



The National Emergency Management Agency, Mongolia



UNISDR

United Nations Office for Disaster Risk Reduction

*Technical Workshop
Launch of the Sendai Framework Monitoring Process
Bonn, Germany, 6 to 8 December 2017*

Mongolia: Disaster Data Disaggregation

**6 December 2017
Bonn, Germany**



Mongolia - Country Profile



- **Capital:** Ulaanbaatar
- **Land Area:** 1,564,000 sq.km
- **Population:** 3.1 million (with density of 1.7 per sq.km) (2016)
- **Neighbour countries:** Russia and China
- **Administrative units:** 21 provinces
- **GDP per capita:** 3686 USD (2016)
- **Major industry:** Agriculture, Construction and materials and Mining





Disaster Profile:

Natural and human induced hazards in Mongolia

Types of main natural and human induced hazards

Fires	steppe and forest fire
	building fire
Hydro-meteorological hazards	heavy rain and flood
	severe winter condition
	thunderstorm
	strong storm
Geological hazards	earthquake
Biological hazards	smallpox
	Foot and mouth disease
	rabies
	bovine malignant catarrhal fever
	Enteroviral vesicular stomatitis with exanthem
	anthrax
	Cattle-plague
	glanders
	Haemorrhagic fever
Human induced hazards	Chemical substances
	explosion
	Small-scale mining collapse (arsenal mining)
	water accident
	mountain accident





Disaster Loss Data Disaggregation (mortality & affected people): Achievements & Opportunities

- **“disaster”** refers to the losses of many people’s lives and health, extensive loss of livestock and animals, damage to property, cultural heritage and environment beyond the capacity of national and local internal resources, due to natural disaster phenomena, human factor and technical accidents (*Law on Disaster Protection of Mongolia*)
 - hazardous event
 - disaster type
 - geographical location
 - age
 - gender
 - year
- National disaster loss data aggregated by
- Disaster data collected by
 - Local Emergency Management Departments under NEMA + Local governmental administration
 - Disaster Research Institute under NEMA
- Availability of most disaster loss data - since 2000 (see UNISDR Desinventar) and some historic data before 2000
- NEMA provides data information to the National Statistical Organization



- ***The number of disaster mortality and missing people***

Currently
available

- by age: adult & children
- By gender: male/female
- by types eg. flood, storms
- by geographical location
- by year

Currently not
available

- by disability
- by age disaggregation
- by income



Mortality from Natural and Human Induced hazards 2000-2015 (by disaster types)

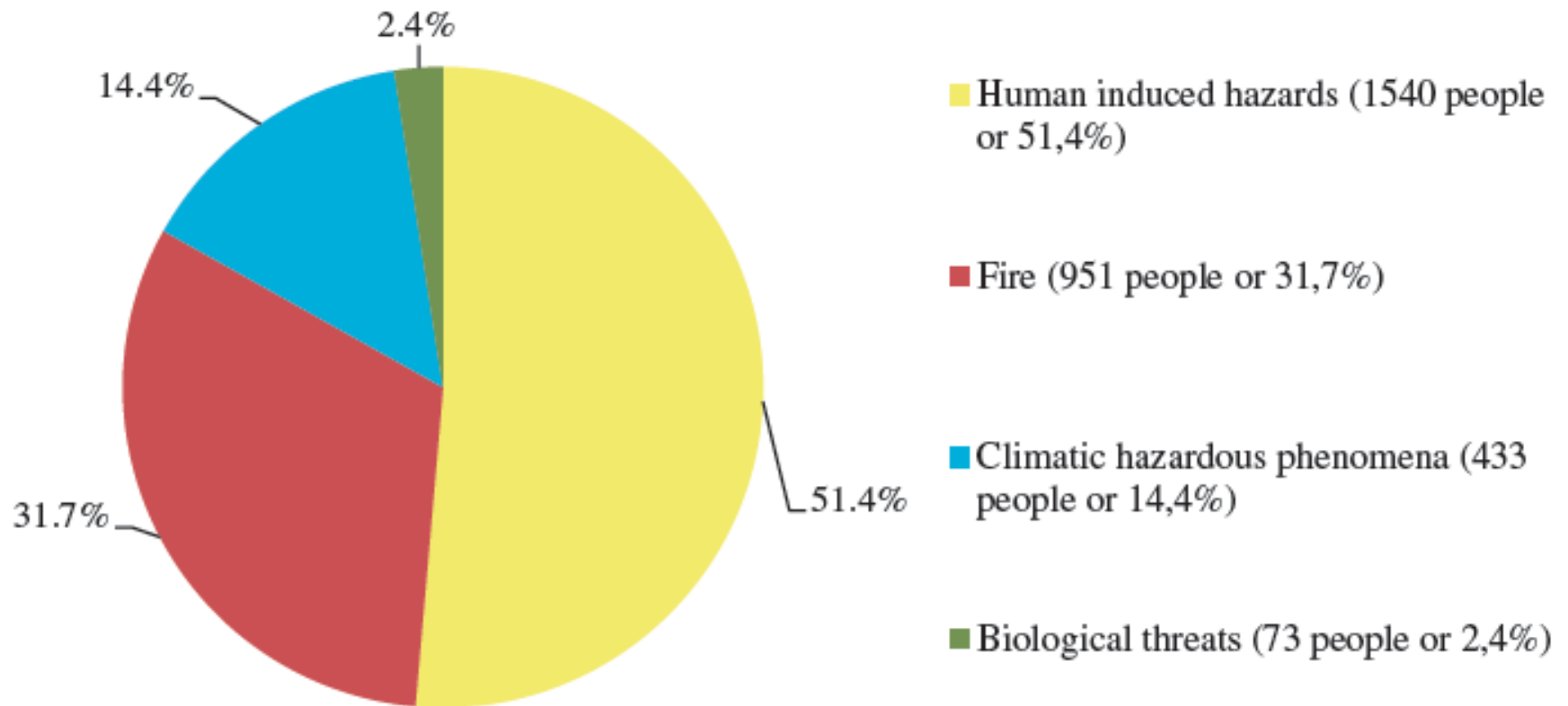
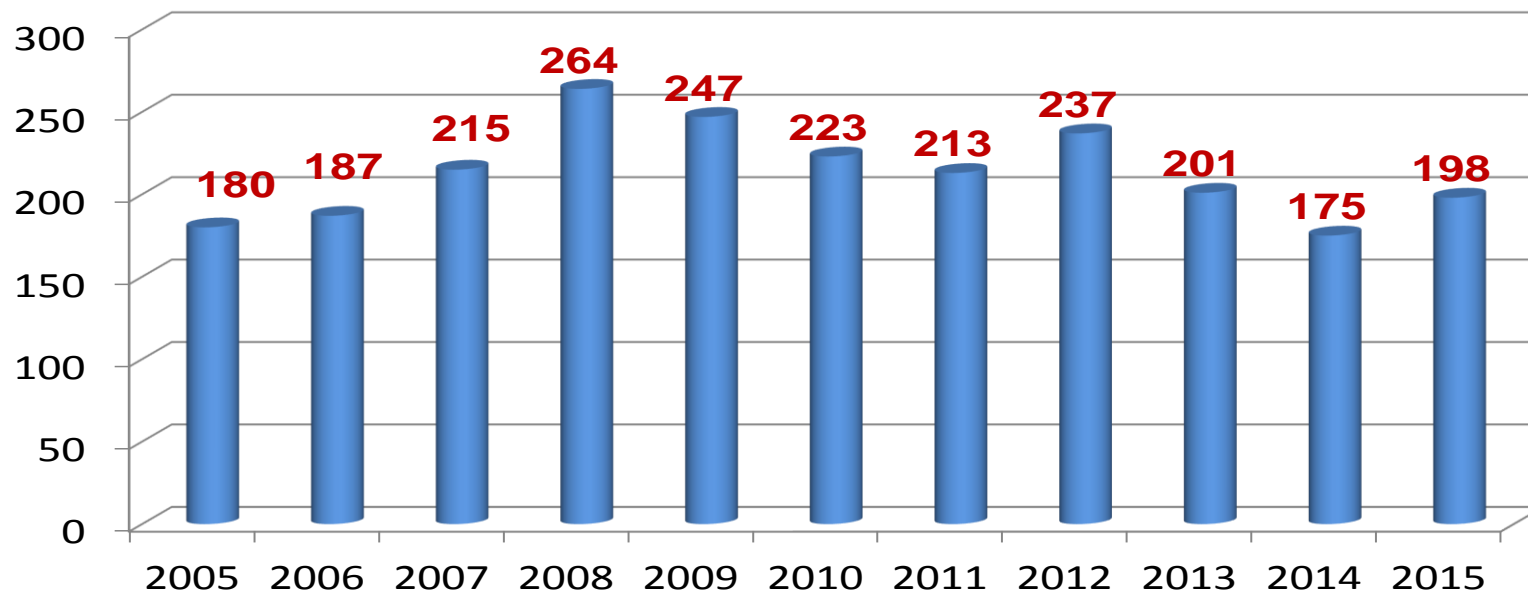


Figure 4 Mortality from natural and human induced hazards by disaster type (2000-2015)



The number of mortality from Natural and Human Induced hazards 2005-2015 (by year)



Average: 234



date] [DATA BOOK ON NATURAL AND HUMAN INDUCED HAZARDS IN MONGOLIA 2014, 2015]

Table 3 Natural and human induced hazards in Mongolia 2015

д/д	Types of natural and human induced hazards		Number of occurrences	Affected		Rescued		Number of affected and injured people	Number of deaths	Livestock deaths	Number of Vaccinated livestock	Burned ger,houses	Broken ger, houses	Burned area of forest and steppe /mln. gal/	Economic loss /mln.tug/	Worked forces and facilities		Response allowance /mln. tug/
				province's and city	sum and district	people	Capital /mln.tug /									number of people	number of facility	
1	Fire	Steppe and forest fire	354	16	114			9	1	7910		67		6.5	62747.6	22247	2316	517.9
2		Building fire	4561	22	150	453	23361.2	35	58	594		1626			11517.4	15133	3382	86.8
3	Hydro-Meteorological Hazards	Flood	20	13	32	57		1	1	20278			55		323.9	270	45	5.6
4		Heavy rain	3	3	17				2	20508						28	9	
5		Thunderstorm	12	7	12			2	1	237					19.6	55	10	1.1
6		Strong storm	21	18	88	438		2	3	151194			149		5263.2	1158	174	13.4
7	Geological hazards	Earthquake	54	18	43													
8	Biological hazards	Plague/Pestis	3	2	3			1	2							124	29	69.6
9		Smallpox	20	4	14					664	520683					166	33	1.1
10		Foot and mouth disease	4	3	4					86	468895			3.0		422	77	366.8
11		Anthrax	28	10	25			4		109	102006			2.8		373	112	13.7
12		Rabies	165	15	84			5		239	64897			61.8		476	174	16.9
13		Bovine malignant catarrhal fever	8	4	6					17	1823			1.3		52	10	2.1
14		Porcine Reproductive and Respiratory Syndrome	4	2	4					1086	6029			10.2		167	10	3.2
15		Other infectious diseases	6	6	6					7	436			1.0		22	5	0.26
16	Human induced hazards	Explosion /gun, bomb, grenade/	6	4	5			2	2							27	6	
17		Chemical substance	16	4	9			8	3							128	33	0.15
18		тэсэрч дэлбэрэх бодис	14	5	9			8	1							149	33	0.1
19		Small- scale mining accident and collapse	25	8	11	21		8	25							393	65	1.3
20		Mountain accident	1	2	2				5							25	3	
21		Water accident	101	16	60	48			94							1380	238	12.0
Бүгд			5426	182	698	1017	23361.2	85	198	202929	1164769	1693	204	6.5	79951.8	42795	6764	1112.0



- ***The number of disaster affected people***

Currently
available

- The number of injured people –
by age: adult & children
by types eg.flood, storms
by geographical location
by year
- The number of rescued people by
NEMA first responders, including
evacuated/displaced people
- The number of people whose dwelling
were damaged attributed by disasters
- The number of affected areas



- ***The number of disaster affected people***

Currently not
available

- The number of injured people –
 - by age disaggregation
 - by gender
 - by income
 - by disability
- The number of rescued & people whose dwelling were damaged -
 - by age
 - by gender
 - by income
 - by disability
- **The total number of affected people**



1.1. HUMAN AND NATURAL INDUCED HAZARDS, ECONOMIC LOSS, RESCUED PEOPLE IN MONGOLIA 2004-2016

T. HUMAN AND NATURAL INDUCED HAZARDS, ECONOMIC LOSS, AND RESCUED PEOPLE																	
Nº	Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	total	average	
1	Number of occurrence of human and natural induced hazards	2338	2724	2659	3070	2759	2468	2976	3544	4045	4443	4926	5426	4381	45759	3519.9	
2	Number of deaths	137	193	187	215	261	247	226	211	226	191	175	198	230	2697	207.5	
3	Number of affected and injured people	282	183	179	253	2593	1402	2413	338	96	188	243	85	61	8316	639.7	
4	Livestock perishment	3.7	25.3	14.5	10.8	906.7	468.6	9735.5	165.5	13.0	5.7	15.1	202.9	1059.4	12626.7	971.3	
5	Burned ger, houses	788	1199	1150	1431	987	990	1560	1631	2155	2046	2062	1693	1657	19349	1488.4	
6	Damaged ger, houses	209	80	219	234	889	320	234	150	196	484	193	204	948	4360	335.4	
7	Burned area of forest and steppe /mln.hec/	0.11	4.3	5.6	1.3	1.02	0.4	1.01	2.1	5.0	5.6	2.9	6.5	3.2	39.04	3.0	
8	Economic loss bln. mnt	3.5	5.4	12.5	200.6	35.1	16.3	534.8	9.6	94.5	21.9	25.2	79.9	43.1	1082.4	83.3	
9	Rescued	people	222	249	286	443	2775	482	1699	2132	685	2019	839	1017	1315	14163	1089.5
		capital bln. mnt	6.2	7.6	6.8	10.3	10.9	14.3	16.9	22.2	25.7	25.6	22.9	23.4	23.6	216.4	16.6



Disaster Loss Data Disaggregation (mortality & affected people): Challenges

- Difficulty to collect data caused by
 - low population density in isolated areas
 - lack of communication and technology
 - lack of good understanding on importance of disaster data collection
- Lack of NEMA human resource
- No data information integrated network /ongoing developed/
- Lack of advanced technological introduction into disaster data
- ...



Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR)

16-19 July 2018

Ulaanbaatar, Mongolia

***Government of Mongolia and UNISDR
working together for
successful AMCDRR 2018***



The National Emergency Management Agency, Mongolia

Thank you very much!

Ms.Bazarragchaa Duudgai

**Senior Officer, National Emergency Management Agency (NEMA)
MONGOLIA**

bazarragchaa@nema.gov.mn, bazaraasg@gmail.com

