The European Centre of Excellence for Countering Hybrid Threats

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Vulnerabilities and Resilience
COI VULNERABILITIES AND RESILIENCE 2018

ALTOGETHER 384 PARTICIPANTS in 9 EVENTS FROM 16 MEMBER STATES, EU AND NATO!

LEGAL RESILIENCE

HT AND ENERGY NETWORKS

DRONES

HARBOUR PROTECTION

SHIPPING

KICK-START

WORKSHOP

TTX?

ADVERTISE

FOLLOW-UP

HYBRID CoE
The European Centre of Excellence for Countering Hybrid Threats
Events 2019

Law of the Sea session at Exeter

EU-NATO Civil protection Brussels

Finance system

Baltic Sea Lines Velkua

Harbour protection II Helsinki

CI Interdependencies Copenhagen - Sjaelland

+ Contributed to Presidency Scenario-based discussions Summer-Autumn 2019

+ Contributed to many seminars especially at EU/NATO
WORKSHOP ON EU-NATO COOPERATION IN CIVIL PROTECTION FEBRUARY 2019
BRUSSELS

NATO 7 BASELINE REQUIREMENTS FOR
CIVIL PREPAREDNESS

EU CIVIL PROTECTION MECHANISM = >
RESCEU => HILP
SITUATION IN COUNTRY X

• NATO’S INTEGRITY CHALLENGED IN AN UPCOMING ELECTION
• A RESPIRATORY VIRUS STARTS SPREADING IN 3 LOCATIONS (LONG INCUBATION TIME)
• AFTER 2 WEEKS APPARENTLY: 5% OF PATIENTS WILL DEVELOP A LIFE-THREATENING FORMULA OF THE DISEASE, REQUIRING INTENSIVE CARE AND RESPIRATORY TREATMENT
AT 21ST DAY
The President declares a state of emergency
Quarantine is implemented at a national level
All schools, both private and public are closed
All public events are cancelled
Programmes are in place for information and education
Programmes are in place for safety and security
The EU Civil Protection System has been activated
The Health Ministry declares an epidemic in the country with 35 deaths and 57500 suspected cases of the infection
There are 287 critical patients, with 903 patients showing potential to become critical
The country has asked for international support
Support measures within the country include;
• The Country treats patients within its own limitations
• Prophylactic measures include;
Entry and exit airport triage
Border control triage
Education and treatment in schools
Media information, education and advice for the population
REQUESTED INTERNATIONAL ASSISTANCE
Country X’s urgent requirements include;
• ICU Facilities - 2500 beds
• ECMO with medical staff - 25
• More stocks of Ribavrin (tablets and injections)
• Experimental vaccines (2.5ml doses)
• Modular field hospital - 5
• Ventilation ambulances - 100
• Multiple victim ventilation vehicles - 50
• Isolation and transport equipment - 40
• Containers for helicopter transport - 10
• Personal protection equipment - 100,000
• Medical staff (Emergency ITU, Epidemiologists, Lab, Infectious Physicians, nurses)
• Equipment and materials for air disinfection
• Mobile mortuary - 5
• Mobile transfusion points - 5
• Other drugs and blood products and medical supplies
• Air transfer facilities including;
  6 planes (Spartan C127 with containers for air transport) 10 helicopters
  5 medical ships
Spread of disease until day 49 (end of week 7) and a forecast of patients requiring ICU-care

- Symptoms: 160,000
- Infected (tested): 50,000
- Hospitalized: 14,943
- ICU-care necessary: 8,552
Every 2 weeks, the ICU-units received through EUCPM save up to 2500 lives
Requested additional ICU-units would save up to 2500 more lives every 2 weeks.
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Critical patients vs available ICU-units

Patients (Thousands)
9
8
7
6
5
4
3
2
1

Weeks
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.

Patients, ICU-care necessary (5%)
ICU-units max total
ICU-units national
Requested additional ICU-units would save up to 2500 more lives every 2 weeks.

HILP/LOHI = CLEAR CASE!
Requested additional ICU units would save up to 2500 more lives every 2 weeks.

RESCEU COULD FILL THIS GAP?

Patients (Thousands)

- Patients, ICU-care necessary (5%)
- ICU-units max total
- ICU-units national

Every 2 weeks, the ICU-units received through EUCPM save up to 2500 lives.
OUTCOME

• Citizens will expect help to arrive from EU and Nato
• The epidemic may be naturally born or man-made – same result: failing to help, EU and Nato will lose support
• Both organizations could contribute significantly, **EU more**
• Conditionality of help; if resources *might* be needed to protect own citizens, almost never can a country send it abroad.
RESCEU COULD AND SHOULD BE DEVELOPED AS A COMMUNITY LEVEL LAST RESORT CAPACITY. THIS WOULD BE REAL EUROPEAN VALUE ADDED! BUT...

• PECULIARITIES IN NATIONAL DECISION-MAKING AND COMMUNICATION:
  • EU’s subsidiarity principle => down to top development will remain slow.
  • Pride and integrity issues. Intra-national and MS vs EU.
• WE SHOULD WORK ON FOR FURTHER IMPROVING AWARENESS and INCREASING POLITICAL INTEREST. Some immediate measures:
  • TRY TO INFLUENCE ON FINNISH PRESIDENCY’S HYBRID CONCLUSIONS
  • ORGANIZE FURTHER EVENTS AND EXERCICES DEMONSTRATING THE NEED AND EMBRACING MORE AND MORE STAKEHOLDERS
  • 22ND NOVEMBER HYBRIDCOE/COI Vulnerabilities and Resilience EVENT IN BRUSSELS FOR THE INSTITUTIONS, NATO AND MEMBER STATES:
    • Present this health scenario and collect comments from DG ECHO, NATO, JRC
    • Indicate a positive way ahead with further works, including those presented today.
THANK YOU!
The Virus
It is spherical and pleomorphic with a diameter of 50 - 300NM
RNA Genome - single stranded and bi-segmented
Ribosomes inside the virus give it its characteristic sandy appearance under magnification
The virus is enclosed in a dense lipid containing envelope with 8-10NM long club shaped projections
The mode of transmission is primarily by aerosol of dust particles from rodent excretia with an infectious dose of 1 - 10 organisms enough to cause clinical infection in humans
Nosocomial transmission has also been observed
The incubation period is 4 - 21 days
Person to person spread is possible through nosocomial transmission
The most common transfer to humans is via bites from ticks that inhabit infected rodents, mosquitoes, or through inhalation of micro aerosols from infected rodents
Ticks and Mosquitoes are the main carrier
The virus becomes inactive by heating it to 56C at pH below 5.5 or above 8.5 and by UV Gamma irradiation
The virus cannot survive outside the host in dry environments in haemorrhaging fever form, but can survive up to two weeks in blood specimens outside the host
**Medical Incidents**
The first of the three locations is in the Capital City. The population is around two million people. The Capital has 5 high level hospitals, 10 county hospitals and 20 local hospitals. There are 250 ICU beds with a daily occupation rate of 90%. 5 mobile ICU, 10 ambulances with ventilation capacity, 1 medical helicopter and 1 ECMO.

After 14 days, 1000 people are showing flu like symptoms. 1% have been admitted to ICU, 10% admitted to the infection diseases hospital, and 89% have been sent home with medical scripts.

After 21 days, 2500 people are displaying flu like symptoms. 5% have been admitted to ICU and 15% have been admitted to the infectious diseases hospital. 80% have been sent home with medical scripts.

3 people from the initial admission are dead. 4 people present hemoragic symptoms and 15 deaths have occurred in the pre-hospital area.

...and there are 2 more