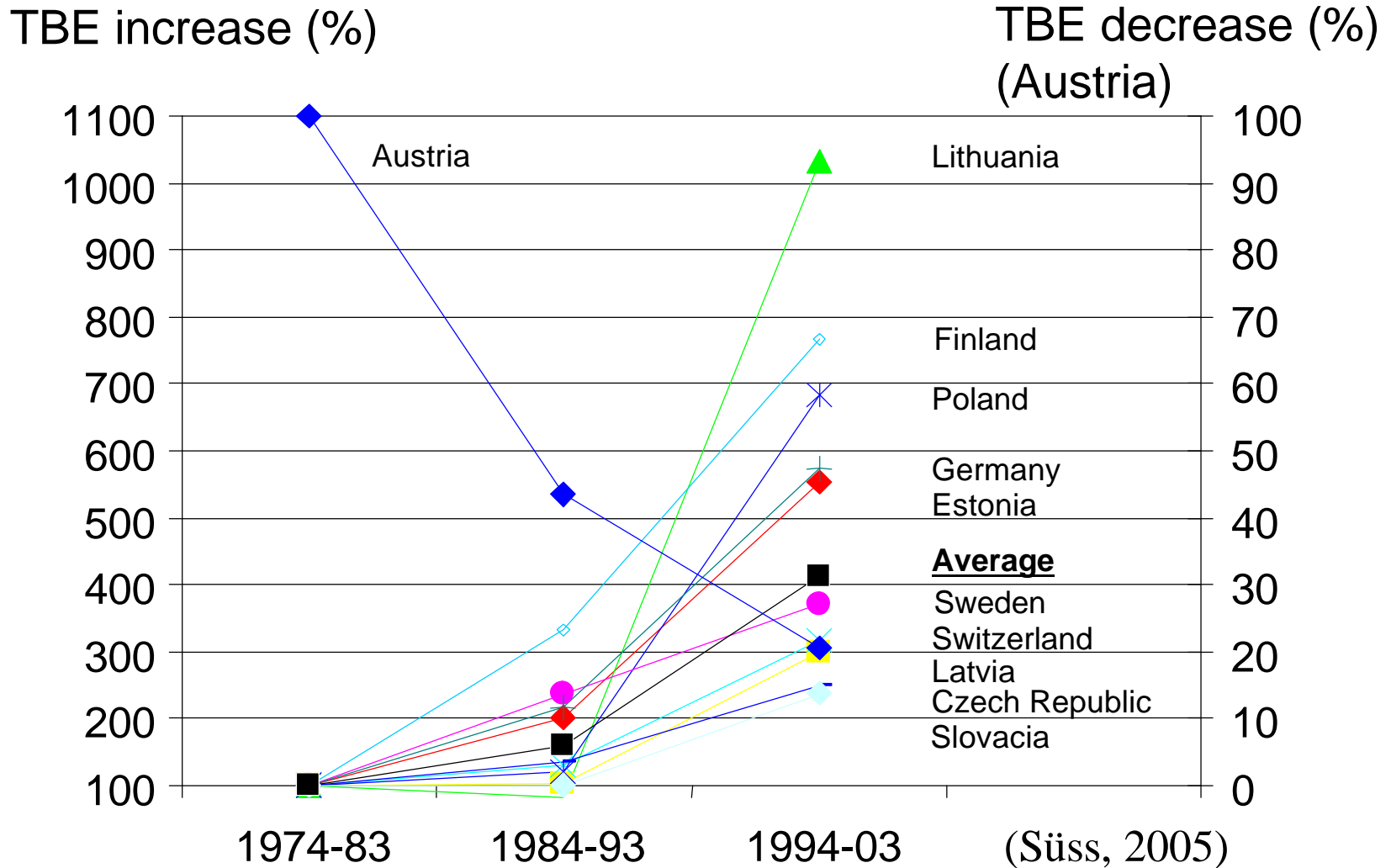


Increase (%) of the TBE incidence in Europe



TBE cases in Europe 1990 -2005

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Albania	8															
Austria	89	128	84	192	178	109	128	99	62	41	60	54	60	82	54	
Belarus			2	20	50	66	97	67	78	26	23	61	18	25		
Croatia	23	60	27	76	87	59	57	25	24	26	18	27	30			
Czech R.	193	356	338	629	613	744	571	415	422	490	719	411	647	606	500	600
Denmark									1	4	3	1	1	4	8	
Estonia	37	68	163	166	177	175	177	404	387	185	272	215	90	237	182	
Finland	9		14	25	16	23	10	19	17	12	41	33	38	16	31	
France	2	1	22	5	4	6	1	1	2	5	0	0	2	6	7	
Germany		44	142	118	306	226	114	211	148	115	133	253	226	278	274	430
Hungary	222	288	206	329	258	234	224	99	84	51	45	76	80	114		
Italy			2	2	8	6	8	8	11	5	15	19	6	14	23	
Latvia	122	227	287	791	1366	1341	716	874	1029	350	544	303	153	365	251	
Lithuania	9	14	17	198	284	426	309	645	548	171	419	298	168	763	425	
Norway									1	1	2	1	2	1	3	
Poland	8	4	8	249	181	267	257	201	209	101	170	205	126	339	262	
Russia	5486	5225	6301	7893	5593	5982	9548	6539	6987	9955	5931	6339	5150	4770	4156	
Slovak R.	14	24	16	51	60	89	101	76	54	57	92	76	62	74	70	
Slovenia	235	245	210	194	492	260	406	274	136	150	190	260	262	275	204	
Sweden	54	75	83	51	116	68	44	76	64	53	133	128	105	105	160	
Switzerland	26	37	66	44	97	60	62	123	68	112	91	107	53	116	138	200
Ukraine													12			

Increasing cases of TBE in Europe

Causes ?

Global warming lead to ecological alterations ?

(tick biology etc., geographical distribution of vectors and hosts)

social and political changes lead to increasing poverty, also in the socalled western industrial countries, i.e. exploding prices for fossil fuels

leads to HIGHER EXPOSITION RATES (native wood)

On the other hand there is a LOW VACCINATION RATE

Further factors for increasing cases of TBE are:

higher traveling activities

stronger awareness of the risks

improved diagnostics

Increasing cases of TBE in Europe

Consequences ?

**enhanced risk analysis lead to better epidemiology
better epidemiology lead to defined risk areas
defined risk areas lead to higher vaccination rates !**

**For standardized definition of risk areas:
use virus prevalence and incidence data**

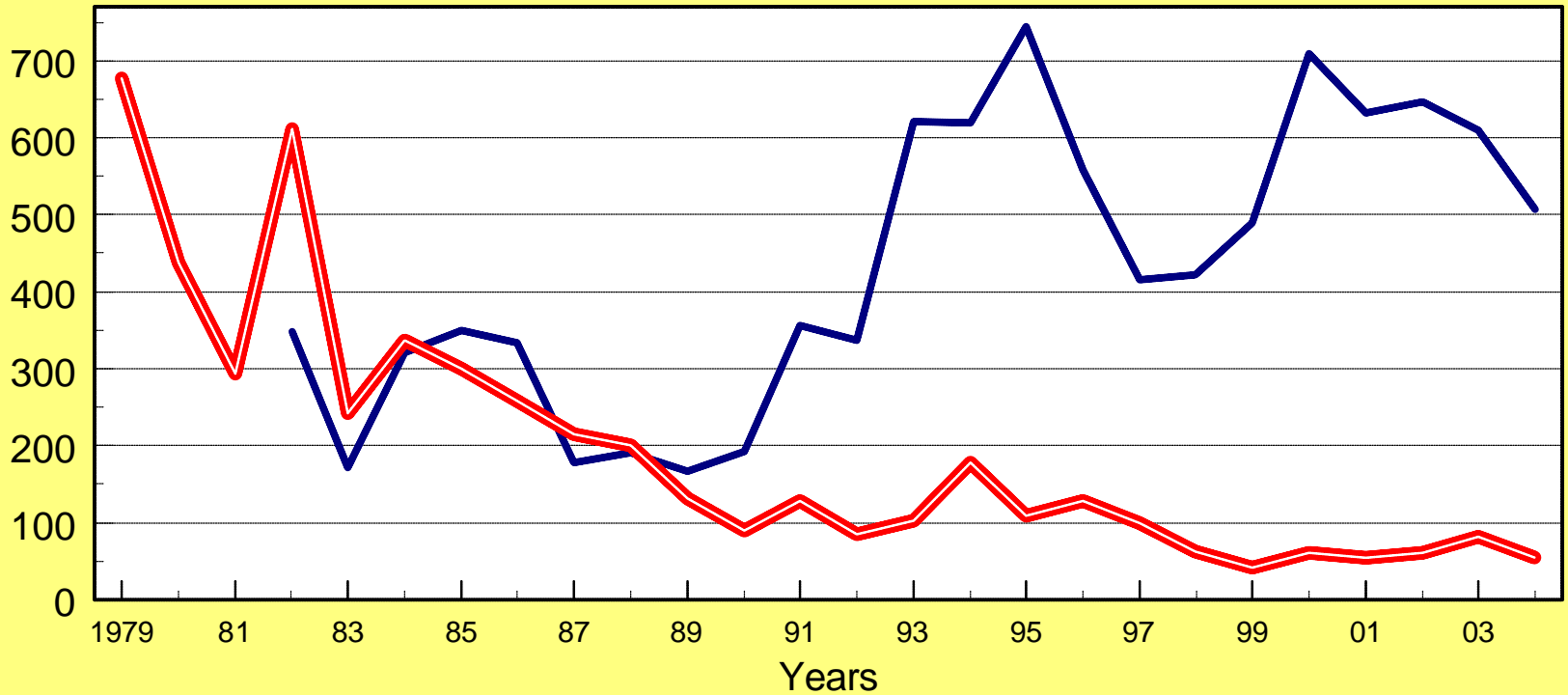
Autochthonous cases correlate to vaccination rates in this area

**standardized case definition (clinics, IgM and IgG) is
important**

TBE in Austria and Czech. Rep. 1979 - 2004

Influence of the vaccination rate on the incidence

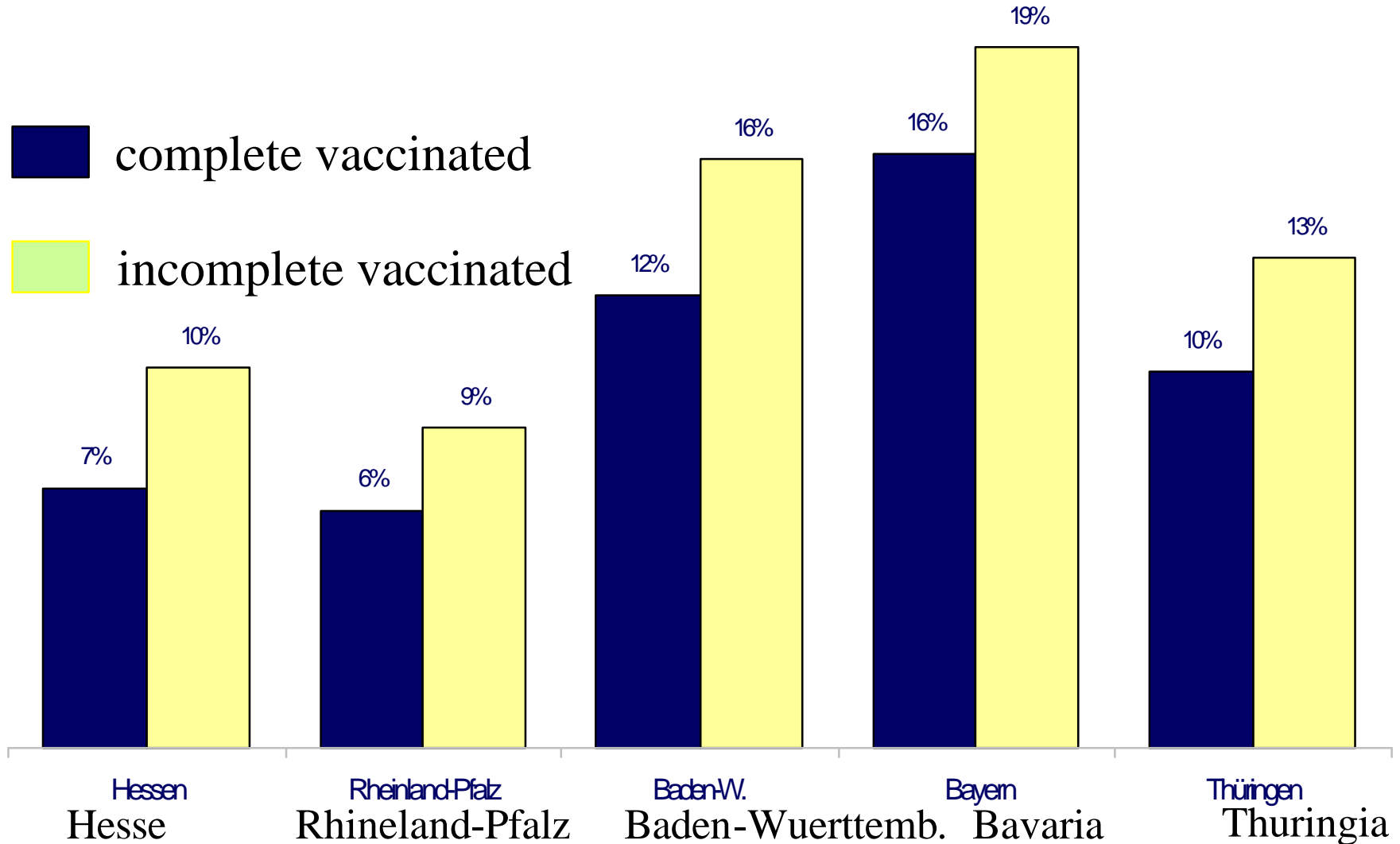
Number of cases



Czech. Rep. Austria

virology, Vienna

Complete vaccination versus incomplete vaccination scheme



TBE - Age of vaccinees and vaccination rates in Germany

