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Preface

Project: Training of school children on pesticides and health - "Toxicology in the classroom"

OBJECTIVE

The project aims to raise awareness among young students about potential side effects of chemicals and help to reduce careless use and handling of pesticides and other chemicals. The teaching tool will help to provide basic understanding of toxicology and awareness of the need for protective and precautionary measures to minimise adverse effects on human health and the environment.

This teaching tool is for use by chemistry/biology/ science teachers in the early years of secondary school. The material is targeted to pupils at the end of primary school and/or the beginning of secondary or middle school to teach them to understand the action and hazards of pesticides, the importance and principles of safe handling, protection of themselves and others from harmful effects of pesticides.

INTRODUCTION

Infants and children are particularly vulnerable to pesticides and other toxic chemicals because their bodies are smaller and still developing. Children also face greater exposures than adults due to their handto-mouth behaviours. Children living in farming areas or whose parents work in agriculture suffer greater pesticide exposure than other children.

Non-chemical methods exist to prevent or manage pests. Integrated Pest Management (IPM) and Integrated Vector Management (IVM) apply different methods, trying to reduce the use of chemicals to a minimum. Despite this, pesticides are much used in farming economies of today, and for managing vectors of disease, especially in developing countries and countries with economies in transition. Pesticides are applied to kill pests, but they can also adversely affect non-target organisms, including humans.

Who developed the tool?

This teaching tool has been developed by the United Nations Environmental Programme (UNEP) and the World Health Organisation Regional Office for Europe (WHO EURO) and the National Poison Centre of Universiti Sains Malaysia (NPC-USM) with initial support from the International Union of Pure and Applied Chemistry (IUPAC).

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