Central and Eastern Europe, Commonwealth of Independent States and the Baltics Region

2005 Report for USAID
Bulgaria
USI/IDD Elimination

December 2005

Progress Report for USAID

Assisted Country: Central and Eastern Europe, Commonwealth of Independent States and the Baltics Region— Bulgaria

Assisted Programme(s)/project(s): IDD Elimination/ USI

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

ICCIDD	International Council for Control of Iodine Deficiency Disorders
IDD	Iodine Deficiency/Iodine deficiency Disorders
MoH	Ministry of Health
USI	Universal Salt Iodisation
WHO	World Health Organisation

Background:

UNICEF's advocacy for the introduction of measures to address mild iodine deficiency in Bulgaria dates to the late 1990's. Initially, baseline studies on urinary iodine levels among school going children, following the WHO methodology, were undertaken and confirmed that that the country are classified as "mild" iodine deficient. The National study carried out in 1996 confirmed that iodine deficiency is a serious problem in Bulgaria as well as that the measures undertaken in 1994 by Decree of the Council of the Ministers were appropriate. These measures include mandatory use of iodized salt by the population and in the foods production, sale's ban of non iodized salt, systematic monitoring of the market and food production facilities, regular studies on the status of IDD. The legislation was reinforced in January 2001 by Decree of the Council of the Ministers in order to be achieved a sustainable elimination of IDD. The Decree adopted ordinance which introduced obligatory use of iodized salt by the population, public catering and food industry on the territory of the country; obligatory requirements for the composition and characteristics of salt for nutritional purposes for household consumption, public catering and food industry, including iodization with potassium iodate in the range of 28-55 mg/kg; requirements regarding labeling/ packaging and storage of salt; rights and obligations of the stakeholders; sampling procedures for inspections; authority for fines, redirection of salt for re-iodization or for industry use, or for impounding salt that repeatedly fails to meet standards.

Program Objectives:

The Multi-Country Program (2003-2005) which covers Bulgaria, Croatia, Latvia and Lithuania, includes the achievement of the World Fit for Children goal of sustainable elimination of iodine deficiency by 2005. The focus in 2005 in Bulgaria was on strengthening the awareness of the population at large and pregnant and breastfeeding women on iodized salt importance in the prevention of IDD and improving the practice of proper use of iodized salt in the households for prevention of IDD; strengthening the awareness and positive attitude of salt producers/traders on iodine nutrition and benefits of iodized salt in the elimination of IDD, supporting the process of sustainability of the monitoring system and , building capacity of key professionals with the most contemporary scientific information and implemented practices in elimination of IDD.

Activities supported by UNICEF-2005 and results

The areas of UNICEF cooperation included:

Elaboration of promotional materials on USI for different population groups

Based on the KAP /knowledge attitude and practice/ results from 2003 national survey it was planned that attention should be focused on preservation and use of iodized salt at household level and the importance of the use of iodized salt during the pregnancy and breastfeeding through production of information materials and video spots. In realization of this two information materials in the form of a picture postcard were produced - 400 000 and 250 000 copies respectively and two video spots as well as. The produced materials were distributed among the Regional Inspectorates for Protection and Control of Public Health to be used in their health promotion and health education activities with the population. The informational materials were pre tested before their printing. The results of the pre testing showed that both materials were highly appreciated by the respondents

Increased commitment of producers/traders toward the observation of the requirements of the legislation

In the realization of this one day meeting was held for the local producers, salt importers and federations of food producers - representatives of the local salt producers and importers, of food producers federations (bread and pastry; meat and meat products; dairy products; pickles and dressings) and of food production facilities (bread and pastry, dairy and pickles). They were familiarized with the IDD situation and the results from the monitoring system, the results of the survey on documenting experiences of using iodized salt in food processing industries. The collaboration between the different stakeholders - the Ministry of Health, salt producers and importers and food producers was discussed in order to effectively support the government policy on sustainable IDD elimination.

Survey on documenting experiences of using iodized salt in food processing industries was carried out. The main objective of the survey was to asses the implementation in practice of the mandatory requirement for use of iodized salt in food production regulated by the Ordinance on the Requirements for the Composition and Characteristics of the Salt for Nutritional Purposes Adopted under the Decree of the Council of Ministers N 23/ 30 January, 2001 (published in State Gazette N 11 /6 February, 2001) **S**ubjects of the survey were food facilities producing: bread and pastry, dairy products, meat and meat products, pickles and dressings.. The survey covered 23 food production facilities located on the territory of 6 regional centre towns. The main conclusion based on the survey results was that Bulgaria has achieved substantial success in the implementation of USI by the support of food producers.

Facilitating consumers' choice for iodized salt

Competition for elaboration of iodized salt's logo was conducted. The logo was chosen among 27 proposals. A registration at Bulgarian registration office is in process. The logo will be placed at disposal to the salt stakeholders (salt importers and producers) whose iodized salt complies with the requirements of the Bulgarian legislation.

Assessment of the USI monitoring system.

National meeting was held on the efficiency of.salt control system and health promotion and education activities. Fifty six representatives - heads and deputy heads of the "Control on Food and Food Facilities" and "Public Health Protection" departments of Regional Inspectorates for Protection and Control of Public Health (RIPCPH) participated in the meeting. The main objective of the meeting was to assess the USI monitoring system and evaluate the health promotion activities conducted by RIPCPH at local level as well as to outline measures for their strengthening.

Conduction of an External Review of Progress towards Sustained Optimal Iodine Nutrition in Bulgaria

The External Review was conducted in the period 26 April – 5 May 2005 by a team of experts on behalf of the Network for Sustained Elimination of Iodine Deficiency. The program of the team included visits of:

- Different levels of the established monitoring system
- Local salt producer and salt importing companies
- Scientific institutions
- Hospitals
- UNICEF representative office

The main conclusions of the team were that Bulgaria has succeeded in tackling a historically significant and severe IDD problem by bringing the dietary iodine intake in the population within the generally acceptable range. **Bulgaria has eliminated iodine deficiency.**

Underlying this success is a well-organized and conscientiously applied universal salt iodization strategy that adds a small and regular amount of iodine to the common diet of the

population by the iodization of all household (edible) and food industry (food-grade) salt. **The USI strategy in Bulgaria is effective and should be sustainable.**

Based on the results and further analysis of recent national survey data, and on a review of ongoing activities and existing documentation, the team also concludes that at present IDD has fallen below public health significance. **IDD has been eliminated in Bulgaria.**

Counterparts and collaboration

The main programme partners have been:
Ministry of Health, National Centre for Public Health Protection, Regional Inspectorates for Protection and Control of Public Health. Medical Universities,WHO Liaison Office, ICCIDD.

At the Regional level with the UNICEF Regional Office in Geneva manages the Multi-Country Programme (2003-2005) which includes Bulgaria.

Country	Bulgaria
Total Population	7 761 049 at the end of 2004
% of Households using Iodized Salt	**100% (** 97.8% with iodine > 15 ppm)
Target Population under Proposal	Total Country Population
USAID FY'2005 Funding (year(s) and amount)	120 465.76 (2002-2004); 40 909.50 - 2005

Program Area	Major Activities	Milestones	Indicator		Budget
			Baseline	Target	US$
Commercial/Industry • Technical assistance • Production Efficiencies & Cost Reduction • Quality Assurance & Control • Marketing	Meeting with the representatives of salt producers and importers was held				942.45
Equipment & Supplies • Donations & Subsidies • Credit/Loans • Revolving Funds • Installation & Maintenance					
Public Sector/Government • Legislation • Regulations/Standards • Monitoring & Enforcement Procedures, Roles & Responsibilities, Penalties • Registration of Non-Iodized Salt Users • Industry Tax/Duty Concessions • IEC/Social Marketing • Links to Other National Fortification Activities	Support to research on documenting experience of using iodized salt in food processing industries Elaboration of National logo of iodized salt Meeting of salt monitoring system's representatives Elaboration and printing of two information materials USI media campaign - TV spot production and campaign evaluation				394.00 915.00 2 769.00 8 339.16 5 089.40
NGO/Civil Society • Consumer Acceptance, misconceptions					
Personnel • Staff Positions • Short-term Consultants					
Total					18 449.01

Suggested Indicators: UNICEF to provide Baseline & Targets (cite data source).

Annual Production of Iodized Salt (MT)*						
	2004		2005		2006	
	Target	Actual	Target	Actual	Target	Actual
Human (retail and food)	NA	40000	NA	40 000	NA	
Livestock						

* Supply of iodized salt (local production and import) is around 40 000 yearly. It equals to the consumption by the population and use by food production facilities.

% of Households Consuming Iodized Salt (only mention national surveys and % >15 ppm)					
2003*		2005		2006	
Target	Actual	Target	Actual	Target	Actual
90%	97.8%				

National representative survey on IDD, 2003

Annex 1: Financial Summary

YEAR 2005

Requisition Ref.	Description	Value US$
	Ministry of Health IDD activities including:	40 909.50
	Elaboration and printing of two information materials	8 339.16
	USI media campaign - TV spot production and campaign evaluation	5 089.40
	Elaboration of National logo of iodized salt	915.00
	Meeting of salt monitoring system's representatives	2 769.00
	Support to research on documenting experience of using iodized salt in food processing industries	394.00
	Meeting with the representatives of salt producers and importers was held	942.15
	Total expenditure	18 449.01
	Balance available	**22 460.49**

Annex 4: Lithuania

Annex 4.1

Monitoring the program of iodine supplementation in Lithuania based on the neonatal screening for congenital hypothyroidism Report January-December 2004

This report analyses the national neonatal TSH screening data for 2004 in Lithuania. National screening for congenital hypothyroidism was performed by measuring TSH in dried blood spots collected on filter paper by fluorometric enzyme immunoassay method, Floroscan Ascent Neonatal, Labsystems, Finland. Results were analysed by Ascent software 2.2.4 version. The results for 29.226 TSH blood spots remained for analysis, representing 99% of all registered births in Lithuania during the observation period. Screening was performed in Centre for Medical Genetic, Vilnius University Hospital Santariskiu Clinics.
According the data of TSH in neonatal screening for CH frequency of neonatal TSH above 5.1 mlU/L was calculated.

Table 1. Data of newborns tested and number and frequency of case TTH>5.1 mlU/I in municipalities of Lithuania based on the neonatal screening for congenital hypothyroidism

Municipality	Newborns tested-2004	Number of case TTH>5.1 mlU/I	%
Alytus city and district	691	39	5,70
Anykščiai district	179	8	4,50
Biržai district	208	15	7,28
Ignalina district	16	3	**18,75**
Jonava district	272	19	7,11
Joniškis district	232	46	**18,94**
Jurbarkas district	218	25	**11,57**
Kaišiadorys district	214	14	6,66
Kaunas city and district	5812	320	5,52
Kelmė district	235	10	4,71
Kėdainiai district	388	17	4,40
Klaipėda city and district	2821	103	3,62
Kretinga district	399	16	4,06
Lazdijai district	286	18	6,45
Marijampolė district	645	23	3,63
Mažeikiai district	609	18	3,11
Panevėžys city and district	1551	57	3,71
Pasvalys district	367	14	3,93
Plungė district	263	3	1,14
Prienai district	187	30	**16,20**
Radviliškis district	416	15	3,53
Raseiniai district	278	17	6,20
Rokiškis district	226	12	5,33
Šakiai district	236	29	**12,30**
Šalčininkai district	247	12	4,97
Šiauliai city and district	1979	56	2,83
Šilalė district	173	7	4,19
Šilutė district	415	77	**18,60**
Švenčionys district	185	9	4,94
Trakai district	360	23	6,38
Tauragė district	346	27	8,03
Telšiai district	439	19	4,58
Ukmergė district	331	17	5,20
Utena district	331	17	5,20
Varėna district	202	7	3,50
Vilkaviškis district	326	11	3,48
Vilnius city and district	6830	355	5,15
Visaginas city	235	9	3,87
Zarasai district	78	28	**35,89**
Total:	**29 226**	**1545**	**5,28%**

For 2004 the prevalence elevated TSH (>5mIU/L) was 5.28% and this percentage is from 1.14% to 35.89%. A variation was apparent among administrative regions in the country, with the highest proportion of elevated TSH in Zarasai district, and the lowest in Plungė district.
Using WHO/UNICEF/ICCIDD criteria, these findings confirm that the population in Lithuania is mildly iodine deficient, which exposes newborns to the risk of brain damage, mediated through inadequate thyroid hormone supply to the developing brain cells during fetal and early neonatal life. The existent national neonatal TSH screening offers a solid and comprehensive database for semi-annual reporting on national progress to ensure optimum iodine nutrition in the population in Lithuania.

Prepared by:
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Annex 4.2

Monitoring the program of iodine supplementation in Lithuania based on the neonatal screening for congenital hypothyroidism“ January-June 2005

This report analyses the national neonatal TSH screening data of the first half of 2005 year in Lithuania. National screening for congenital hypothyroidism was performed by measuring TSH in dried blood spots collected on filter paper by fluorometric enzyme immunoassay method, Fluoroscan Ascent Neonatal, AniLabsystems, Finland. Results were analysed by Ascent software 2.2.4 version.
The results for 14.428 TSH blood spots remained for analysis, representing 99% of all registered births in Lithuania during the observation period. Screening was performed in Centre for Medical Genetic, Vilnius University Hospital Santariskiu Clinics.
According the data of TSH in neonatal screening for CH frequency of neonatal TSH above 5.1 mIU/L was calculated.

Table 1. Data of newborns tested and number of case TSH > 5.1 mlU/I in municipalities of Lithuania based on the neonatal screening for congenital hypothyroidism-2005

Municipality	Newborns tested-2005	Number of case TSH>5.1 mlU/I
Alytus city	300	20
Akmenės district	29	0
Anykščiai district	85	1
Biržai district	94	2
Jonava district	143	8
Joniškis district	106	7
Jurbarkas district	110	6
Kaišiadorys district	96	1
Kaunas city and district	3016	129
Kelmė district	89	6
Kėdainiai district	165	1
Klaipėda city and district	1456	58
Kretinga district	153	2
Lazdijai district	138	4
Marijampolė district	260	13
Mažeikiai district	286	10
Panevėžys city and district	802	32
Pasvalys district	160	3
Plungė district	111	2
Prienai district	77	14
Radviliškis district	191	8
Raseiniai district	144	8
Rokiškis district	111	4
Šakiai district	100	7
Šalčininkai district	143	3
Šiauliai city and district	936	26
Šilalė district	84	5
Šilutė district	191	72
Švenčionys district	89	0
Trakai district	189	4
Tauragė district	150	11
Telšiai district	217	4
Ukmergė district	182	6
Utena district	173	8
Varėna district	65	1
Vilkaviškis district	152	8
Vilnius city and district	3463	184
Visaginas city	170	11
Zarasai district	2	1
Total:	**14 428**	**690 (4,78 %)**

The prevalence of elevated TSH (>5.1 mIU/L) was 4.78% for the the first half of 2005 year.

A variation was apparent among administrative regions in the country, with the highest proportion of elevated TSH in Zarasai and Šilutės districts, and the lowest in Akmenės and Švenčionys districts.

Using WHO/UNICEF/ICCIDD criteria, these findings confirm that the population in Lithuania is mildly iodine deficient, which exposes newborns to the risk of brain damage, mediated through inadequate thyroid hormone supply to the developing brain cells during fetal and early neonatal life. The existent national neonatal TSH screening offers a solid and comprehensive database for semi-annual reporting on national progress to ensure optimum iodine nutrition in the population in Lithuania.

Albertas Barzda

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