

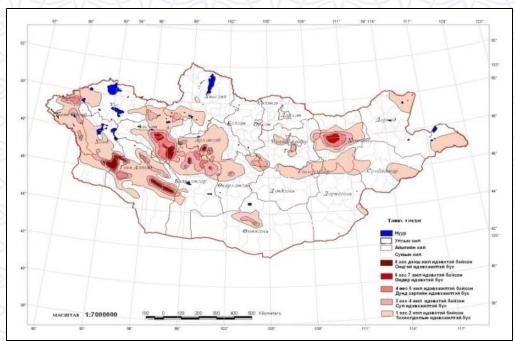
NATIONAL CENTER FOR ZOONOTIC DISEASES







Natural plague foci in Mongolia



- National center for zoonotic disease has established firstly as "Anti plague research laboratory" in 1931.
- In Mongolia, 28.3% of area in 132 soum of 18 provinces has detected plague natural foci.

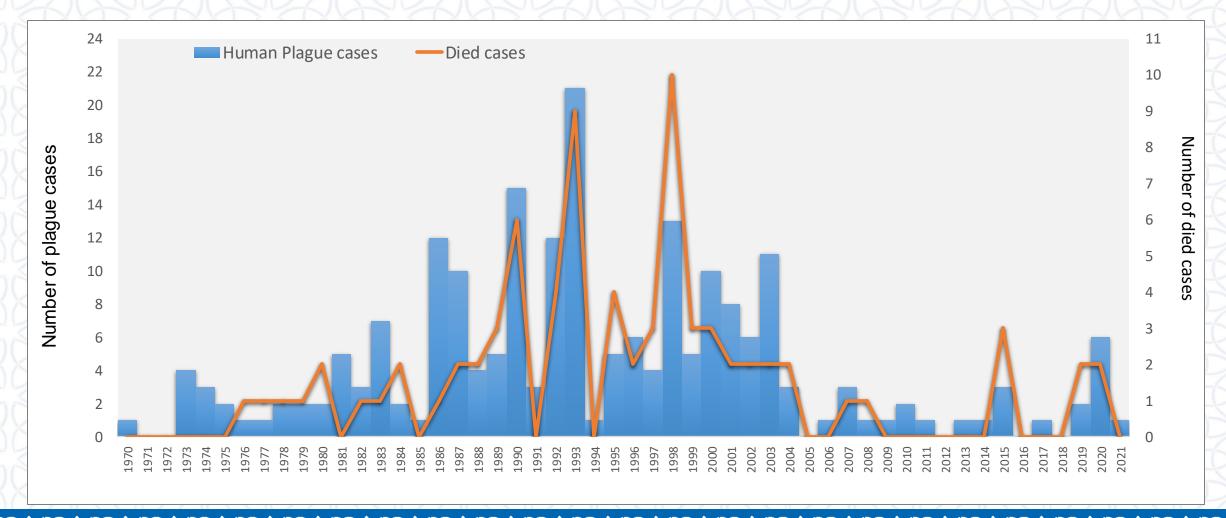


- Since 1928, about 3000 plague strains were isolated from 19 species of mammals and birds in Mongolia.
- More than 50% of all plague strains were isolated from the main host plague in Mongolian marmots (M.sibirica).
- 27% of al plague strains were isolated from ectoparasites as marmots fleas (O.silantiewi)



Human plague cases in Mongolia

Between 1970-2021, totally 214 human cases were registered and 36.9% (79) of them died.





Histoty of plague vaccine in Mongolia

- Since 1931, Plague vaccine has first tried produced in Anti plague research laboratory" of Mongolia
- In 1942, Plague vaccine AD produced in Russia
- In 1944, Plague vaccine EV produced in Russia
- Since 1944, we organized campaign vaccination anti-plague in 21 province of Mongolia.
- Since 2002, we organized campaign vaccination anti-plague in 16-18 province which high endemic plague of Mongolia.
- Campaign vaccination of anti-plague has been organized within 3th week of July in every years by order of Ministry of Health.

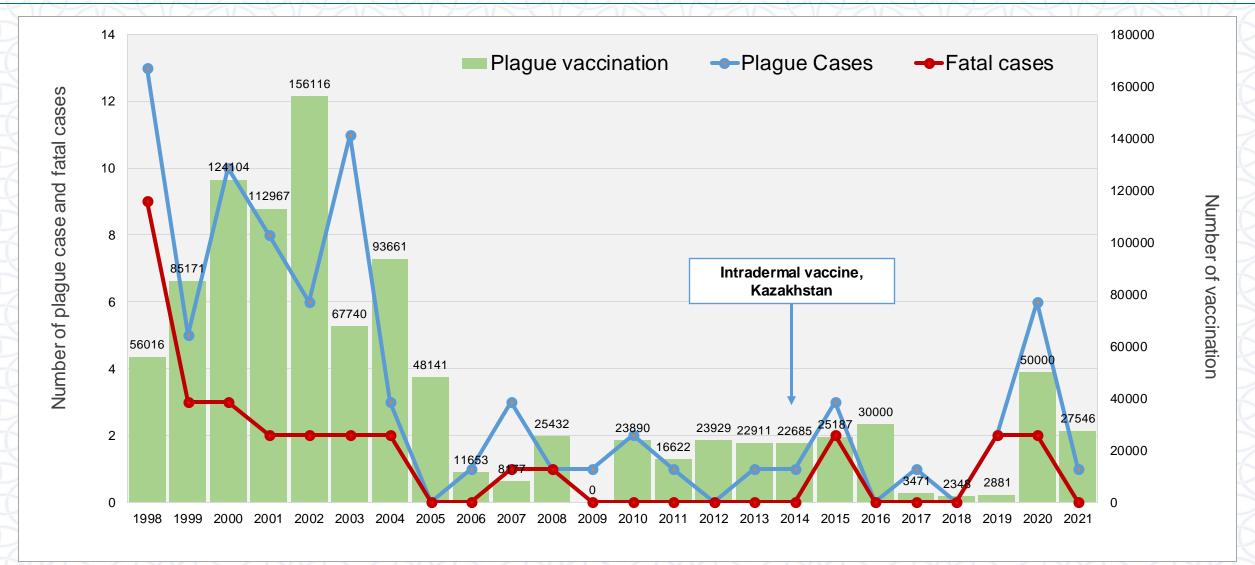


Plague vaccine used in Mongolia

Charecteristic of vaccine	EV76	EV Kazakhstan			
Producer	Russia				
Type	Dry live	Dry live			
Packages	100-200 human dose in one bottle	10 human dose in one bottle			
Injection type	Subcutaneous, intravenous	Intradermal			
Bottle usage	30%≈ 30 human dose	100%			
Price	5-10\$	30-40\$			



Mass vaccination of anti-plague

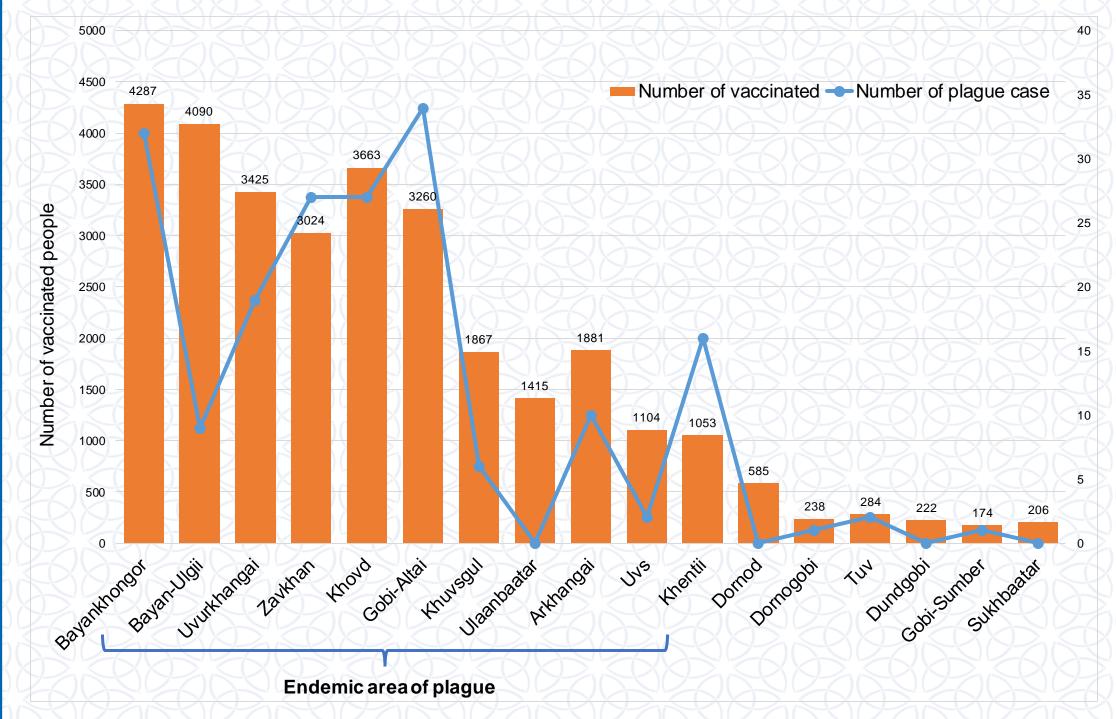




Natural plague foci in Mongolia

Charecteristic	People who have vaccine (early)					Plague case (1970-2011)			
	Age group	Male	Female	Number of vaccinated	%	Male	Female	Total case	%
Age	3-10	1763	1282	3045	6.1	19	7	26	13.1
	11-18	2932	2335	5267	10.5	61	13	74	37.4
	19-29	7237	5186	12423	24.8	16	11	27	13.6
	30-39	8580	5190	13770	27.5	16	14	30	15.2
	40-49	5848	3939	9787	19.5	13	6	19	9.6
	50-59	2605	1844	4449	8.9	9	4	13	6.6
	Upper 60	770	590	1360	2.7	7	2	9	4.5
Total 29735 (60%) 20366 (40%)		50101	100.0	141 (71%)	57 (29%)	198	100.0		
Specialists	Health staff			4709	9.4	Health staff		4	2.0
	Police and solders			6066	12.1	Police and solders		0	0.0
	Laboratory specialist			550	1.1	Labortaory specialist		2	1.0
	Resident of active plague foci			2368	4.7	Resident of active plague foci		62	31.3
	Travelers			1001	2.0	Travelers		0	0.0
	Herder			18747	37.4	Herder		62	31.3
	Students			7589	15.1	Students & pupils		63	31.8
	Other			9071	18.1	Other		5	2.5
	Total							198	100.0
Side effect after	Swollen			590	1.2				
vaccination	Headache			3064	6.1	Plague case with vaccinated		12	5.6%
vaccination	Fever			17	0.0				
Total			3671	7.3					









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THANK YOU FOR YOUR ATTANTION