# Reproductive, Maternal and Child Health in Eastern Europe and Eurasia: A Comparative Report

**Eastern Europe** 



Moldova Romania



Republic Central Asia Caucasus Uzbekistan

erbaijan



Kazakhstan Kyrgyz Republic

Armenia Turkmenistan

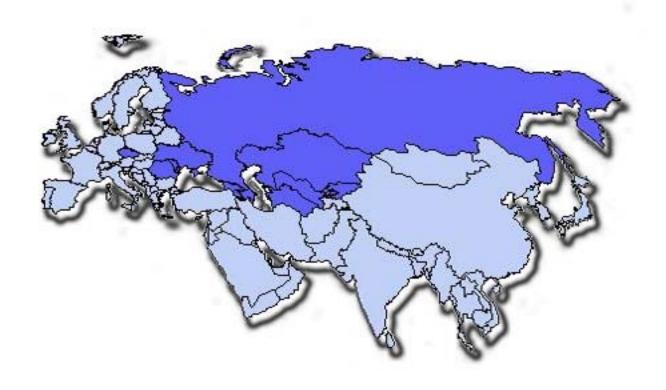






# REPRODUCTIVE, MATERNAL AND CHILD HEALTH IN EASTERN EUROPE AND EURASIA: A COMPARATIVE REPORT

Division of Reproductive Health Centers for Disease Control and Prevention Atlanta, GA 30333 ORC MACRO DHS 11785 Beltsville Drive Calverton, MD 20705



April, 2003

#### PRINTED BY:

#### U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention (CDC) Atlanta, GA 30333 USA

This comparative report on data from surveys conducted in Eastern Europe and Eurasia is funded by the United States Agency for International Development (USAID) PASA DPE-3038-X-HC-1015-00 with the Division of Reproductive Health of the Centers for Disease Control and Prevention and USAID Contract No. HRN-C-00-97-0019-00 with ORC Macro. The opinions expressed herein are those of the authors and do not necessarily reflect the views of USAID.
Additional information about this report may be obtained from: Division of Reproductive Health, Centers for Disease Control and Prevention (DRH/CDC), Mailstop K-23, 4770 Buford Highway, NE, Atlanta, GA 30341, 3724, USA. Fax (770) 488-6242; Tel (770) 488-6200, or from ORC Macro, 11785 Beltsville Drive, Calverton, MD 20705, USA. Fax (301) 572-0999, Tel (301) 572-0200.
Suggested citation:

Centers for Disease Control and Prevention and ORC Macro. 2003. *Reproductive, Maternal and Child Health in Eastern Europe and Eurasia: A Comparative Report.* Atlanta, GA (USA) and Calverton, MD (USA).

# **TABLE OF CONTENTS**

		Page
ACK	NOWLEDGEMENTS	i
LIST	OF CONTRIBUTORS	iii
PRE	FACE	ν
INITE	AODITOTION	•:
INIF	ODUCTION	V11
1. E	ACKGROUND(Florina Serbanescu, Leo Morris)	1
	1.1 Shared History	1
	1.2 Similar Demographic Profiles	
	1.3 Common Reproductive Health Concerns	
	1.4 Young Adult Sexual and Reproductive Health: A Growing Concern	
	1.5 Women's Status and Gender Issues	
	1.6 Health and Population Policies	
	1.7 Measurement Issues	
	1.7 Wedsurement issues	1 1
2 1	IETHODOLOGY	13
2. IV	(Leo Morris, Jeremiah M. Sullivan, Howard Goldberg)	10
	2.1 Sampling Design	1⊿
	2.2 Characteristics of Eligible Women	
	2.2 Characteristics of Eligible Wollich	10
3 F	ERTILITY	21
J. I	(Jeremiah M. Sullivan, Howard Goldberg)	41
	3.1 Fertility Levels	00
	3.2 Fertility Differentials	
	3.3 Age Pattern of Fertility	
	3.4 Time Trends	
	3.5 Marital Status	
	3.6 First Sexual Relations and First Union by Age 20	
	3.7 Summary of Findings	33
1 A	BORTION	25
4. A	(Jeremiah M. Sullivan, Florina Serbanescu, Howard Goldberg)	33
	(Jeremian M. Samvan, Fiorma Serbanescu, Howara Golaberg)	
	4.1 Survey Data	36
	4.2 Comparison of Survey and Government Statistics	
	4.3 Levels and Age Pattern of Abortion	
	4.4 Abortion Differentials	
	4.5 Time Trends	
	4.6 Unintended Pregnancy, Abortion, and Contraception	
	4.7 Reasons for Abortion	
	4.8 Post-abortion Complications	
	4.9 Summary of Findings	

		Page
5.	CONTRACEPTIVE KNOWLEDGE AND USE (Florina Serbanescu, Ranee Seither)	51
	5.1 Contraceptive Awareness	
	5.2 Current Contraceptive Prevalence	
	5.3 Source of Contraception	
	5.4 Reasons for Not Using Contraception	
	5.5 Intention to Use Contraception among Nonusers	
	5.6 Recent Trends in Contraceptive Use	
	5.7 Contraceptive Failure and Discontinuation	
	5.8 Contraceptive Counseling	
	5.9 Summary of Findings	/ 1
6.	NEED FOR CONTRACEPTIVE SERVICES	73
	(Florina Serbanescu, Leo Morris, Howard Goldberg)	
	6.1 Potential Demand and Unmet Need for Family Planning Services	74
	6.2 Unmet Need for Family Planning Services According to Fertility Preferences	
	6.3 Summary of Findings on Unmet Need	
7	ATTITUDES AND OPINIONS TOWARD CONTRACEPTION AND ABORTION	83
	(Ranee Seither, Florina Serbanescu)	
		0.0
	7.1 Desire for More Information about Contraception	
	7.2 Opinion on the Best Source of Information About Contraception	
	7.3 Opinions Regarding the Advantages and Disadvantages of the Pill and IUD	
	7.4 Opinions on Risks to Women's Health Due to Contraceptive Use	
	7.5 Opinions About Abortion	01
	<ul><li>7.7 Discussion of Contraception Between Partners</li></ul>	
	7.8 Ferception of Husbands Opinion of Contraception	
	7.9 Summary of Findings	94
8.	MATERNAL CARE	97
	(Howard Goldberg, Ranee Seither)	
	8.1 Prenatal Care	97
	8.2 Pregnancy and Delivery	
	8.3 Birth Weight	
	8.4 Postpartum Care	
	8.5 Summary of Findings	
Ω	HEALTH BEHAVIORS	111
9.	(Florina Serbanescu, Ranee Seither)	111
	9.1 Prevalence of Routine Gynecologic Visits	
	9.2 Breast Self-Exam	
	9.3 Cervical Cancer Screening	
	9.4 Prevalence of Pelvic Inflammatory Disease and STI Symptoms	
	9.5 Cigarette Smoking	
	9.6 Alcohol Use	

10.	NOWLEDGE OF HIV/AIDS TRANSMISSION AND PREVENTION	Page 129
	(S. Afua Appiah-Yeboah, Leo Morris, Ranee Seither)	
	10.1 Knowledge of HIV/AIDS	130
	10.2 Knowledge of HIV/AIDS Transmission	
	10.3 Knowledge of HIV/AIDS Prevention	
	10.4 Self-Perceived Risk of HIV/AIDS	
	10.5 Summary of Findings	142
11.	FANT FEEDING PRACTICES AND NUTRITION STATUS OF WOMEN AND CHILDREN . (Jeremiah M. Sullivan)	145
	11.1 Breastfeeding	145
	11.2 Nutrition of Children	
	11.3 Nutrition of Women	
	11.4 Summary of Findings	
10	VENUA AMONO WOMEN AND OUR DDEN	1
12.	NEMIA AMONG WOMEN AND CHILDREN	155
	12.1 Design and Methodology of the Anemia Studies	156
	12.2 Anemia Among Women	
	12.3 Anemia Among Children	
	12.4 Anemia Trends: Changes in the Prevalence of Anemia in Kazakhstan	
	12.5 Summary of Findings	163
13.	FANT AND CHILD MORTALITY	165
	(Jeremiah M. Sullivan, Albert Themme)	
	13.1 Definitional Issues	166
	13.2 Data Collection Procedures	166
	13.3 Survey Estimates of Infant and Child Mortality	167
	13.4 Survey and Government Mortality Rates Compared	
	13.5 Evaluation of Survey Data	
	13.6 Mortality Differentials	
	13.7 Time Trends in Mortality	
	13.8 Summary of Findings	
14.	EXUAL AND CONTRACEPTIVE BEHAVIOR OF YOUNG ADULTS	183
	(Leo Morris, S. Afua Appiah-Yeboah, Florina Serbanescu)	
	14.1 First Sexual Experience	
	14.2 Current Sexual Activity	189
	14.3 Condom Attitudes	190
	14.4 Trend Data in Romania (1993–1999)	193
	14.5 Summary of Findings	
15.	EXUALITY EDUCATION(Florina Serbanescu, Leo Morris)	199
	15.1 Opinions about Savuality Education in School	200
	15.1 Opinions about Sexuality Education in School	
	15.2 Young Adult Experience with Sexuality Education at Home or in School	
	15.3 Most Important Source of Information about Sexual Matters	
	15.4 Summary of Findings	208

16. PHYSICAL AND SEXUAL ABUSE(Florina Serbanescu, Mary Goodwin)	Page 211
16.1 History of Witnessing or Experiencing Parental Physical Abuse	212
16.2 Types of IPV in Eastern Europe and Caucasus	
16.3 Discussions of Physical Abuse with Others	218
16.4 Summary of Findings	219
REFERENCES	221
GLOSSARY	231
APPENDIX	237

# **ACKNOWLEDGEMENTS**

his comparative report, which summarizes the major findings from 16 surveys conducted in Eastern Europe and Eurasia during the period, 1993-2001, has been a collaborative effort of the Division of Reproductive Health of the Centers for Disease Control and Prevention (DRH/CDC), Atlanta GA., and ORC Macro, Calverton, MD. The funding for this report was provided by the Europe and Eurasia Regional Bureau of the United States Agency for International Development (USAID).

The surveys on which this report is based were primarily funded by USAID. The United Nations Population Fund (UNFPA), the United Nations Children Fund (UNICEF) and USAID country missions have also contributed to many of these surveys Technical assistance for these surveys was provided by DRH/CDC and ORC Macro.

Particular acknowledgement is made to the organizations that implemented the surveys in participating countries. The staff of these organizations provided dedicated and expert collaboration to colleagues from CDC and ORC Macro in project planning and analysis of the survey data. We are pleased to acknowledge these organizations by name on the following page.

Based upon our experience, we feel that the expertise and infrastructure needed to carry out these types of population-based surveys has improved in each country. In many instances, CDC and ORC Macro were able to use counterparts from countries that had completed surveys as consultants in the planning of surveys in other countries in the region.

We wish to thank the dedicated interviewers, field supervisors and data processing staff in each country for their commitment and discipline as well as the thousands of respondents who made such a major contribution to our knowledge of women's reproductive health in the region by their participation in these surveys.

I want to extend my personal thank you to all the contributors to this report. They are listed in the table of contents. A brief background of each author follows the table of contents. My special thanks to *Ranee Seither* who worked with me as the liaison between contributors, editorial staff, reviewers, and the production staff. *Susanna Binzen* provided editorial assistance and *Juliette Kendrick* provided valuable technical comments. Also, many thanks to *Moises Matos*, for formatting the report, and to *Rose Pecorraro*, for her contribution to the cover design.

Special thanks are also extended to the USAID, UNFPA, and UNICEF staff in each country for their assistance in project design, planning, and financial management. Many thanks to *Mary Ann Micka*, *Mary Jo Lazear*, *Willa Pressman*, USAID/Washington, for their continued support of these surveys and the review of chapters by *Rachel Lucas* and others at USAID/W in addition to *Dr. Micka* and *Ms. Lazear*.

Leo Morris, Ph.D., MPH

Project Coordinator

Country Year	of Survey	Organization
Armenia	2000	National Statistical Service Ministry of Health
Azerbaijan	2001	Adventist Development and Relief Agency StateDepartment of Statistics Ministry of Health
Czech Republic	1993	Czech Statistical Office WHO Collaborating Center for Perinatal Medicine, Prague Institute for the Care of Mother and Child
Georgia	1999	National Center for Disease Control Ministry of Health
Kazakhstan	1995	National Institute of Nutrition Academy of Preventive Medicine
Kazakhstan	1999	Academy of Preventive Medicine
Kyrgyz Republic	1997	Research Institute of Obstetrics and Pediatrics, Ministry of Health
Moldova	1997	Institute of Mother and Child Care, Ministry of Health State Department of Statistics Family Planning Association of Moldova
Romania	1993	Institute of Mother and Child Care, Ministry of Health
Romania	1996	International Foundation for Children and Families Institute for Mother and Child Care, Ministry of Health National Commission for Statistics
Romania	1999	Romanian Association for Public Health and Health Management National Commission for Statistics
Russia	1996	All-Russia Centre for Public Opinion and Market Research
Russia	1999	All-Russia Centre for Public Opinion and Market Research
Turkmenistan	2000	Research Center for Maternal and Child Health, Ministry of Health
Ukraine	1999	Kiev International Institute of Sociology
Uzbekistan	1996	Institute for Obstetrics and Gynecology, Ministry of Health

# LIST OF CONTRIBUTORS

#### S. Afua Appiah-Yeboah

Ms. Appiah-Yeboah is a Michigan Population Fellow in the Division of Reproductive Health (DRH), CDC. She has a degree in anthropology from the University of Pennsylvania and an MPH degree from the University of Michigan School of Public Health.

#### **Howard Goldberg**

Dr. Goldberg has had a 22-year career at CDC and currently is the Associate Director for Global Health, DRH/CDC. He has a Ph.D. in sociology from Princeton University. He was team leader responsible for the surveys in Czech Republic, Russia, and Ukraine.

#### Mary Goodwin

Ms. Goodwin has an MPA from the University of Texas/Austin and is an integral member of the Safe Motherhood team at DRH/CDC. She is the lead person on research and programs relating to intimate partner violence.

#### Leo Morris

Dr. Morris has a masters in biostatistics and Ph.D. in population studies, both from the University of Michigan School of Public Health. Following 24 years as chief of the Demographic Research and Behavioral Research Branch, he is now a special advisor in the Office of the Director, DRH/CDC. He was technical advisor to the surveys in Czech Republic, Romania, Moldova, Georgia, and Azerbaijan.

#### Ranee Seither

Ms. Seither is an ORISE Fellow with DRH/CDC. She has a degree in international studies and Russian and an MPH from the University of South Florida.

#### Florina Serbanescu

Dr. Serbanescu is an obstetrician-gynecologist who has been a medical epidemiologist with DRH/CDC since 1992. She attended the School of Public Health at the Belgium Free University. She was technical advisor to the surveys in Romania, Moldova, Georgia, and Azerbaijan.

#### Almaz Sharman

Dr. Sharman is a physician and has a Ph.D. in immunology. He is currently the Infectious Disease Advisor at the USAID Regional Mission for Central Asia, Almaty, Kazakhstan following 8 years at ORC Macro. He was the technical advisor for five surveys in the Central Asian Republics.

#### Jeremiah M. Sullivan

Dr. Sullivan has been with the Demographic and Health Surveys Program since it's inception in 1984 and is currently Technical Director. He was team leader for the Armenia survey and the five surveys in the Central Asian Republics. Dr. Sullivan has a Ph.D. in economics from Princeton University.

#### Albert R. Themme

Mr. Themme has an MA in non-western demography and a BA in geography, both from the Groningen University in the Netherlands. He has been a data processing specialist with ORC Macro for 8 years and participated in the five surveys in the Central Asian Republics.

## PREFACE

Agency for International Development, to write the preface for the most comprehensive compilation of data regarding women's and children's health in the Europe and Eurasia Region. I have served USAID in the countries of Eastern Europe and the former Soviet Union since 1991, first as the USAID health officer in Romania and then as the Chief of the Health Reform and Humanitarian Assistance Division of the E&E Bureau in Washington D.C. I observed that the health of women in the region suffered considerably from excessive use of abortion to limit the number of children to that which they could financially support. High rates of secondary infertility often resulted from complicating infections. Thus, USAID supports programs promoting modern contraceptive methods to address inordinately high rates of abortion in the E&E Region and to counter widespread misinformation about modern contraception.

A number of population-based surveys have been funded to document the progress of these women's health care initiatives and to provide more accurate, population-based data. In fact, these surveys have become invaluable tools for decision-makers in USAID Missions in the E&E countries where reliable data have served as a lynchpin for the development of new programs and basic reforms in health care systems. Most importantly, these surveys have served to facilitate a mutually enriching exchange of experience and knowledge among governmental and UN entities in the U.S. in the host countries, especially UNFPA and UNICEF, as well as between governmental and non-governmental organizations. Clearly, these reports represent a concrete example of trust and collaboration among health professionals at many levels.

As I began reading the results of these surveys, I wondered about the similarities among the countries in the region since they shared a common prior context of communism. This comparative report of 16 surveys among 12 countries answers that question by examining clusters of countries that fall into three sub-groups. This report also provides special insights on health behaviors, knowledge of HIV/AIDS, infant and child mortality, young adults, and domestic violence. These are all topics that influence how USAID programs its resources. It is my hope that the governments and health professionals in the E&E Region, as well as USAID Missions, will deem it appropriate to support the implementation of future surveys and smaller comparative studies focusing on specific problems of infant and maternal mortality.

I wish to express my extreme gratitude to the organizations abroad that so generously gave time and resources to make this report a success. I wish to thank my staff, and especially Leo Morris and his staff at CDC and Jerry Sullivan and his staff at ORC Macro International. They have been dedicated to providing a methodologically sound approach to training host country staff and to the preparation and publication of the surveys. To each and everyone, thank you for your contributions as you traveled in the region.

Mary Ann Micka, MPH, MD

E&E Bureau, USAID/Washington

vi .	Preface
------	---------

### INTRODUCTION

his report summarizes the results of a series of surveys on fertility and reproductive health attitudes and behaviors carried out in 12 countries in Eastern Europe (Czech Republic, Moldova, Romania, Russia, and Ukraine), the Caucasus (Armenia, Azerbaijan, and Georgia), and Central Asia (Kazakhstan, Kyrgyz Republic, Turkmenistan, and Uzbekistan). These countries share a great deal in the way of recent political and economic history, having been either part of the Soviet Union or within its sphere of influence. The collapse of the Soviet Union in 1991 brought a number of social, economic, and political changes to the countries in this region, and the transition to a new market economy has presented formidable challenges.

In addition to the striking similarities in socioeconomic conditions inherited from the Soviet era, there have also been demographic and health similarities among countries in the region, in particular a heavy reliance on abortion rather than on modern contraception as a means of preventing unintended births. Therefore, reproductive health is an issue of critical importance for the countries of this region.

Beginning in 1993, with the initiation of United States Agency for International Development (USAID) programs in this region, several surveys on family planning and reproductive health attitudes and behaviors were conducted. To this end, the Division of Reproductive Health of the Centers for Disease Control and Prevention (DRH/CDC) and Macro International have provided technical assistance for Reproductive Health Surveys (RHS) and Demographic and Health Surveys (DHS), respectively, in collaboration with local counterparts. Between 1993 and 2001, 16 surveys (10 RHS and 6 DHS) were conducted in the 12 countries covered in this report.

These surveys represent the first systematic efforts to gather data on population and reproductive health issues in the region. Population-based surveys of women of reproductive age using nationally representative samples are an effective mechanism for collecting information on topics such as family planning, fertility, contraceptive use, knowledge about HIV/AIDS, and other reproductive health issues. Significantly, data produced during the Soviet era were often flawed by distorted reporting, which sometimes presented a misleading picture of conditions in the region. As a result, until recently, relatively little detailed and reliable population-based information was available about the situation in the region with regard to important reproductive health topics.

Both the RHS and DHS examine patterns and levels of fertility, family planning, contraceptive use and method selection, health behaviors, knowledge of HIV/AIDS, as well as attitudes towards specific contraceptive methods and abortion. These issues are of particular importance in this region, since for many years women and health care providers had limited access to up-to-date and reliable information on these topics. The surveys also provide data on key maternal and child health indicators, including anemia, infant feeding and nutrition, and the extent to which mothers receive medical care during pregnancy and at delivery.

A principal objective of these surveys has been to examine the aspects of reproductive health status and needs that can be used to help direct or modify program interventions. These data are particularly useful in assisting policy makers and health planners in evaluating health service needs, and identifying reproductive health behaviors associated with poor health outcomes. They could also play a significant role in designing programs better targeted to meet the needs of population subgroups. A key programmatic difference between policy

objectives in this region and those in some developing countries is that in the former Soviet Union the emphasis is not on promoting a decline in fertility and population growth, but on bringing about improvements in women's health through increased availability and improved use of modern contraceptive methods and reduced reliance on abortion.

Until now, a comparison of key family planning and reproductive health indicators had never been compiled in the region. It is intended that this comparative analysis serve as a reference document for readers interested in major reproductive health findings in the region, while more detailed information may be found in the individual country reports (see references). By bringing together data from the individual surveys, this report allows for the examination of the similarities and differences between countries in the region. For instance, it may enable program officials, researchers, and policymakers to identify those characteristics which will lead to increased and improved contraceptive use. In addition, this document may prove useful for other countries in the region that have not yet conducted surveys, but have similar characteristics, policies, and health care systems.

In conclusion, the nationally representative data on key indicators produced by both the Reproductive Health Surveys and the Demographic and Health Surveys can be used to design or modify health interventions, identify high-risk behaviors amenable to change and highlight reproductive health areas that warrant greater attention. These data may be translated into policy and programmatic activities to improve services and findings may provide guidance on how data may be combined with other existing information to contribute to a more profound understanding of reproductive health in the region.

viii Introduction