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Medical Treatment of Intoxications and Decontamination of Chemical Agents in the Area of Terrorist Attack

edited by

Christophor Dishovsky
Military Medical Academy,
Sofia, Bulgaria

Alexander Pivovarov
Ukrainian State University of Chemical Engineering,
Dnepropetrovsk, Ukraine

and

Hendrik Benschop
TNO Prins Maurits Laboratory,
Rijswijk, The Netherlands

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PREFACE

This book includes reports which were presented at a NATO Advanced Research Workshop (ARW) entitled “Medical Treatment of Intoxications and Decontamination of Chemical Agent in the Area of Terrorist Attack”. The workshop was held on 25-28 January 2005 in Dnepropetrovsk, Ukraine.

Currently, scientists and experts from many countries are working on development and implementation of a readiness for anti terrorist actions. In addition to chemical weapons, terrorists can use various toxic chemicals from chemical industry, agriculture or products released from terrorist acts on industrial facilities. The arsenal of chemical agents that can be used as terrorist agents is practically unlimited. The focus of this workshop was assessment of scientific concepts and practical means for management of chemical agent casualties in the area of terrorist attack with emphasis on improving the medical treatment and decontamination. These problems were analyzed from an interdisciplinary perspective.

The primary objective of the ARW was to provide countries in which chemical-defense systems are currently under development with the experience and expertise of those that are more advanced and/or have already been exposed and responded to a chemical-terrorist attack.

The main areas covered were:
1. new approaches in pre-treatment and prophylaxis of nerve agent intoxication;
2. diagnosis of exposure to chemical agents;
3. therapy of chemical agent intoxication;
4. development of personal decontamination;
5. decontamination of intoxication with chemical agents.
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The meeting was sponsored by the NATO Scientific and Environmental Affairs Division. We take this opportunity to express our thanks to the sponsor. We also are grateful to Dr. Sergey Ryzhenko for according a hearty welcome at Dnepropetrovsk Region Sanitary-Epidemiological Station, Dr. Grigory Shmatkov for a very interesting and useful excursion to the industrial city of Dneprodzerzhinsk, Mr. Valery Berestjanoy for organizational contacts with the Dnepropetrovsk Regional Administration. Finally, the hard and dedicated work of Dr. Viktor Kovalenko, Dr. Anna Tischenko, Mrs. Tetjana Bolva, Mr. Boris Dubina, Ukrainian State University of Chemical Engineering, Dnepropetrovsk, is highly appreciated. Indeed, without their organizational and technical support this meeting would not have gone as smoothly as it did.

Prof. Christofor Dishovsky, Ph.D., D.Sc. – Co-Director
Prof. Alexander Pivovarov, D.Sc. – Co-Director
KEY SPEAKERS

Dishovsky Christophor, Ph.D., D.Sc., Professor.
Military Medical Academy, Department of Military Toxicology.
3, St. G. Sofiisky Str. Sofia 1606, Bulgaria
Telephone: (+359 2) 9226448,
Fax: (+359 2) 952 6536
E-mail: christophord@yahoo.com

Pivovarov Alexander, D.Sc., Professor.
Ukrainian State University of Chemical Engineering, Department of
Food Equipment and Technology. 8 Gagarin Ave.,
Dnepropetrovsk 49005, Ukraine
Tel. (+38 0562) 38-56-58
Fax: (+38 0562) 36-68-37
E-mail: apivo@ua.fm

Benschop Hendrik, Ph.D., Professor.
Department of Chemical Toxicology, TNO Prins Maurits Laboratory,
2280AA Rijswijk, Postbox 45. The Netherlands.
Tel. 00 31 15 2843629
Fax: 00 31 15 2843963
E-mail: benschop@pml.tno.nl

Department of Chemical Toxicology, TNO Prins Maurits Laboratory,
2280AA Rijswijk, Postbox 45. The Netherlands.
Tel. 00 31 15 2843048
Fax: 00 31 15 2843963
E-mail: philippens@pml.tno.nl

Jiri Matoushek, Professor,
Masaryk University, Faculty of Sci., EU Res. Ctre of Excellence
for Environmental Chemistry and Ecotoxicology, Kamenice
126/3, CZ-625 00 Brno, Czech Republic
Tel. 420 549 492 860
Fax: 420 549 492 840
E-mail: matousek@recetox.muni.cz

Jyruli Manana, D.Sc.
Georgian Environmental and Biological Monitoring Association.
60 Agmashenbeli Av., Tbilisi, 0102 Georgia
Tel. +99532 98 67 94
Fax: +99532 95 67 92
E-mail: mjuruli@myoffice.ge
Brown Clarence Lee, D.Sc.
Inspection Team Leader / Senior Medical Officer Inspectorate, Organization for the Prohibition of Chemical Weapons (OPCW), Johan de Wittlaan 32 2517 JR Den Haag. The Netherlands
Tel. +31 (0)70-416.31.74
Fax: +31(0)70-306.35.35
E mail: Clarence.Brown@opcw.org

Rowell Mike, MB,BS,MPH
Senior Medical Officer Health and Safety Branch, Organization for the Prohibition of Chemical Weapons (OPCW), Johan de Wittlaan 32 2517 JR Den Hague. The Netherlands
Tel. +31 (0)70-416.35.10
Fax: +31 (0)70-306.35.35
E-mail: mrowell@opcw.org

Ryzhenko Sergey, D.Sc. (Chief of DRSES)
Dnepropetrovsk Region Sanitary-Epidemiological Station. 39a. Philisofskaja St., Dnepropetrovsk 49000, Ukraine
Tel. +38 056 3710155
Fax: +38 056 3710155
E-mail: oblses@a-teleport.com
http://www.sesobl.dp.ua

Khaydarov Renat, D.Sc.
Institute of Nuclear Physics, 702132, Ulugbek, Tashkent, Uzbekistan, (998712)606144
Tel. 998 712 606144
Fax: 998 712 606144
E-mail: physicist@sarkor.uz

Litvin Yuri, Professor., Col.
Dnepropetrovsk State Medical Academy, Chief of Department of Extremely and Military Medicine. 9. Dzerzhinskogo St. 49044 Ukraine
Tel. +38 0562 938916
Fax: +38 056 7702258
E-mail: litvin@dsma.dp.ua

Popov Tzvetan, D.Sc.
State Agency for Civil Protection, 30 Gabrovsky St., Sofia 1172, Bulgaria.
Tel. 00359 2 960 10 324
Fax: 00359 2 960 10 324
E-mail: tsvtnppv@abv.bg
Key Speakers

Zadorsky Willjam, Professor.
Ukrainian State University of Chemical Engineering,
Department of Chemical Equipment and Ecology. 8 Gagarin Ave.,
Dnepropetrovsk 49005, Ukraine
Tel. +38 (056) 744 0210
Fax: +38 (056) 744 0210
E-mail: ecofond@ecofond.dp.ua
http://zadorsky.com

Kokshareva Natalia, Professor.
Medved’s Institute of Ecohygiene and Toxicology,
6. Heroev Oborony St. 01000 Kiev, Ukraine
Tel. +38 (044)258 32 01
Fax: +38 (044)251 96 43
E-mail: knv@medved.kiev.ua

Tkach Vladimir, Professor.
Medved’s Institute of Ecohygiene and Toxicology,
6. Heroev Oborony St. 01000 Kiev, Ukraine
Tel. +38 (044)258 32 01
Fax: +38 (044)251 96 43
E-mail: knv@medved.kiev.ua

Shmatkov Grigoriy, Professor.
Dnepropetrovsk Regional Administration, 1. Kirov Av.,
Dnepropetrovsk 49004, Ukraine
Tel. +38 (0562) 428841
Fax: +38 (0562) 424028
E-mail: shmatkov@gue.dp.ua

Florin Paul, MD, Ph.D., Col.
Str. Institutul Medico Militar NR 3-5, Bucharest, Romania
Tel. +40-21-212-6004
Fax: +40-21-212-6004
E-mail: paulf@pcnet.ro

Pozdnjakova Ludmila, MD, Ph.D.
Ukrainian I.I.Mechnicov Anti Plague Research Institute,
Odessa 65000, Ukraine.
Tel. +38 (048) 741 1586
E-mail: PL258396@ua.fm
OTHER PARTICIPANTS AND OBSERVERS

Kovalenko Victor, D.Sc. (Pro-rector)
Ukrainian State University of Chemical Engineering,
8 Gagarin Ave., Dnepropetrovsk 49005, Ukraine
Tel. +38 (056) 744 0210
Fax: +38 (056) 744 0210
E-mail: ughtu@dicht.dp.ua

Hmel Stanislav, Col.
Dnepropetrovsk State Medical Academy, Department of
Extremely and Military Medicine. 9. Dzerzhinskogo St.
49044 Ukraine
Tel. +38 0562 938916
E-mail: litvin@dsma.dp.ua

Gninenko Alexander, Lieut. Col.
Dnepropetrovsk State Medical Academy, Department of
Extremely and Military Medicine. 9. Dzerzhinskogo St.
49044 Ukraine
Tel. +38 0562 938916
E-mail: litvin@dsma.dp.ua

Kremenchutzky Gennady, Professor.
Dnepropetrovsk State Medical Academy, Chief of
Department of Microbiology. 9. Dzerzhinskogo St.
49044 Ukraine
Tel. +38 0562 471355
E-mail: kremen@dsma.dp.ua

Bandura Alexey, Captain.
Science-Research Centre of Expert Crime Detection.
Chief of Research Explosive Substances Department of
Police in Dnepropetrovsk Region. 105a, Heroev Stalingrada St.,
Dnepropetrovsk 49033, Ukraine
Tel. +38 0562 415798

Isaev Viktor, MD. Ph.D. (Deputy of Chief).
Dnepropetrovsk Region Sanitary-Epidemiological Station.
39a. Philisofskaja St., Dnepropetrovsk 49000, Ukraine
Tel. +38 056 3710155
Fax: +38 056 3710155
E-mail: oblses@a-teleport.com
http://www.sesobl.dp.ua
Isaev Andrey, MD. Ph.D.
Dnepropetrovsk Region Sanitary-Epidemiological Station.
Chief of Sanitary-Hygienic Department.
39a. Filosofskaja St., Dnepropetrovsk 49000, Ukraine
Tel. +38 056 3710155
Fax: +38 056 3710155
E-mail: oblses@a-teleport.com
http://www.sesobl.dp.ua

Berestjanoy Valery. (Deputy of Chief)
Main Directorate of External Economic Links of
Dnepropetrovsk Regional Administration,
1. Kirov Av., Dnepropetrovsk 49004, Ukraine
Tel. +38 (0562) 428209
Fax: +38 (056) 74412426
E-mail: isachenko@adm.dp.ua

Kolyada Alexander, MD. Ph.D.
Medical Academy of Postdiploming Education,
20 Vintera Av. Zaporizhia 69096, Ukraine
Tel. +38 (0612) 570533
Fax: +38 (0612) 570533
E-mail: iskander@mail.zp.ua

Andruschenko Nikolai, Col. (Deputy of Chief)
Department of Extraordinary Situation and Protection
of Population from Consequences of Chernobyl Accident
in Dnepropetrovsk Region. 4 Korolenko St. Dnepropetrovsk
49000 Ukraine.
Tel. +38 (0562) 7701891

Tischenko Anna, D.Sc.
Ukrainian State Chemical-Technology University,
Department of Food Equipment and Technology.
8 Gagarin Ave., Dnepropetrovsk 49005, Ukraine
Tel. (+38 0562) 470555
Fax: (+38 0562) 356422
E-mail: antisch@ua.fm

Kharytonov Mykola, D.Sc.
Ecotoxicology Laboratory, Dnepropetrovsk State
Agrarian University, 25 Voroshilov St., Dnepropetrovsk,
49600, Ukraine
Tel. (+38 056) 7448132
E-mail: envteam@ukr.net