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Kiev, Nov. 2007

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## **Children's Environment and Health Action Plan for Europe (CEHAPE)**

Regional Priority Goal 1 of CEHAPE is about ensuring safe water and adequate sanitation to prevent and reduce child morbidity and mortality

## Implementation of Regional Priority Goal I on water and sanitation

### Bulgaria Progress towards Regional Priority Goal I on water and sanitation

- Water quality and safe sanitation are among the main priorities of governmental policy. They are included as priorities for action in the Strategy for Regional Development, and the Strategy and Plan for Action for ...
- No data is available on what proportion of schools and nurseries have access to: a continuous sanitation infrastructure, a sanitation system with uninterrupted access to water, soap available to children, toilet paper available to children, regular collection and removal of solid refuse, separate toilets for boys and girls, or basic personal hygiene on the curriculum.

### Bulgaria Progress towards Regional Priority Goal I on water and sanitation

#### Education and awareness

 Lessons on personal hygiene are included in the educational programmes of the primary schools. Every year the regional inspectorates for public health protection and control issue information materials related to drinking water quality, protection from water-born diseases;

#### Who does what

- The Drinking Water Supply Companies are responsible for drinking water supply and drinking water quality.
- The Ministry of Health and the municipal authorities control the drinking water quality.

### Ukraine Progress towards Regional Priority Goal I on water and sanitation



# WHO Priority Areas of Work for Europe

For the European Region, activities are concentrated on the following themes and vulnerable groups:

- Water and children's health
- <u>Management of water resources for the</u> production of drinking water
- Drinking-water quality
- <u>Management of water supply structure and</u> <u>services</u>
- <u>Recreational waters</u>

# Study on environmental burden of disease in children: key findings

Fact Sheet EURO/05/04 18 June 2004

Unsafe water, poor sanitation and hygiene are among the major environmental risk factors for children in the European Region

Indirect estimates of the burden of diarrhoeal disease attributable to water, sanitation and hygiene in the European Region, children 0–14 years of age, in 2001

Subregion		all-cause aths	Deaths pe 10 000 children	er DALYs	% all-cause DALYs	e DALYs per 10 000 children
EUR A EUR B EUR C Total Europe	11 876 1 609 13 548	7.5 2.4	0.36	25 946 446 763 77 231 549 940	5.2 1.6	3.71 75.75 17.04 31.53

## Water, sanitation and hygiene

- 90% of Europe population is covered by an improved water.
- Former Soviet Block infrastructures of water and sanitation systems to be developed or was disrupted owing to poor maintenance in the period of transition.
- At least 2 million people in the European Region do not have access to clean water, thus exposing children to a high risk of diarrhoeal diseases.
- The burden of diarrhoeal disease attributable to poor water, sanitation and hygiene is 5.3% of all deaths and 3.5% of all DALYs (children aged 0–14 years).
- High potential savings in deaths and DALYs to be made by development of infrastructures and better personal hygiene. For EUR B, access to a regulated water supply and full sanitation coverage, with partial treatment for sewage, would save about 3700 lives and 140 000 DALYs.

## **MDGs**

### **Goal 4: Reduce child mortality:**

• **Target 5:** Reduce by two thirds the under-five mortality rate between 1990 and 2015.

### **Goal 7: Ensure environmental sustainability:**

- Target 10: Halve the proportion of people without sustainable access to safe drinking-water and basic sanitation by 2015;
- Target 11: Achieve a significant improvement in the lives of at least 100 million slum dwellers by 2020.

### Ukraine http://www.unicef.org/infobycountry/ukraine\_statistics.html

### Health

% of population using improved drinking water sources, 2004

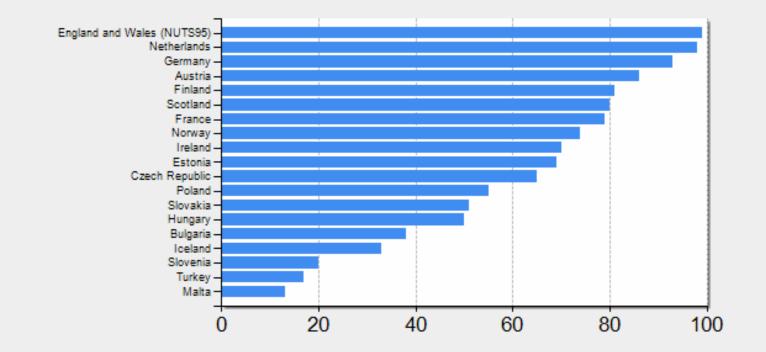
- total 96%
- urban 99%
- rural 91%

% of population using adequate sanitation facilities, 2004

- total 96%
- urban 98%
- rural 93%

# Environment and Health Information System – 08.05.2007

Wastewater treatment and access to improved sanitation: percentage of the child population served by sewerage connected to a waste water treatment facility



## Global Patient Safety Challenge - 13 Oct. 2005

- "Clean Care is Safer Care"
- To fight the spread of health careassociated infections which take a high toll in human lives and affect hundreds of millions of patients worldwide each year;
- WHO Guidelines on Hand Hygiene in Health Care

## **Bulgarian Villages**



- Centralized water supply in 96% of the villages in the country;
- No sewer, no working mechanism for wastewater management in 98% of the villages in the country;

No solid waste collection in 70% of the villages.

## **Management of human wastes**





## **EcoSan for Bulgarian Villages**

- UDD toilets, plus
- Waterless urinal, plus
- Greywater treatment facility: vertical planted soil filter, mulch filter, plus
- Sanitizing of ecosan products, incl. composting, vermicomposting, plus
- Reuse of ecosan sanitized products to improve soil facility for more efficient agriculture.

## The UDD toilet from inside











Foundation, Nev, Nov. 2007



Earth Forever, Foundation; Kiev, Nov. 2007

## **Re-use of Sanitized EcoSan Products**



No application Urine a Earth Forever, Foundation; Kiev, Nov. 2007

Urine application

### Sanitation is a Priority Re-use of Sanitized EcoSan Products





No application Urine application Earth Forever, Foundation; Kiev, Nov. 2007

## **Before**



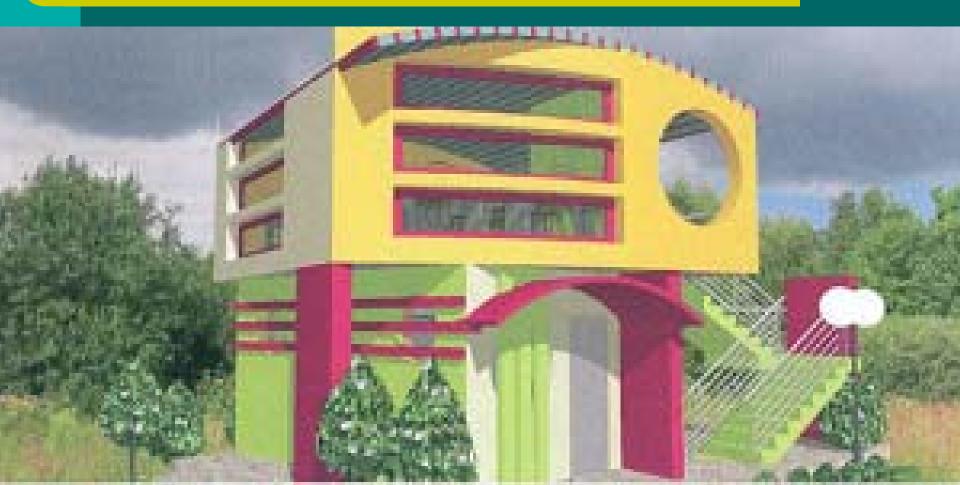
## Now



## Now!



## In the closest future





## Thank you for your attention!