Uus = unustatud vana

Pilleriin Soodla

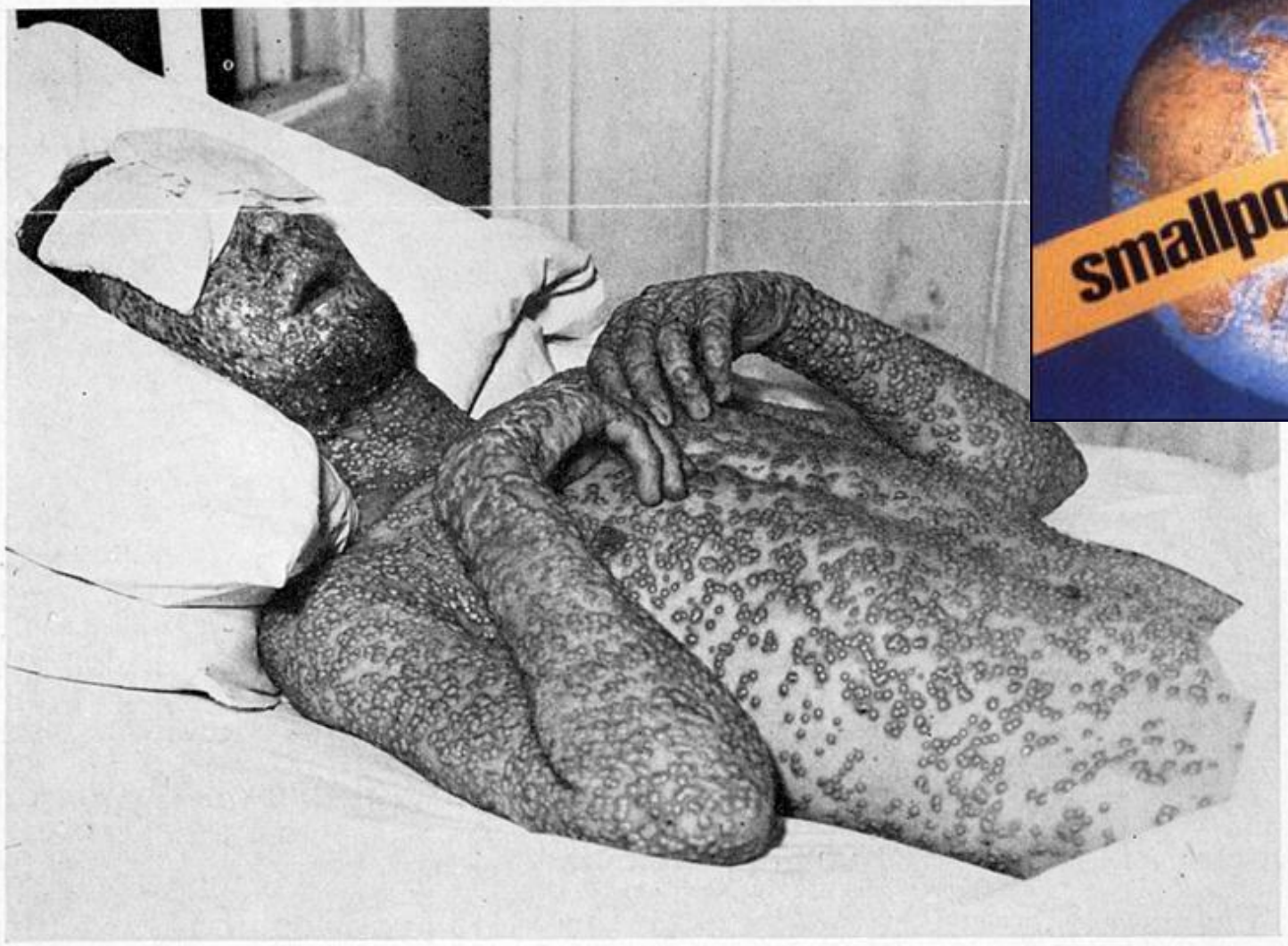
Kiirabis 2012

Vaccines

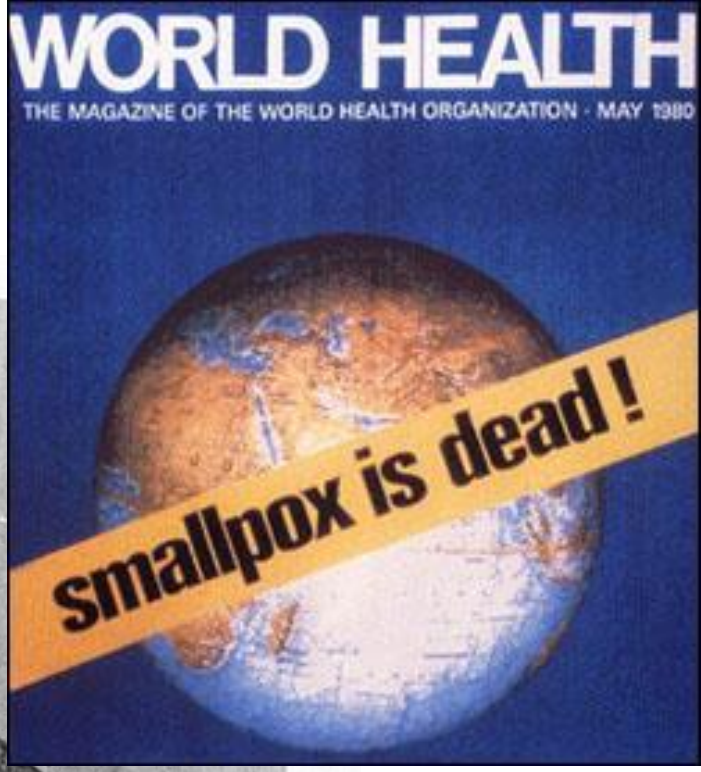
“With the exception of safe water, no other modality, not even antibiotics, has had such a major effect on mortality reduction…”

Plotkin S, Orenstein W, Offit P. *Vaccines, 5th ed. Saunders, 2008*

Rõuged



New York State Department of Health Photograph



Impact of vaccines

Mandated immunizations appear to have made a major difference in fighting vaccine-preventable diseases. The incidence rate for such diseases has fallen 88% since the vaccines were introduced, according to estimates from the Centers for Disease Control and Prevention. Mortality from these once-deadly diseases has dropped 99%.

	PREVACCINE		POSTVACCINE			
Disease	Annual cases	Annual deaths	2006 cases	Percent reduction	2004 deaths	Percent reduction
Diphtheria	21,053	1,822	0	100%	0	100%
Haemophilus influenzae type b	20,000	1,000	< 50*	99.8%	<5*	99.5%
Hepatitis B	66,232	237	13,169	80.1%	47	80.2%
Measles	530,217	440	55	99.9%	0	100%
Mumps	162,344	39	6,584	95.9%	0	100%
Pertussis	200,752	4,034	15,632	92.2%	27	99.3%
Polio	36,110	3,272	0	100%	0	100%
Rubella	47,897	17	12	99.9%	0	100%
Tetanus	580	472	41	92.9%	4	99.2%
Varicella	4,085,120	105	48,445	85.0%	19	81.9%

*DATA FOR HAEMOPHILUS INFLUENZAE TYPE B ARE FROM 2005.
SOURCE: "HISTORICAL COMPARISONS OF MORBIDITY AND MORTALITY FOR VACCINE-PREVENTABLE DISEASES IN THE UNITED STATES," *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*, NOV. 14, 2007

PUBLISHED IN THE SEPTEMBER 8, 2008 ISSUE OF AMERICAN MEDICAL NEWS. WWW.AMEDNEWS.COM

JAMA 2007

Leetrid

Difteeria

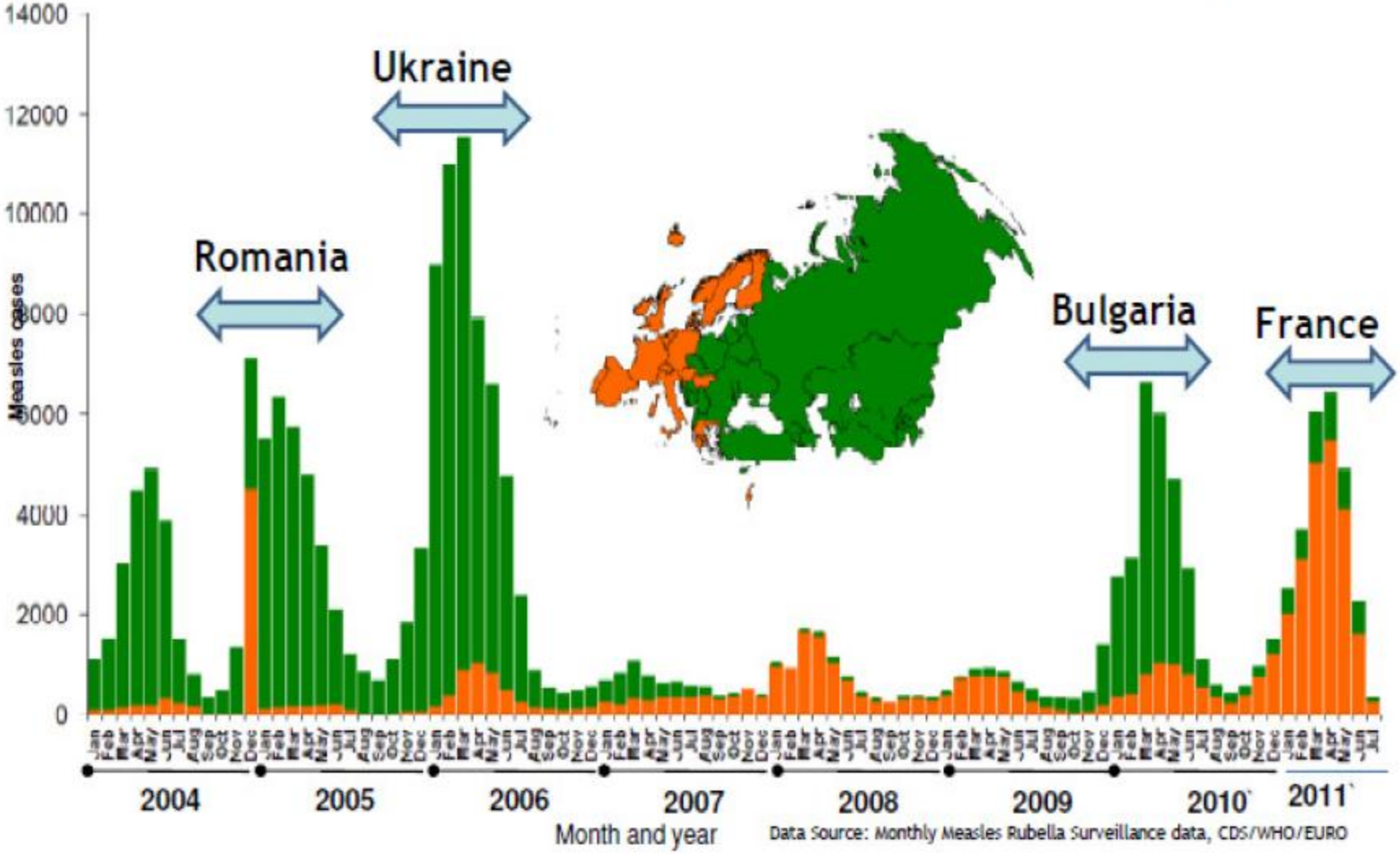
Läkaköha

LEETRID

- Kõige nakkavam infektsioonhaigus: kliiniline pilt tekib 100%-l vastuvõtlikest

- Viimase 150 aasta jooksul on 200 mln inimest surnud leetritesse

Figure 1 Measles cases and countries affected with outbreaks in the European Region, 2004 – 2011



Leetrid. Haigusjuhtude arv, 2010-2012 (WHO, CISID)

Riik	2010.a	2011.a	2012.a (2 kuud)
Prantsusmaa	5 139	15 214 ↑	362 ↓
Itaalia	861	5 179 ↑	134 ↓
Rumeenia	359	4 167 ↑	1 449 ↓
Hispaania	285	3 507 ↑	111 ↓
Saksamaa	813	1 599 ↑	20 ↓
Bulgaaria	22 005 ↑	157 ↓	0 ↓
Venemaa	169	835 ↑	1 225 ↑
Šveitsi	243	755 ↑	10 ↓
Makedoonia	209	731 ↑	6 403 ↑
Austria	48	99 ↑	0
Iirimaa	417	303 ↓	17 ↓
Belgia	57	576 ↑	19 ↓
Suurbritannia	397	1 083 ↑	256 ↓

Terviseamet

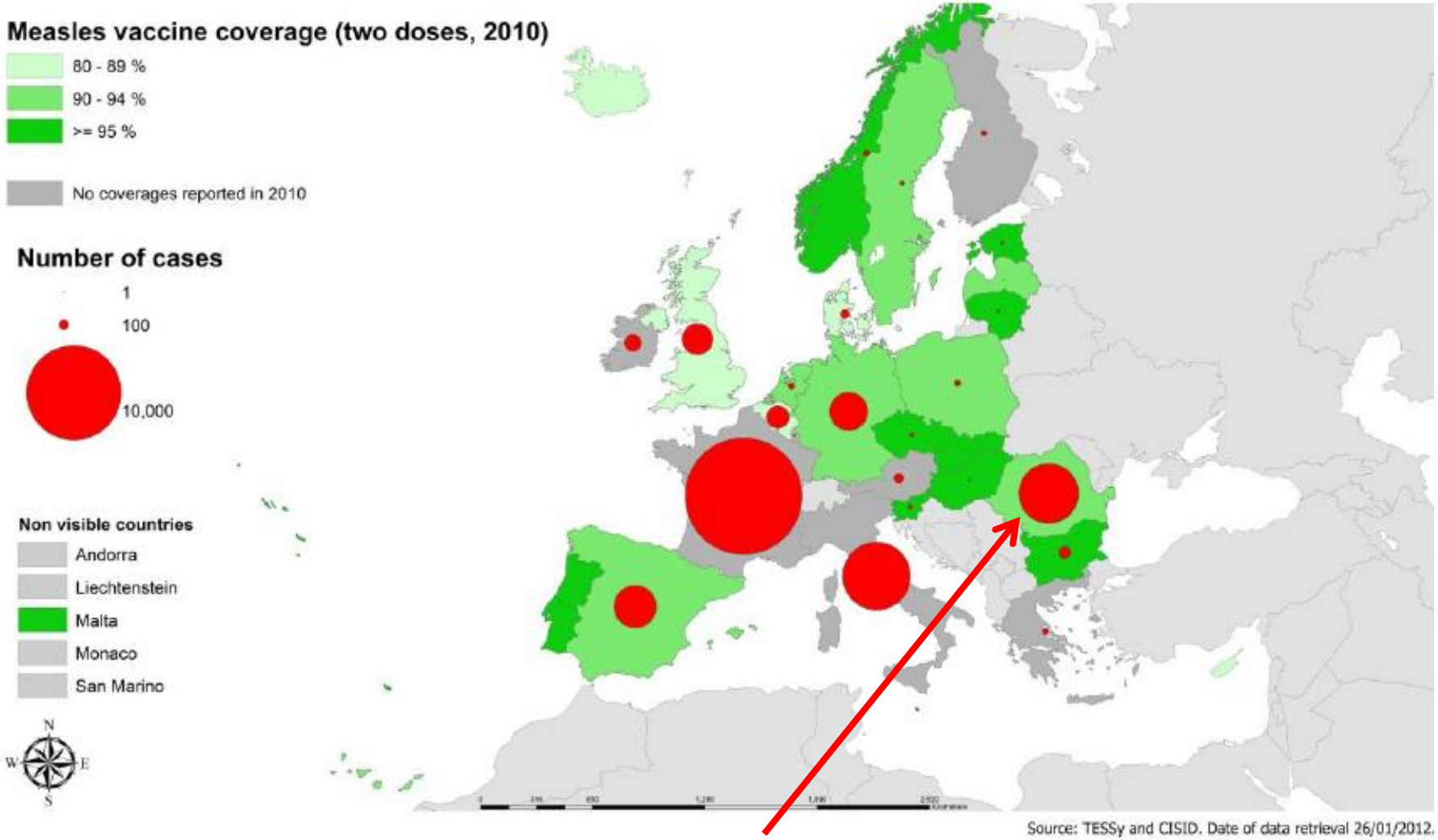
2011 Euroopas

- 8 surmajuhtu
- 27 leetritest põhjustatud entsefaliidi juhtu

>80% haigestunutest olid vaktsineerimata

> 90% haigestunutest nakatusid oma elukohariigis

Figure 3. **Distribution of measles cases reported to TESSy by EU and EEA countries for January–December 2011 (n=30 474) and two-dose measles vaccine coverage* (2010 CISID)**



Juuni 2012 toimub Ukrainas jalgpalli EM

Mumps, punetised leetrid, hõlmatus vaktsineerimisega (MMR), 2005 – 2011

	2005	2006	2007	2008	2009	2010	2011
Hõlmatus 1.annusega 2-aastaste laste seas	95,9%	96,1%	95,5%	95,4%	95,2%	95,1%	93,9%
Hõlmatus 2.annusega 14-aastaste laste seas			96,5%	96,9%	95,5%	95,3%	94,7%

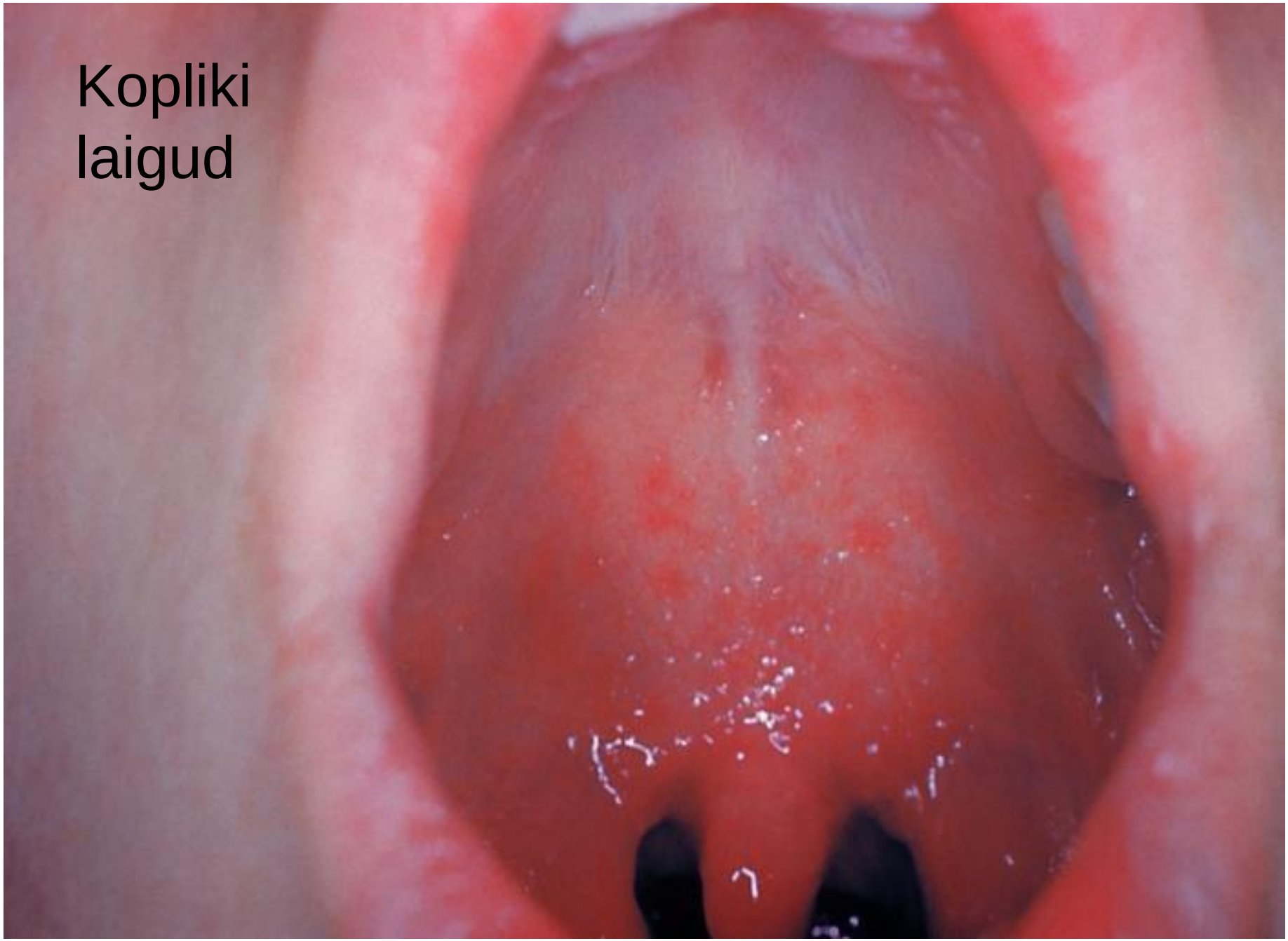
31.12.2011 seisuga on Eestis **6 427 vaktsineerimata ja 1 903 revaktsineerimata last** vanuses 1 kuni 14 aastat.
Keeldumised vaktsineerimisest vanuserühmas 1 kuni 14 aastat:
2010.a – 1,8% (3756 last)
2011.a – 2,2% (4465 last)

Terviseamet

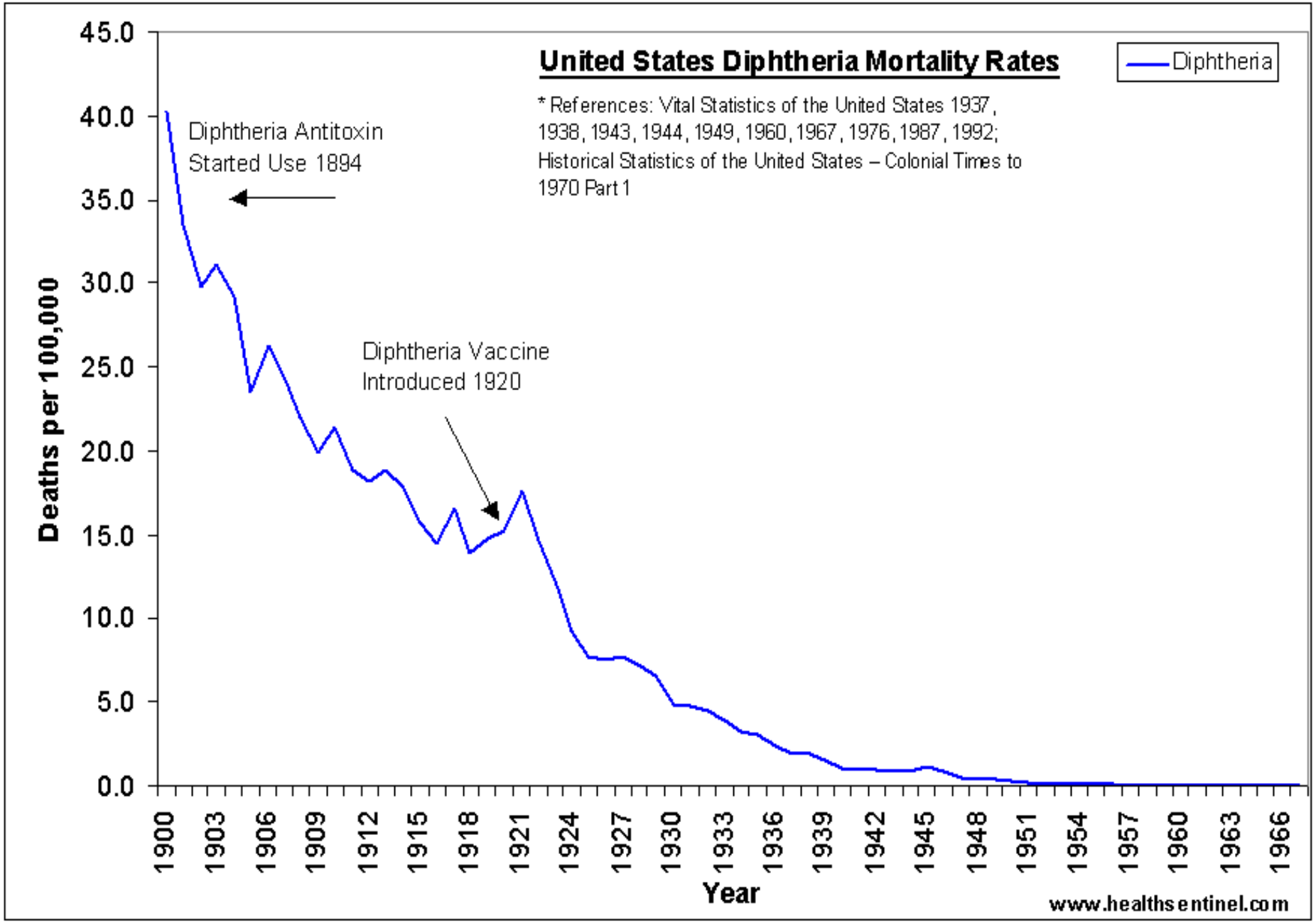
Diagnoos

- Köha
- Häälekähedus
- Konjunktiviit
- Kopliki laigud
- Makulopapulaarne lööve, mis algab näost

- Entsefaliit
- Pneumoonia


Kopliki
laigud

DIFTEERIA


United States Diphtheria Mortality Rates
* References: Vital Statistics of the United States 1937, 1938, 1943, 1944, 1949, 1960, 1967, 1976, 1987, 1992; Historical Statistics of the United States – Colonial Times to 1970 Part 1
Diphtheria
Diphtheria Antitoxin Started Use 1894
Diphtheria Vaccine Introduced 1920
Deaths per 100,000
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1900
1903
1906
1909
1912
1915
1918
1921
1924
1927
1930
1933
1936
1939
1942
1945
1948
1951
1954
1957
1960
1963
1966
Year
www.healthsentinel.com

RAPID COMMUNICATIONS

A case of diphtheria in Sweden, October 2011

H Fredlund (hans.fredlund@orebroll.se)[1], T Norén[1], T Lepp[2], E Morfeldt[2], B Henriques Normark[2]

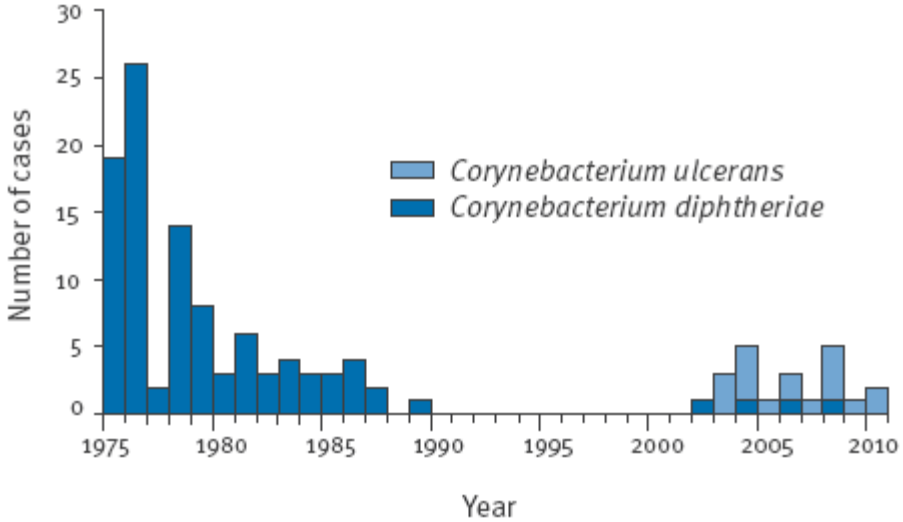
RAPID COMMUNICATIONS

Diphtheria in the south of France, March 2011

C Rousseau (cyril.rousseau@ars.sante.fr)[1], E Belchior[2], B Broche[3], E Badell[4], N Guiso[4], I Laharie[3], O Patey[5], D Lévy-Bruhl[2]

FIGURE

Number of laboratory confirmed cases of toxigenic diphtheria, France, 1975–2010

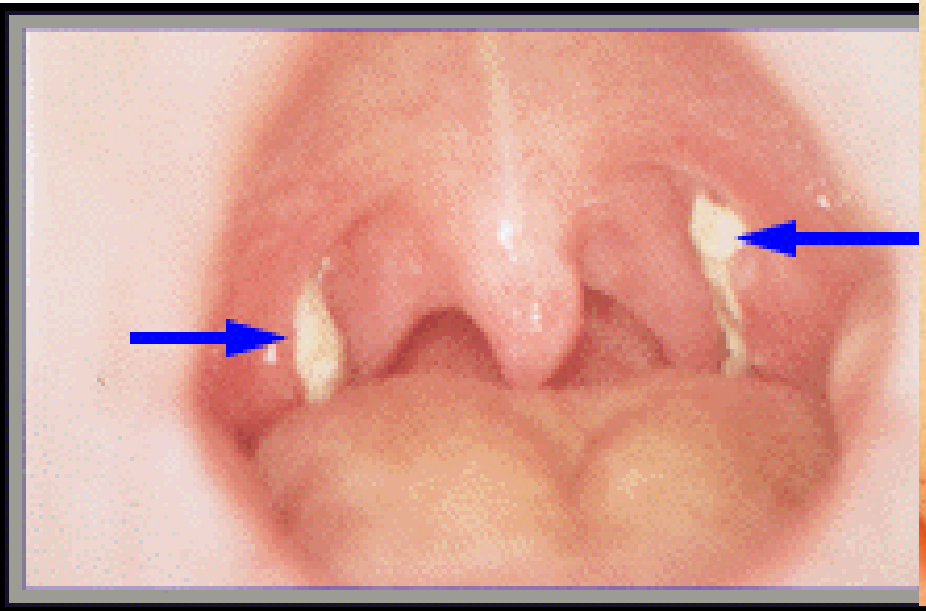


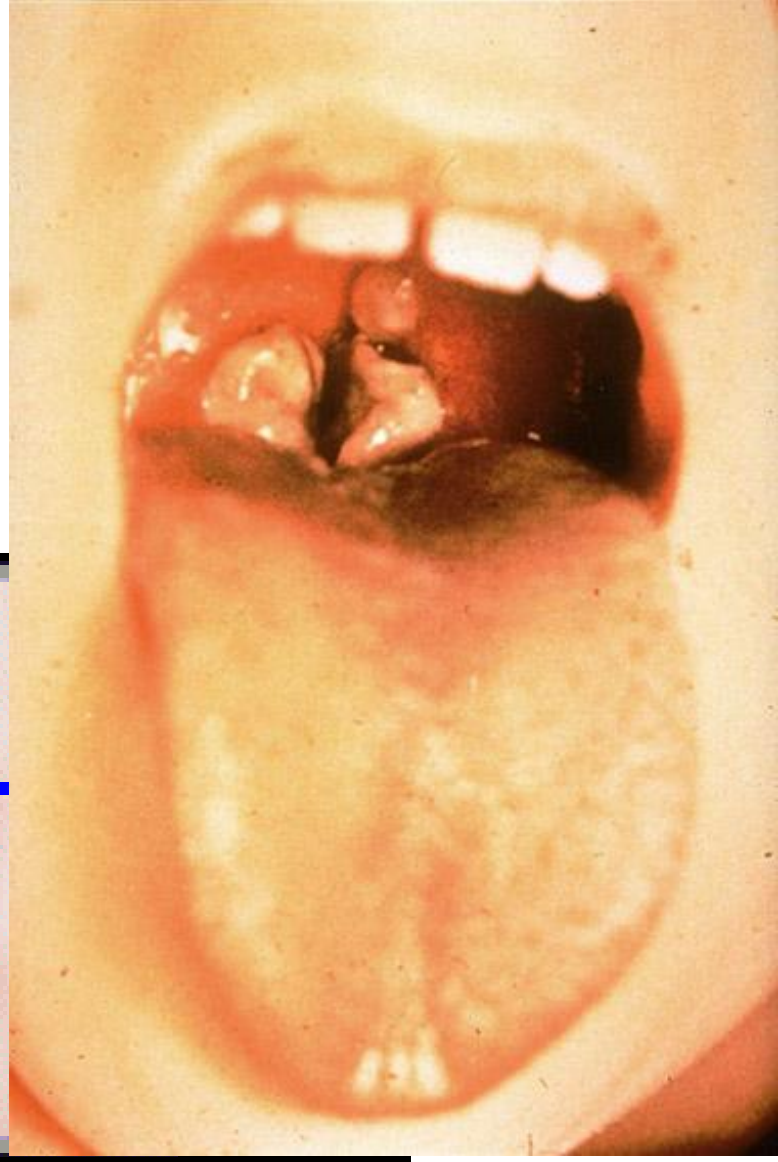
Eurosurveillance

Table 1. Toxigenic *Cornyebacterium diphtheriae* isolates and epidemiologically linked cases and deaths reported by DIPNET member countries, Europe, 2000–2009*

Characteristic	Patient description†	No. toxigenic isolates or clinical cases with epidemiologic link (no. deaths)									
		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Country											
Estonia	Symptomatic	2	2	0	0	0	0	0	0	0	0
	Asymptomatic	1	7	0	0	0	0	0	0	0	0
	Total	3	9	0	0	0	0	0	0	0	0
Finland	Total	0	2 (1)	0	0	0	0	0	0	0	0
France	Total	0	0	1	0	1	0	1	1 (1)	1	0
Germany	Total	1	2	4	0	0	1	0	0	0	2
Latvia	Symptomatic	145	0	45	26	20	20	32	18	29	6
	Asymptomatic	61	24	15	22	2	2	11	5	12	3
	Not known	119	91	0	0	0	0	0	0	0	0
	Total	325 (9)	115 (5)	60 (3)	48 (2)	22 (1)	22 (2)	43 (6)	23 (1)	41 (2)	9 (1)
Lithuania	Symptomatic	2	0	4	0	0	0	0	0	2	0
	Asymptomatic	0	0	1	0	0	0	0	0	2	0
	Total	2	0	5 (1)	0	0	0	0	0	4 (1)	0
Norway	Symptomatic	0	0	0	0	0	0	0	0	3	0
	Asymptomatic	0	0	0	0	0	0	0	0	1	0
	Total	0	0	0	0	0	0	0	0	4	0
Sweden	Total	0	0	0	0	0	0	0	0	0	1
Turkey	Symptomatic	1	3	1	0	0	0	0	0	0	0
	Asymptomatic	2	0	0	0	0	0	0	0	0	0
	Not known	1	4	1	1	0	0	0	0	0	0
	Total	4 (1)	7 (3)	2 (1)	1	0	0	0	0	0	0
United Kingdom	Total	1	0	6	3	0	0	1	0	2 (1)	2
Total known symptomatic patients	NA	152	9	61	29	21	21	34	19	37	11
Total (all countries)	NA	336 (10)	135 (9)	78 (5)	52 (2)	23 (1)	23 (2)	45 (6)	24 (2)	52 (4)	14 (1)
Total known symptomatic patients, excluding Latvia	NA	7	9	16	3	1	1	2	1	8	5
Total, excluding Latvia	NA	11 (1)	20 (4)	18 (2)	4	1	1	2	1 (1)	11 (2)	5

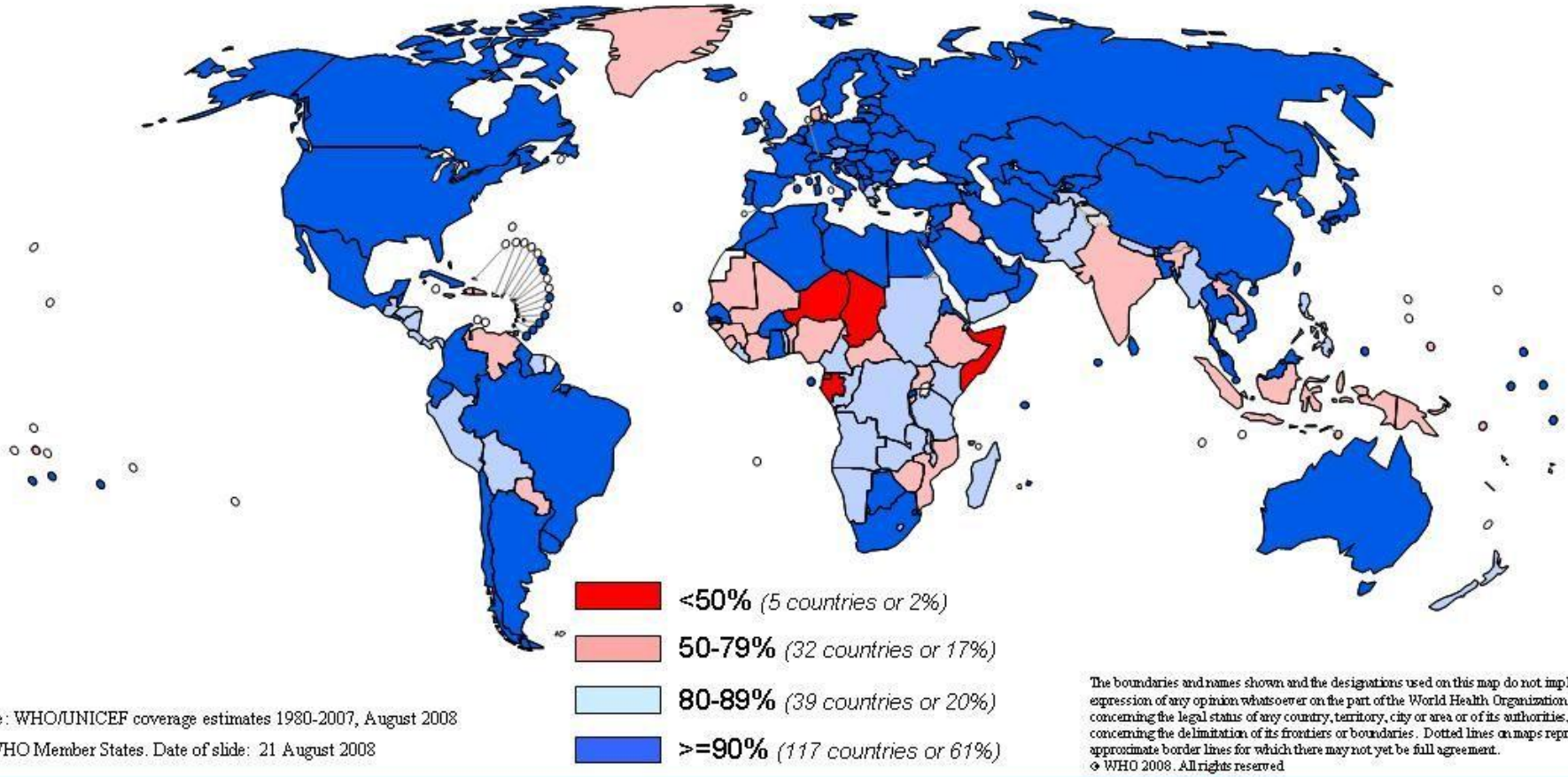
Difteeria





Diphtheria - notice the pseudomembrane in the posterior pharynx. It can become very large and may obstruct the airway.

Immunization coverage with DTP3 vaccines in infants, 2007



Source: WHO/UNICEF coverage estimates 1980-2007, August 2008

193 WHO Member States. Date of slide: 21 August 2008

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.
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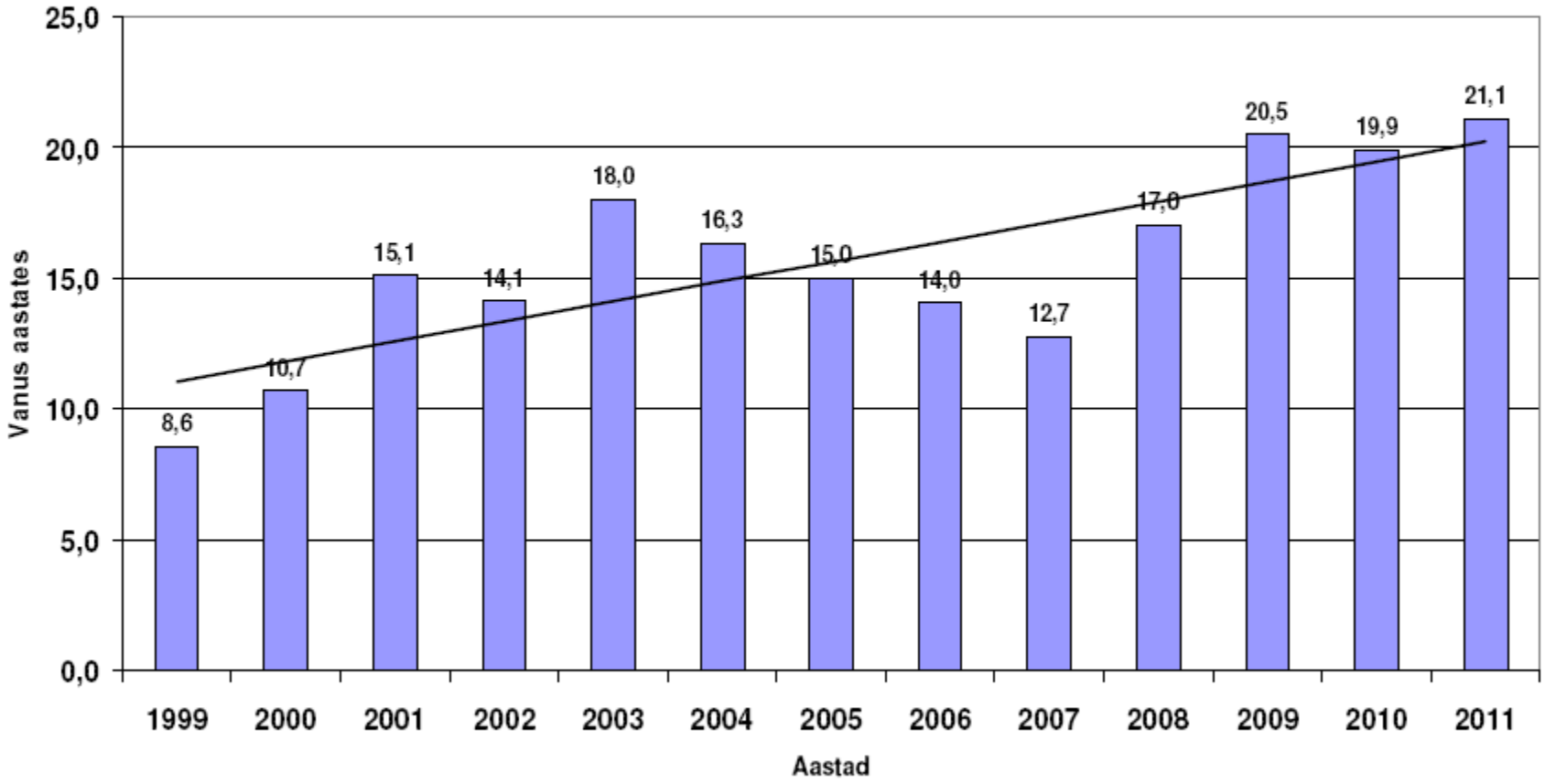
Läkaköha kliiniline definitsioon

- köhaga kulgev haigestumine
- kestvus üle kahe nädala
- lisandub vähemalt üks järgmistest sümptomitest:
  - paroksüsmaalsed köhahood
  - inspiratoorsed repriisid
  - köhahoojärgne oksendamine
- köhale ei ole teist teadaolevat põhjust

Läkaköha.
Haigete keskmine vanus, 1999-2011



Terviseamet
Health Board

Kokkuvõte

- Edukas vaktsineerimine vähendab oluliselt haigestumisi
- Infektsioonhaigused on endiselt alles
- Mõelge ja kahtlustage leetreid, difteeriat ja läkaköha

Keep Watch
Infectious disease
is sneaky
VIROX
deb
MALINCO
MEDICAL
deb
SBS
BUTCHER'S
Johnson Diversey