of the exposure to low doses of OPWA requires lower detection limits (0.1-1 ng/ml).

Optimal objects for the retrospective analysis of OPWA in an organism are long-lived blood protein adducts. We developed a procedure for revealing an exposure to soman, involving reactivation of inhibited blood butyryl choline esterase with fluoride ion to liberate soman and its subsequent combined SPME-GCMS analysis. The procedure allows determination of total blood soman and separate determination of reactivated and intact soman. Analysis for total blood soman is used to reveal an exposure to this agent. Separate determination of reactivated and intact soman provides a valuable tool for toxicokinetic research.

The sensitivity of the determination is no worse than 0.5 ng/ml. The average total analysis time is 1.5 h. The procedure was approved in experiments with human blood in vitro and with rat blood in vivo.

53. EPIDEMIOLOGY OF MULTIRESISTANT ACINETOBACTER INFECTIONS IN BULGARIA *(6)*

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Evolution of bacteria towards resistance to antimicrobial drugs, including these with multidrug resistance, is very important issue for hospital epidemiology in all over the world. There are many papers about an increasing number of Acinetobacter *baumannii* blood stream and other type of infections in patients at military medical facilities in the Iraq / Kuwait region and in Afganistan during Operation Enduring Freedom /OEF /. It has now become also a one of the major cause of hospital acquired infections in Bulgaria which due to its remarkable propensity to rapidly acquire resistance determinants to a wide range of antimicrobial drugs.

According to the data obtained in Bulgaria, it can be concluded that the majority of the A.baumannii isolates was strikingly resistant, including the 3rd generation of cephalosporines, quinolones and also carbapenems, in the last years. Different methods / phenotypical and molecular methods, including PCR/ for a multidrug A.baumannii investigation and its clonality determination are needed, especially when the strains are not epidemiologicaly related.

54. THE CBRNE THREAT NEEDS NEW DEDICATED ANALYSERS *(5)*

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INTRODUCTION

After the 9-11 attack by terrorists several governments realized their vulnerability towards creative asymmetric attacks. Due to increasing complexity of our society we create more vulnerability towards terror attacks. More chemical substances than we realize can be misused to destabilize our modern society.

Recently aircraft passengers were confronted with new regulations, which limit the amount of fluid, which a passenger can bring on board with hand luggage. How far should we go limiting the allowance to bring liquids and substances on board? It indicates that we need new analytic instruments for screening the safety of luggage in all types of transport.

STUDY DESIGN

An inventory was made of the present demand for safe transport and its vulnerability to terror attacks. Also the safety and safety awareness in public buildings, offices and industrial complexes was assessed.

Knowing the demand for a certain safety level, an inventory was made to identify analytical equipment, which can be used to check passengers and luggage on possible threats. The same can be used for protecting public areas, offices and industrial complexes.

RESULTS AND DISCUSSION

It is amazing how some governments, financially driven, underestimate the consequences of CBRNE incidences and disasters. Both threats due to release of dangerous substances just by accident and deliberate abuse of chemicals and/or biologicals by terror organizations is underestimated. Financial rationales are often the cause that the preparedness is less that technically could be possible.

Still some commercial companies realize the importance of safety and preparedness towards terror attacks and take their precautions. Several detection systems are now under development and a new market of safety devices comes into existence.

CONCLUSION

Key question is how far we would like to go with defending us with technical devices against potential terror attacks. Also the design of buildings, transport vehicles and industrial complexes can limit the risk on CBRNE incidences.

Key words: Industrial dangerous goods, disaster plan, terrorism, transport, infrastructure, knock-on effect

55. NAVIRCEPT – NUCLEIC ACID-BASED ANTI-VIRAL PROJECT *(14)*

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Vaccines are generally considered to be the most effective countermeasures to bacterial and viral diseases, however, licensed vaccines against many disease agents are either not available or their efficacies have not been demonstrated. Vaccines are generally agent specific in terms of treatment spectrum and are subject to defeat through natural mutation or through directed efforts.