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Immunization without needles.

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Abstract

Most current immunization procedures make use of needles and syringes for vaccine administration. With the increase in the number of immunizations that children around the world routinely receive, health organizations are beginning to look for safer alternatives that reduce the risk of cross-contamination that arises from needle reuse.

This article focuses on contemporary developments in needle-free methods of immunization, such as liquid-jet injectors, topical application to the skin, oral pills and nasal sprays.

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