STOP FREEZING VACCINE!

This packet of materials describes the serious risk of freezing DPT, TT, DT, and hepatitis B vaccines and provides tools to reduce freezing in the cold chain. It contains current WHO-recommended freeze-prevention strategies targeted toward all levels of storage and transport of vaccines. These materials are intended to provide the basis for policy revisions, retraining exercises, and targeted supervision—all designed to reduce cold chain freezing. Prevention of cold chain freezing will require the cooperation of all immunization personnel!

1. Background presentation

This PowerPoint presentation should be adapted and used to educate immunization managers about the risks and consequences of freezing vaccines. It describes how to use the following materials to reduce the risk of vaccine freezing.

2. Two literature reviews

These two literature reviews summarize published information illustrating:

- The negative effects of freezing on vaccine potency.
- The widespread occurrence of freezing in vaccine cold chains.

3. Posters for vaccine refrigerators

These posters remind users how to avoid freezing vaccine in three types of refrigerators:

- Front-opening, domestic-type refrigerator.
- Top-opening, chest-type absorption or compression (kerosene, gas, electric) refrigerators.
- Ice-lined refrigerators.

These posters should be adapted to local conditions, translated, reproduced, and distributed to all vaccine storage points. They should be posted near the appropriate refrigerators and used to reinforce training and supervision.

4. Job Aids for using the shake test

These job aids explain how to use the shake test correctly to determine whether liquid vaccine has been frozen and must be discarded. Available for both Uniject™ and vial vaccines.

5. Information on ice pack conditioning and chilled water packs

These materials should be reproduced and placed on cold boxes and vaccine carriers. Conditioning frozen ice packs to prevent freezing during transport is an interim anti-freeze measure. WHO, UNICEF, and the vaccine industry consider using chilled water packs for transport of vaccines a safe alternative.

6. Protocol for a study of freezing in the cold chain

This simple monitoring study will determine the extent of vaccine exposure to freezing temperatures throughout the cold chain. It provides continuous graphic temperature recordings during vaccine distribution through the cold chain. The study is recommended in all countries to help focus freeze-prevention interventions.

7. Results of Indonesian cold chain study

This manuscript describes the results of Indonesia's cold chain study. It has been submitted for publication in the Bulletin of the World Health Organization.

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Freezing damages DPT, TT, DT, and Hep B vaccines!

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