
EMS SYSTEM IN LITHUANIA

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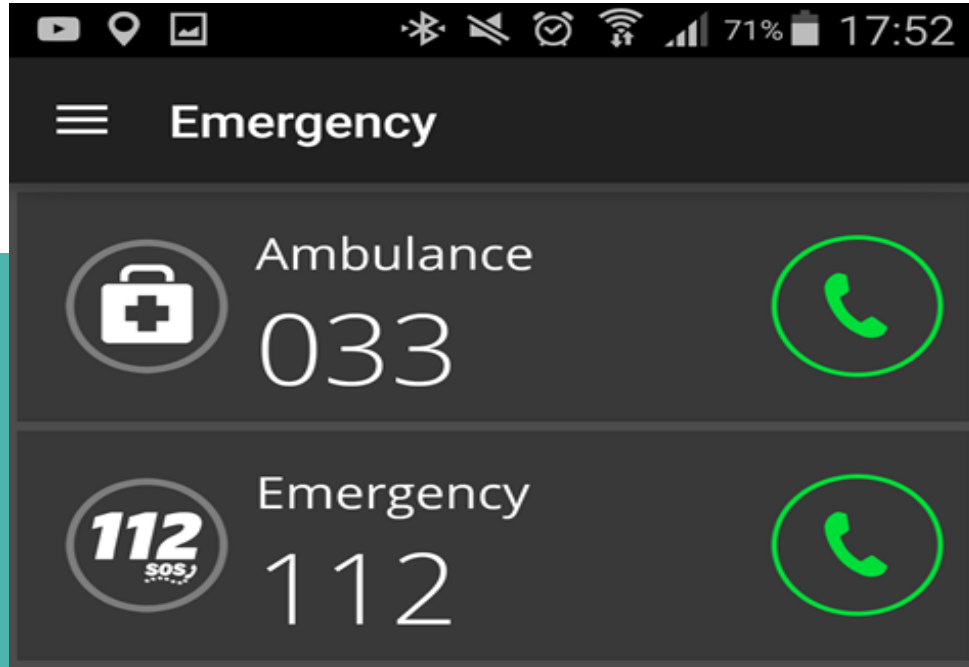
DIRECTOR

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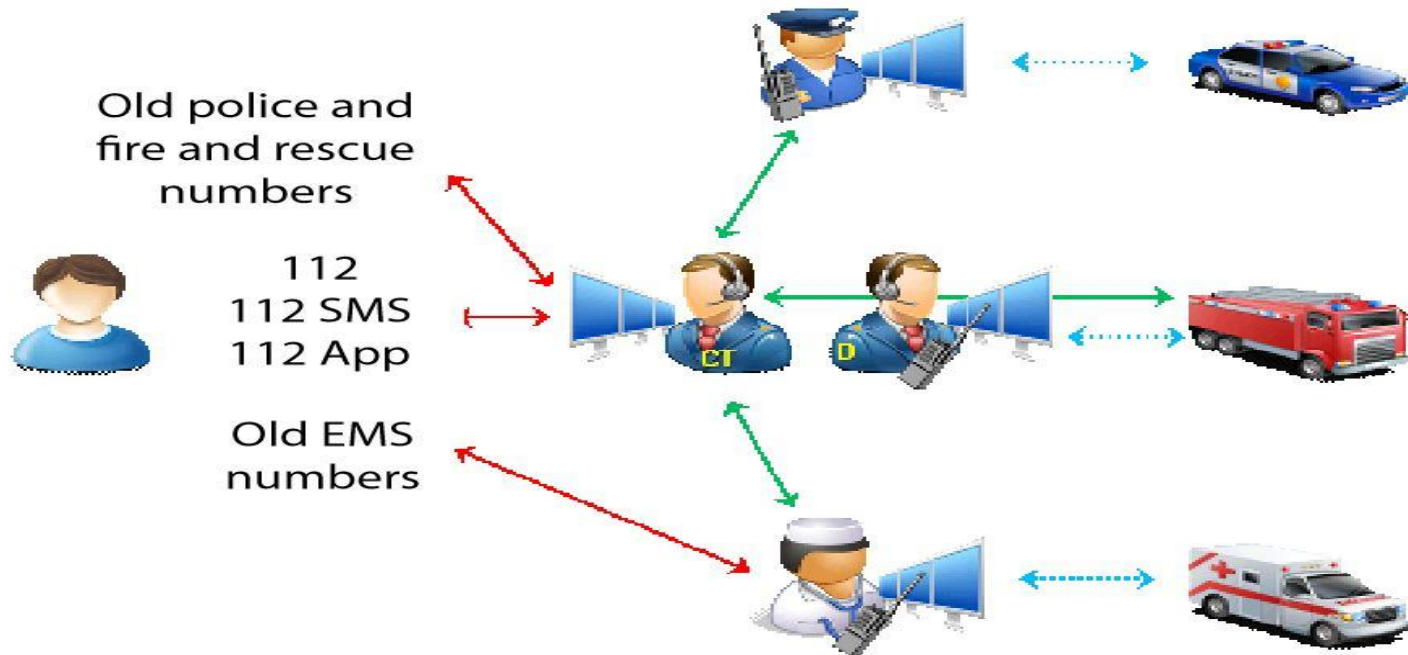
- Territory of Lithuania – **65 300 km²**
- Population – **2 904 922**
- 24/7 - **210-215** units are on duty
- There are **8** Emergency Dispatch Centers in Lithuania
- In 2016 year about **700000** ambulance response;



EMERGENCY NUMBERS



112(0,9mln calls/year)



033(1 mln calls/year)



1. VoIP
2. CAD - core of calltaking and unit dispatching
3. ProQA, Aqua. International Academies of Emergency Dispatch (IAED). Medical Priority Dispatch System (MPDS)
www.emergencydispatch.org/articles/whatis.html
4. RadioNET –TETRA, NEXEDGE DB, LDS, PC, Radio network, Radios, Car computer
5. Orientae - StreetView, Ortophoto, AKIS, unit coverage area, unit history, (forecast)
6. “Colibri” TSMA - statistics module

1.1.1. Skaitmeninio radijo ryšio automobilinis terminalas Kenwood NX-800E.



1.1.2. Mobilioji valdymo panelė RadioNET (toliau – MVP).



1.1.3. Garmin GPS navigorius Nüvi 2595 (toliau – navigatorius).



1.1.4. Skaitmeninio radijo ryšio nešiojamasis terminalas Kenwood NX-320E2.



1.1.5. Automobilinio radijo terminalo ir MVP sisteminiai blokai bei trumpalaikio rezervinio maitinimo baterija yra sumontuoti įrangos lagamine su automatine aušinimo (ventiliavimo) sistema.



Structure of Dispatch center

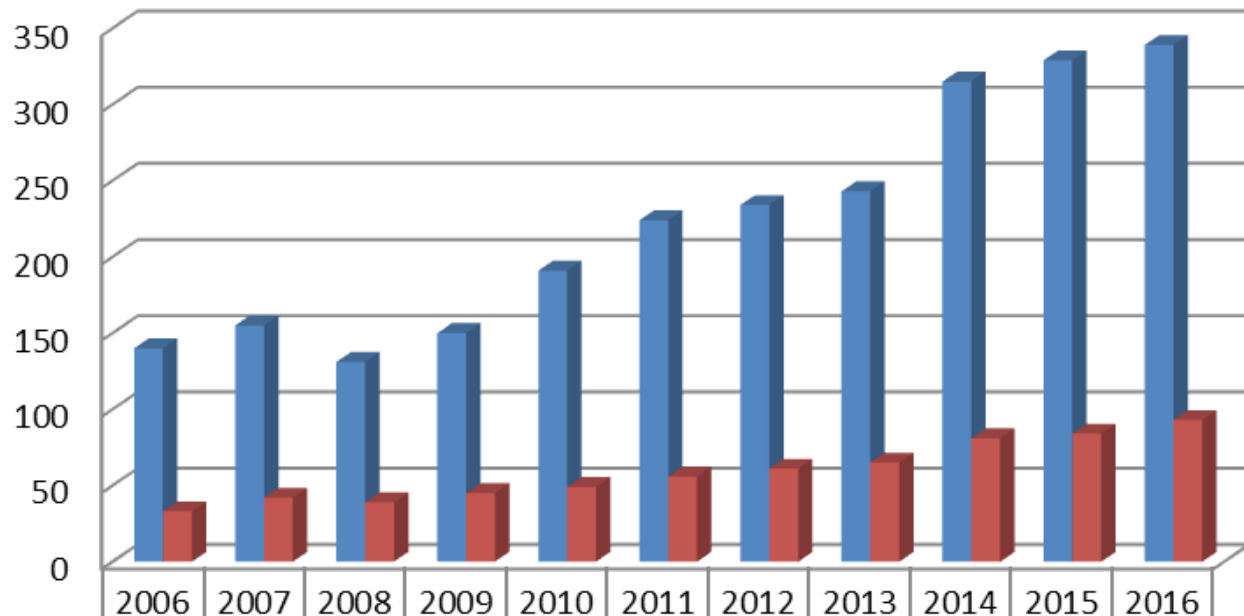
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7. DMR - Tab - electronic medical 110a form with recommendation module in cases of coronary syndrome, stroke and polytrauma

Types of units

- 48 ambulance stations in Lithuania(Public institutions, established by Municipality);
- 1 unit for 16000 habitants in rural area;
- 1 unit for 18000 habitants in urban area;
- Types of units: BLS(Paramedic+Paramedic/Driver) and ALS (Nurse/Doctor + Paramedic/Driver). 90 % in Lithuania- - ALS type with Nurse+Paramedic/Driver crew;
- Response time according law – 15 min in urban and 25 min in rural area for 1st category call (approx. 84 % in urban area and 80% in rural area for today);
- No helicopter support in EMS system (except emergency offshore – coastguard and transplantology – Air Force helicopters);

Successful CPR Kaunas ambulance

ATGAIVINTŲ PACIENTŲ SKAIČIUS 2006 - 2016 M.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
■ Gaivinta	140	155	131	150	191	224	234	243	315	329	339
■ Atgaivinta	33	42	39	45	49	56	61	65	81	84	93

Problems in LTU Ambulance system

1. Full decentralization (48 independent ambulance stations);
2. 8 Dispatch centers (planing 4 DC at the end of 2017);
3. Absence of Call taking algorithms standart on national level;
4. Using medical equipment on RT on RP on RW problem;

Trauma patients

- 2016 - 3289 car accidents (2015 -3033, 2014-3185) in Lithuania;
- 189 dead – 53 (21,9%) less than in 2015 (241 in 2015, 267 in 2014);
- 3880 injured (3801 in 2015, 3785 in 2014);
- Our main target group – 3880 injured;

Trauma patients

- Trauma centers network established (Level 1 Trauma centers Vilnius, Kaunas and Klaipeda University hospitals) ;
- Trauma team in Trauma centers;
- Communication from EMS unit – to ER;
- Patient arrival to Trauma centers – approx. 49 min(from call to emergency room);

Trauma patients – problems on EMS stage

- Inequality of medical care quality in different EMS (mortality rate in transportation stage distributes from 0,2% to 2,2 %);
- Last well-budgeted trauma care programs aimed to improve trauma care provision were launched by Ministry of Health of Lithuania in 2012 (ALS,ATLS,ACLS etc.);
- Lack of development and integration of standard operative protocols, care pathways and clinical guidelines on national level;
- No central management or trauma governance-specific structure for the existing trauma service in the country;

Trauma patients – five critical areas for further development

1. The establishment of a formal National Trauma Network(Trauma research and Audit Network);
2. Use Information systems services (ISS) in all trauma centers to simplify and assessments of their performance;
3. Use of standardized death rates for comparison purposes;
4. Systematic continuous trauma life support education and training for the health care specialist nationwide;
5. Structural changes in EMS system – less DC, Ambulance stations centralization, etc.

THANK YOU FOR YOUR ATTENTION

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