaign will start to be rolled out immediately thereafter and will be sustained for 3-5 years. Furthermore, WHO plans to pilot test the policy and the campaign in a number of countries since the second quarter of 2015.