

Hepatitis A and B outbreaks among intravenous drug users in Nordic countries

Viral Hepatitis Board Meeting, Berlin 13-14 October 2003

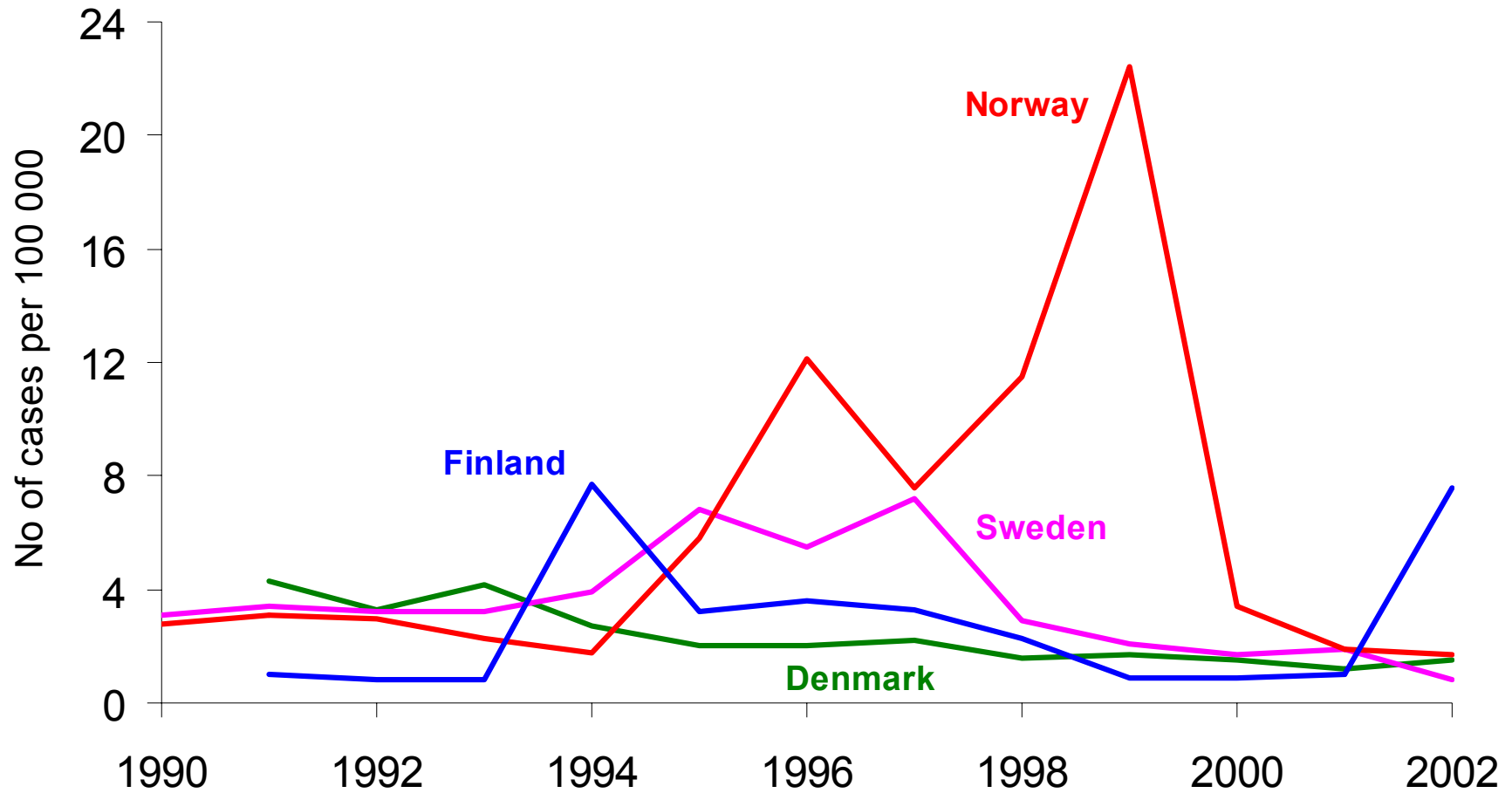
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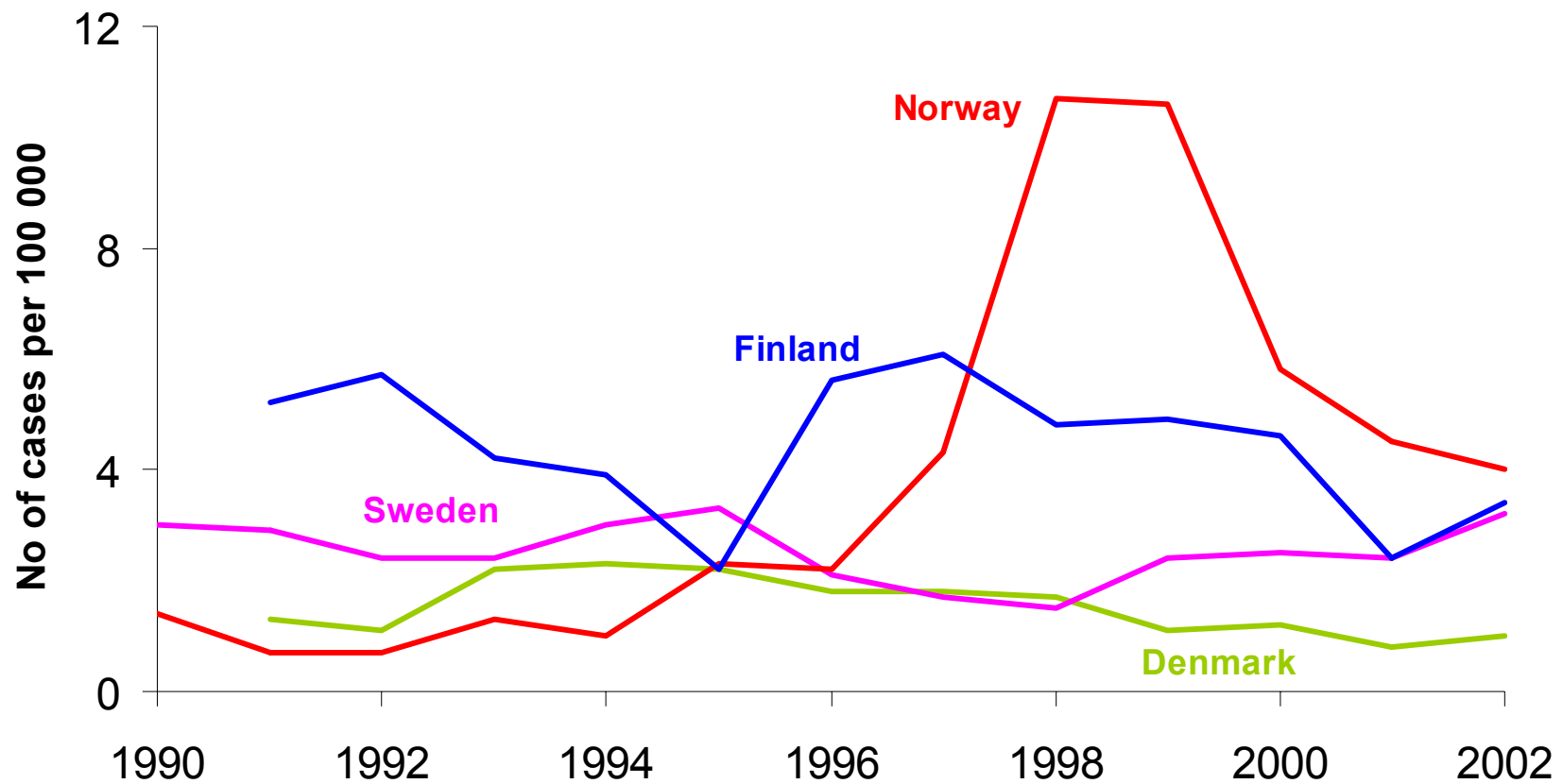


NORWEGIAN INSTITUTE OF PUBLIC HEALTH
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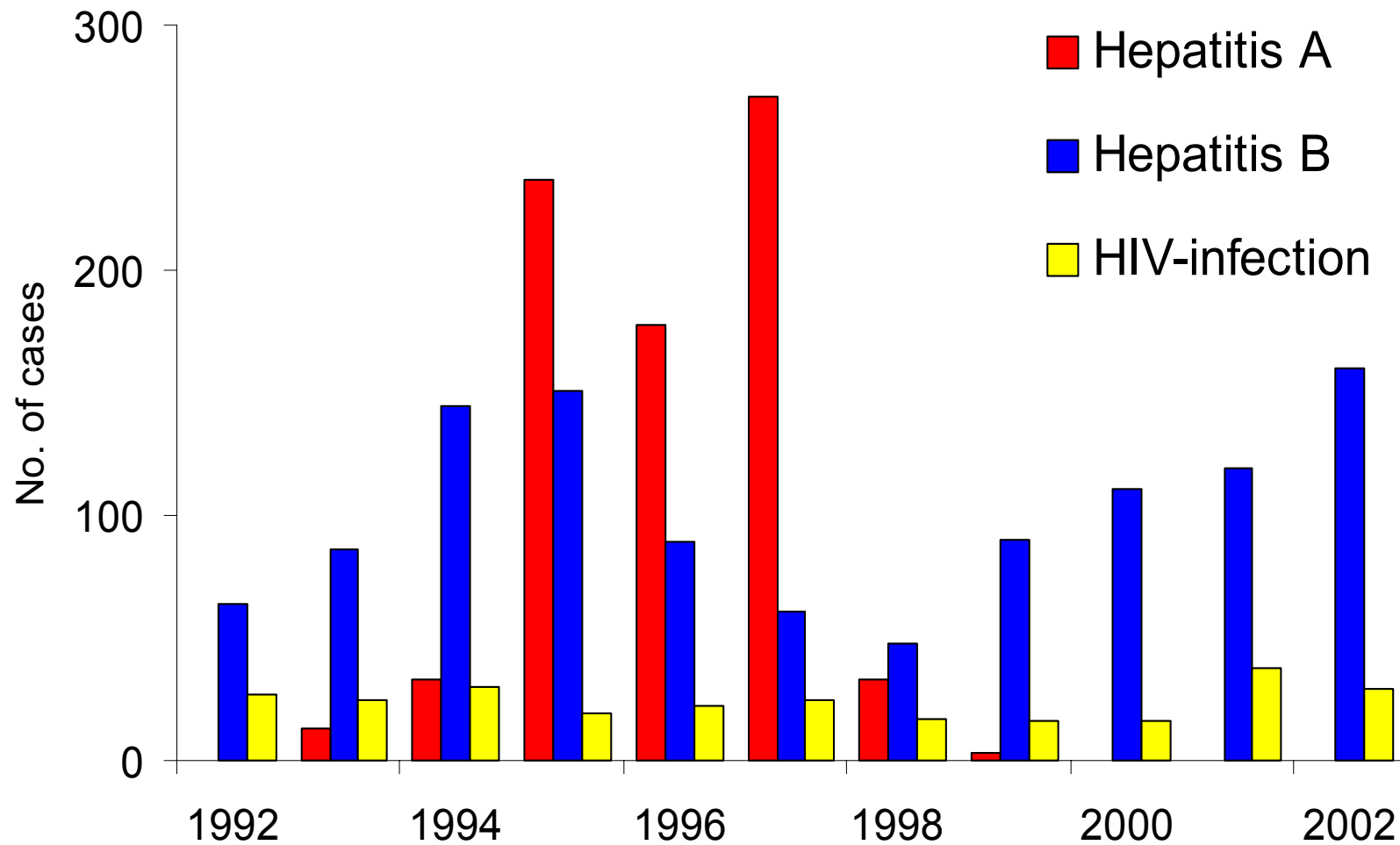
Hepatitis A notifications in the Nordic countries 1990-2002



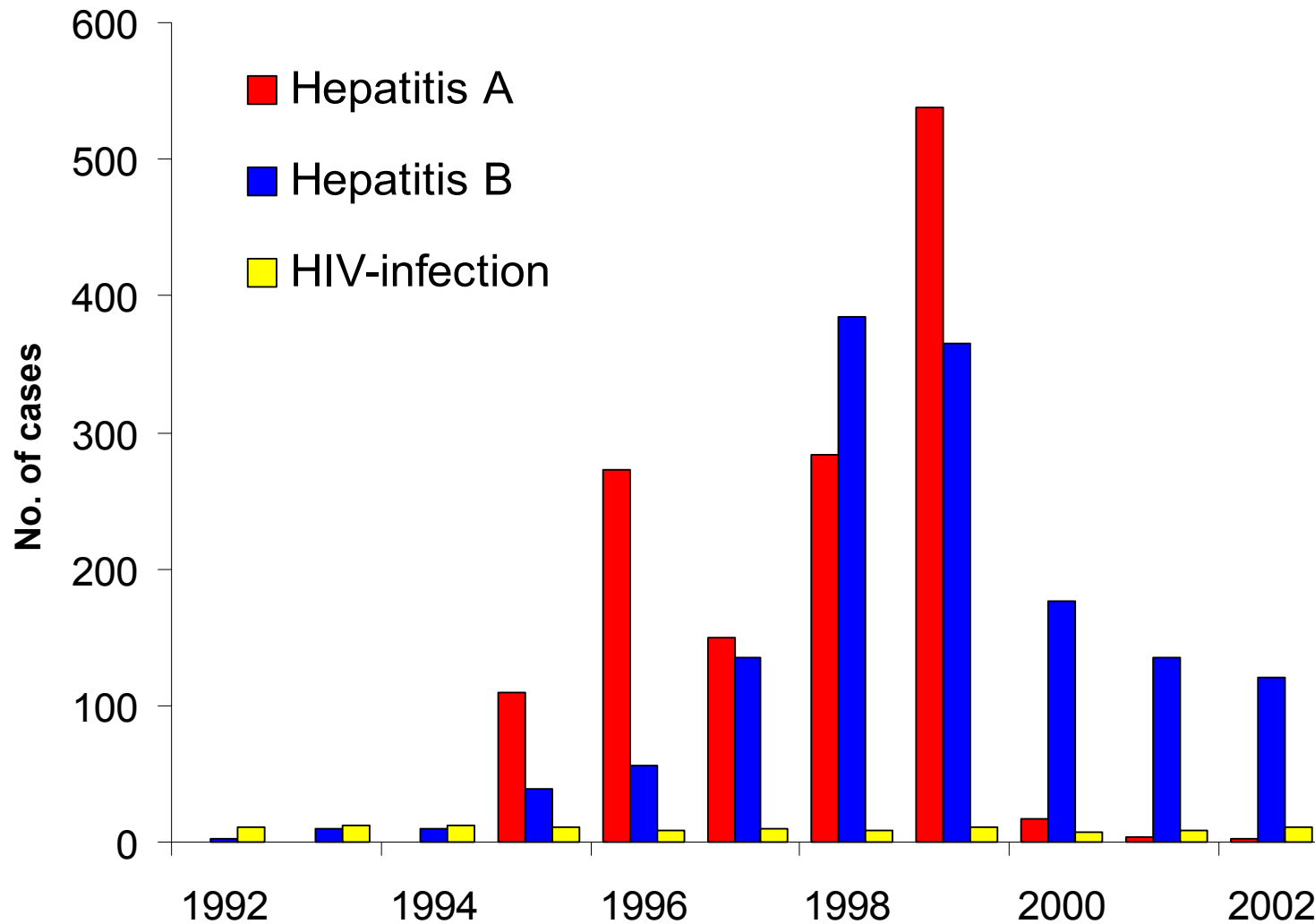
Acute hepatitis B notifications in the Nordic countries 1990-2002



Hepatitis A, acute hepatitis B and HIV-infection reported among drug users in Sweden 1992-2002



Hepatitis A, acute hepatitis B and HIV infection reported among drug users Norway 1992-2002



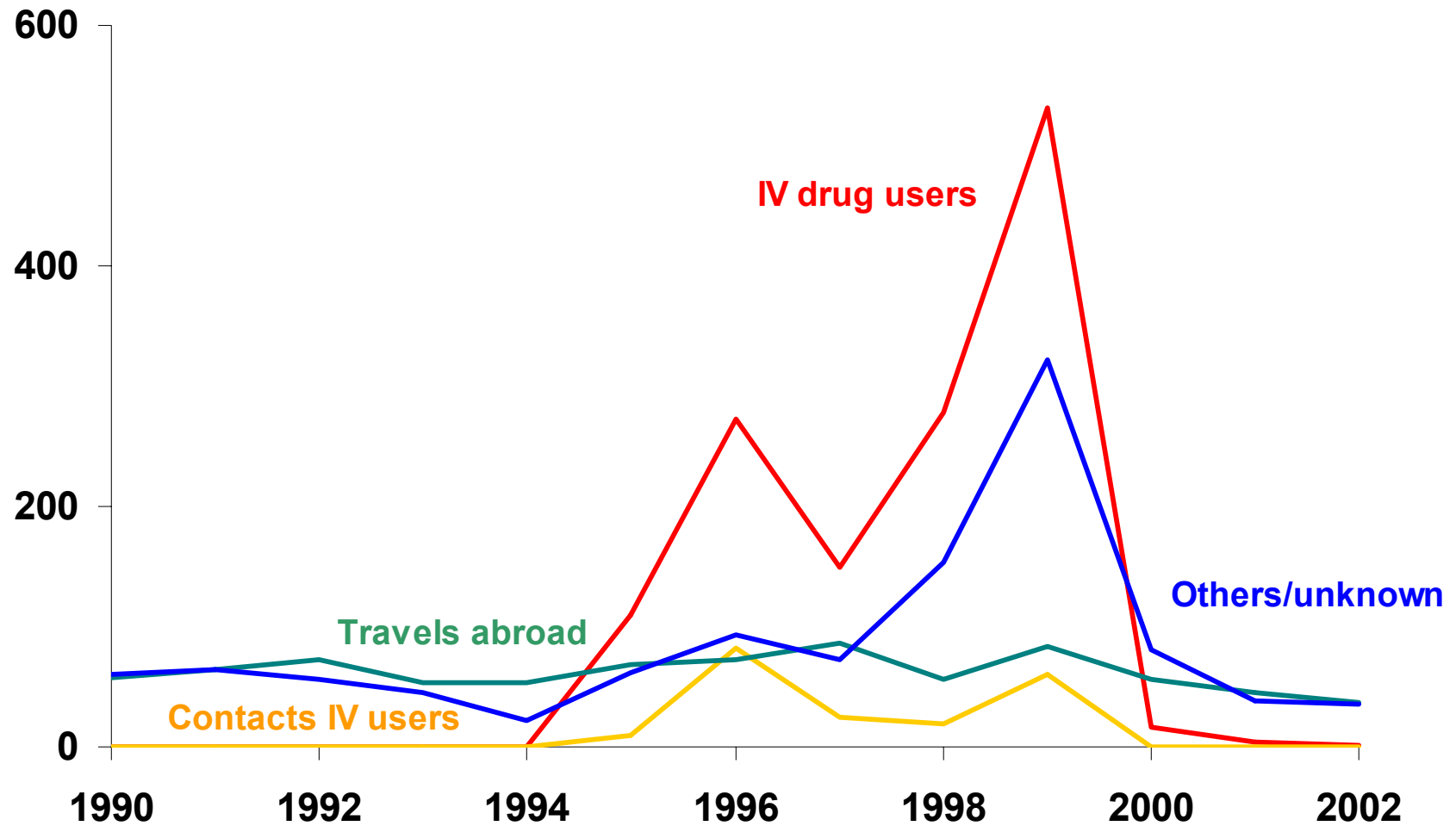
Hepatitis A and B outbreak among IV users in Norway - characteristics 1999

	Hepatitis A	Hepatitis B
Male/female ratio	3,5 (417/117)	3,5 (292/82)
Mean age (range)	30 (15-68)	30 (16-60)

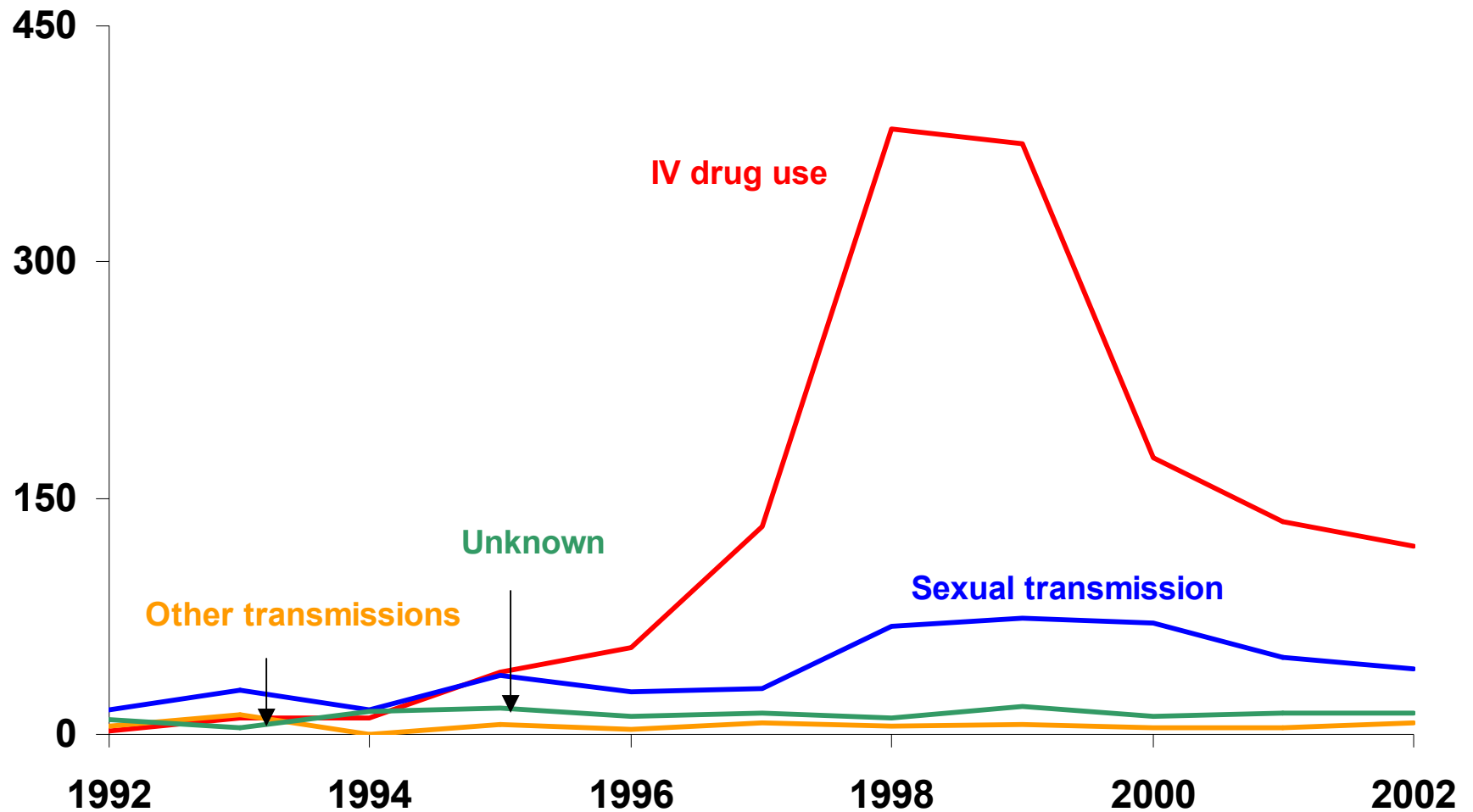
Acute hepatitis B among IV drug users in Norway 1994-2002 by counties

<i>County</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	Total
Østfold	1	1	1	3	22	44	22	12	10	116
Akershus	1	5	8	9	15	26	11	11	4	90
Oslo		19	18	28	31	55	27	10	7	195 (14 %)
Hedmark		1		8	11	6	6	1	9	42
Oppland			2		13	25	5	2	1	48
Buskerud	1	6	16	20	20	19	11	7	4	104
Vestfold	2	2	3	1	19	25	4	4	10	70
Telemark	3			9	41	28	10	8	4	103
Aust-Agder				3	39	18	6	5	8	79
Vest-Agder				1	11	9	4	21	15	61
Rogaland		2	6	6	56	30	16	13	16	145
Hordaland	2	1	1	16	39	35	14	6	12	126
Sogn og Fjordane		1		3	5	1		1	4	15
Møre og Romsdal				1		5	23	10	1	40
Sør-Trøndelag				21	36	32	4	5	2	100
Nord-Trøndelag				6	10	5	9	3		33
Nordland			1		7	8	2	1		19
Troms					7	1	3	14	9	34
Finnmark					1		1			2
Total	10	38	56	135	383	372	178	134	116	1422

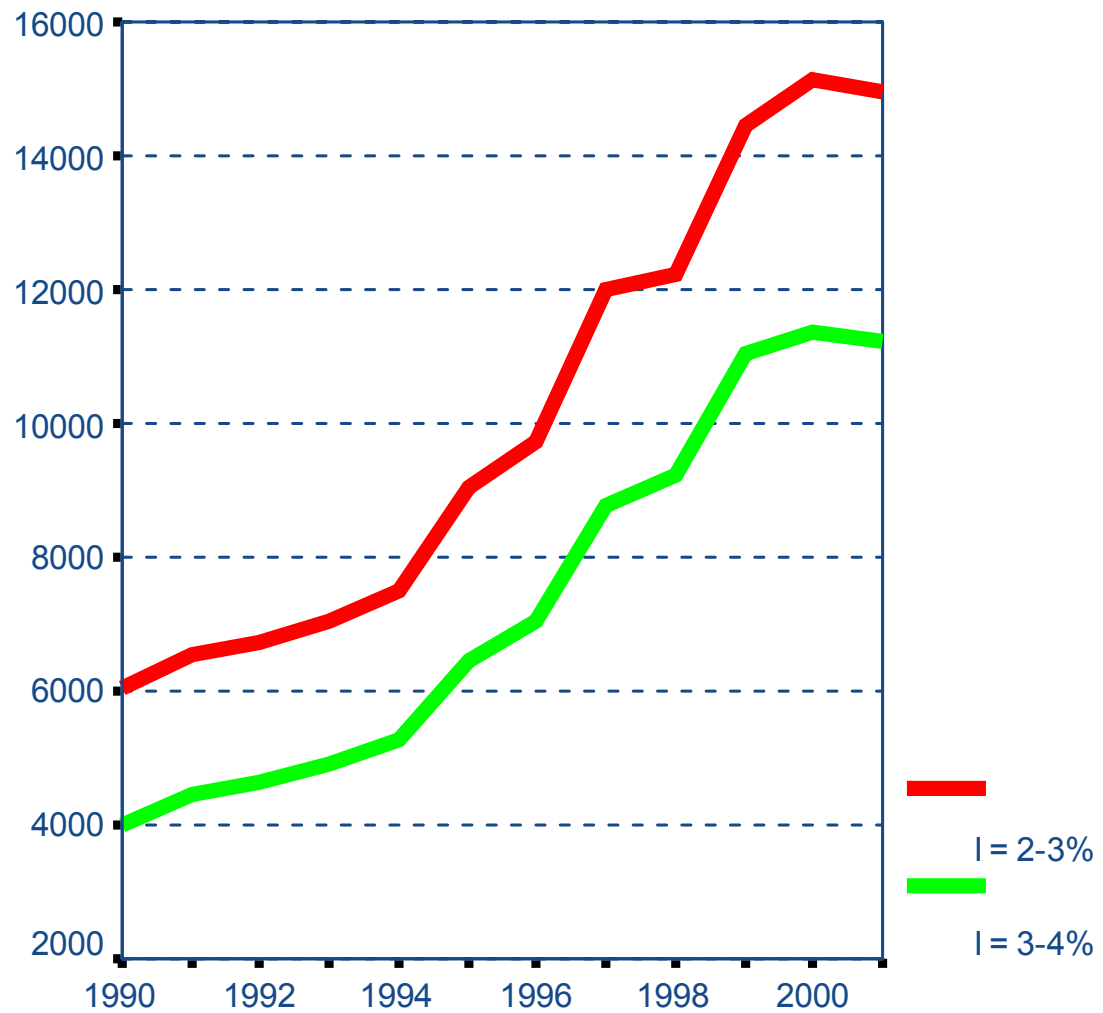
Hepatitis A notifications Norway 1990-2002 by risk groups



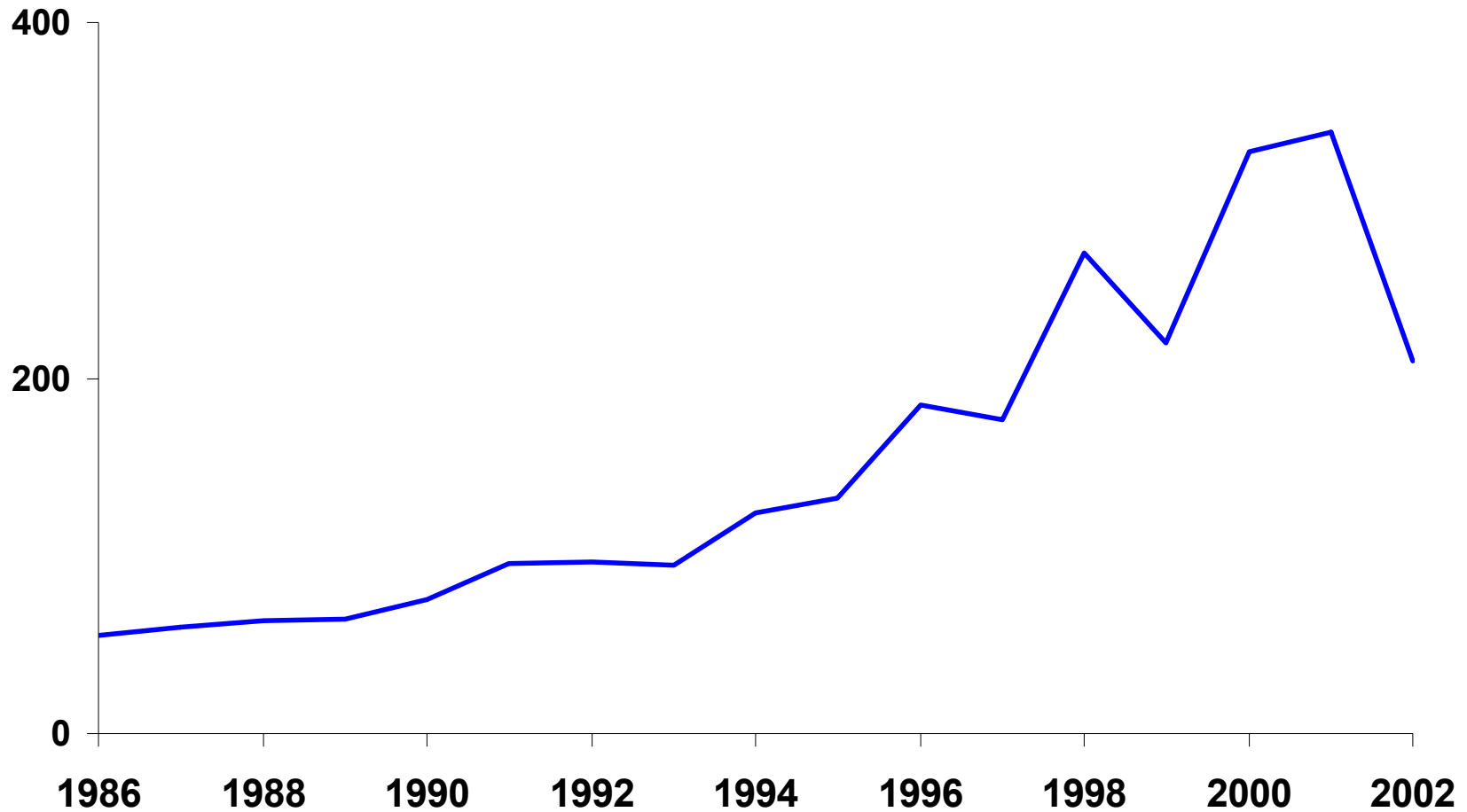
Hepatitis B notifications Norway 1992-2002 by route of transmission



Estimated no. of intravenous drug users in Norway 1990-2001



Drug-related deaths reported in Norway 1986-2002



Sources: The National Bureau of Investigation

Prevalence studies drug users Oslo 2002 (n=410)

- HAV IgG: 60%
- HbsAg: 3%
- anti-HBc: 53%
- anti-HBs pos and anti-HBc: 25%
- anti-HCV: 79 %
- anti-HCV pos and HCV-RNA pos: 47%
- HIV: 1,2%
- HTLV-II: 3,7%

Hepatitis A and B outbreaks among IV drug users - prevention strategies

- Cooperation between social services, health authorities, treatment centers, prisons etc.
- Information to drug communities
- Readily available clean needles and syringes
- Vaccination against hepatitis A and B

Hepatitis A and B outbreaks among IV drug users in the Nordic countries - summary

- All the Nordic countries (except Iceland) have reported hepatitis A and B outbreaks among IV drug users in the 1990s and early 2000s
- Largest outbreaks in Norway and Finland, moderate in Sweden and less in Denmark
- The outbreaks have coincided with an increase in no. of people injecting drugs
- No increase in HIV-infection has been reported (except in Finland)
- These outbreaks have resulted in secondary transmissions of the diseases among sexual partners (hepatitis B) and family contacts (hepatitis A)
- Vaccination against hepatitis A and B among drug users should be encouraged