

Tutorial 4: Visualizing Infectious Disease Data

	year	prevHIV
1	1990	0.047
2	1991	0.068
3	1992	0.095

16	2005	0.249
17	2006	0.243
18	2007	0.239

	date	cases
1	1944-01-07	82
2	1944-01-14	98
3	1944-01-21	118

2659	1994-12-16	25
2660	1994-12-23	22
2661	1994-12-31	23



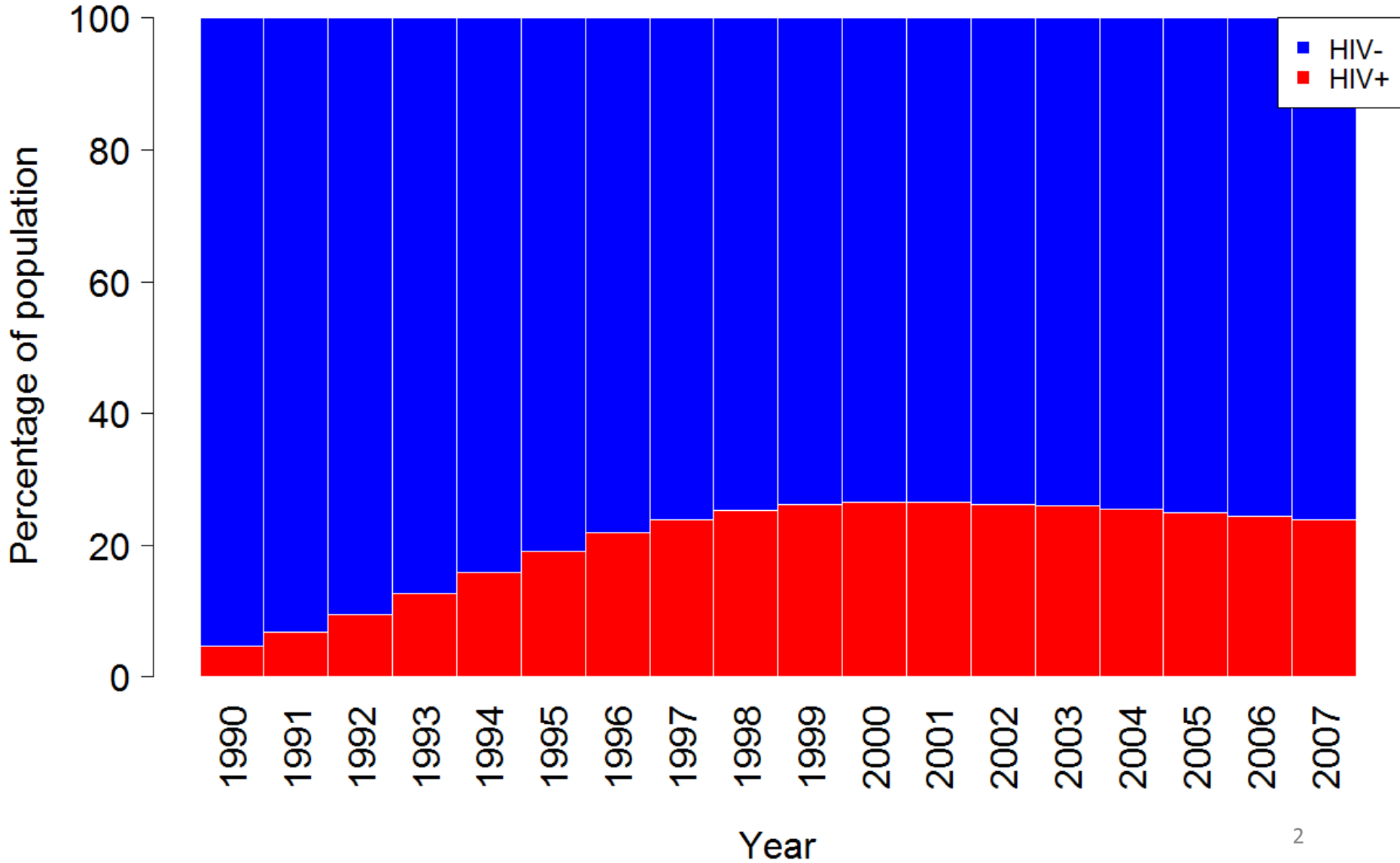
	date	cases
1	1944-01-07	6
2	1944-01-14	9
3	1944-01-21	7

2659	1994-12-16	0
2660	1994-12-23	0
2661	1994-12-31	0

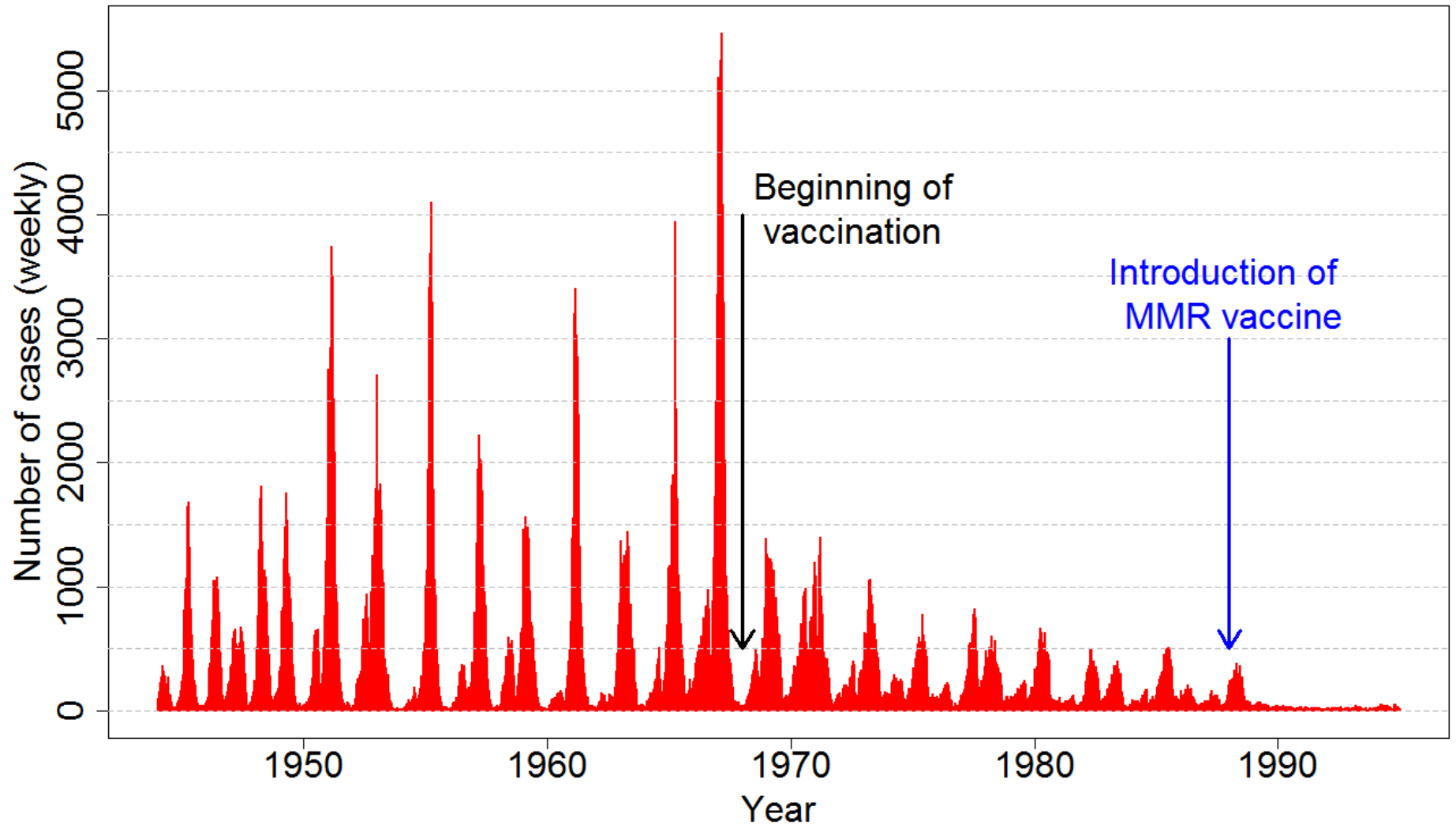
	epg	shoes
1	0	no
2	46	no
3	184	no

635	2898	no
636	690	yes
637	920	no

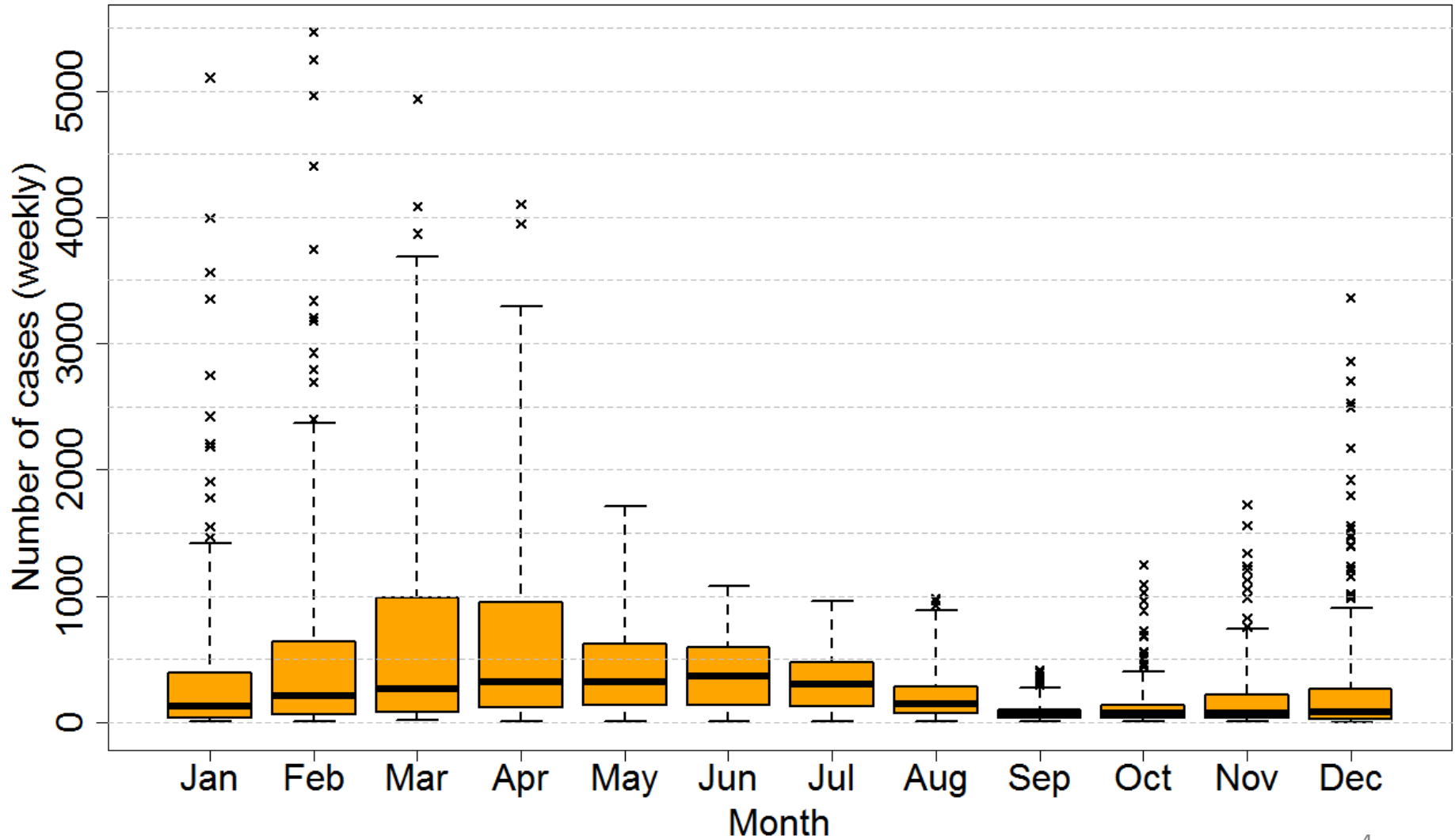
HIV Prevalence in Botswana, 1990-2007



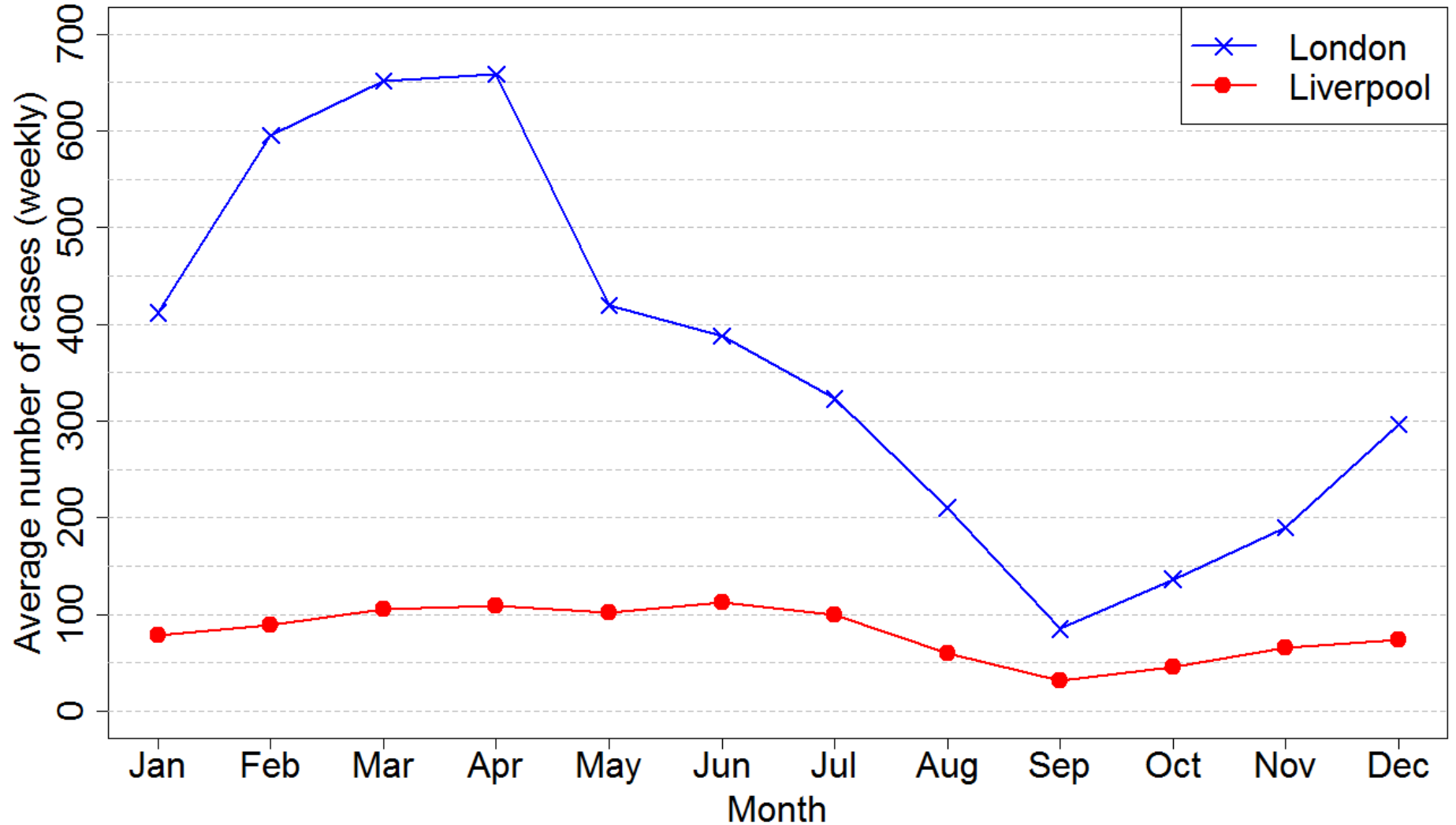
London Measles Incidence, 1944-1994



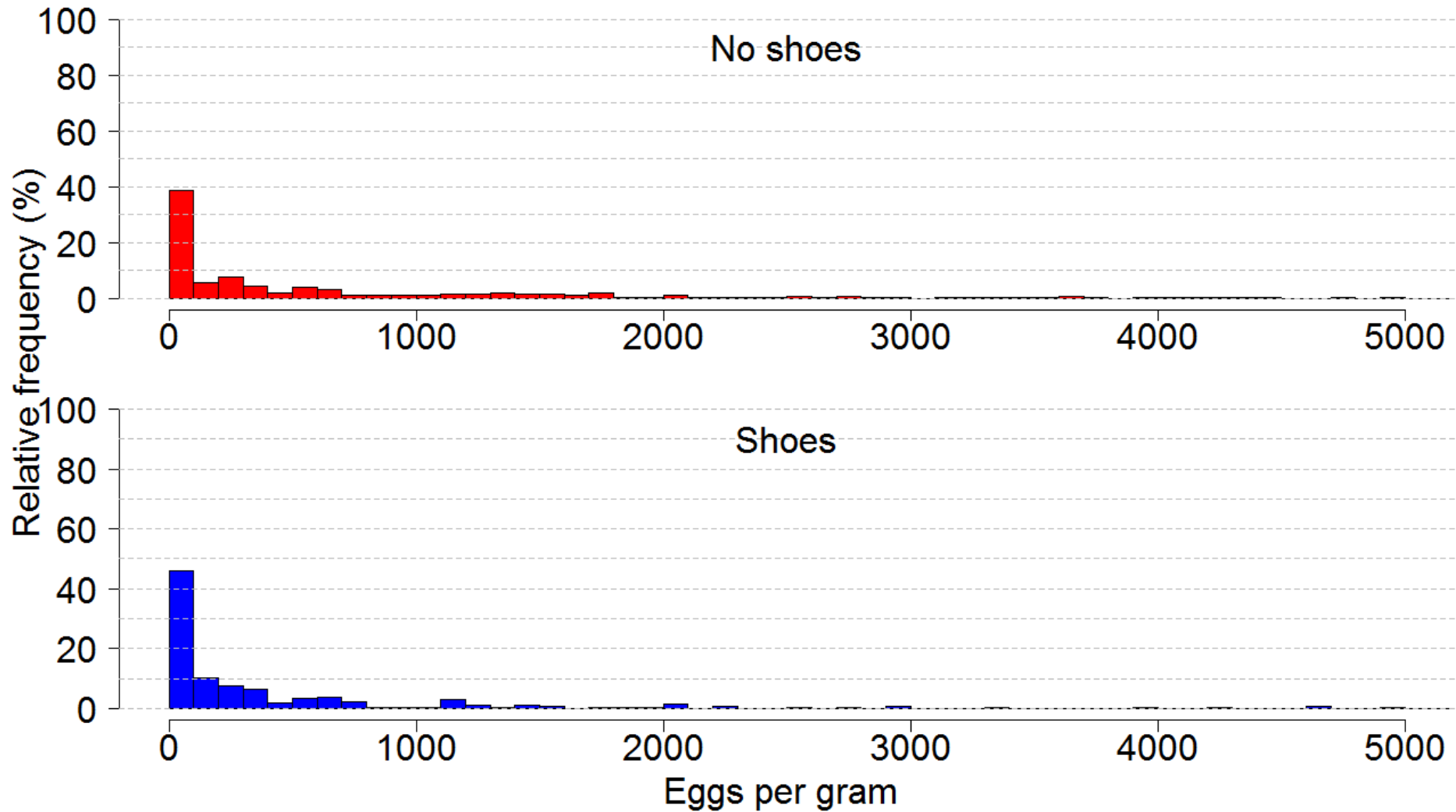
Seasonality in London measles incidence



Average weekly measles incidence by month - London versus Liverpool



Hookworm eggs per gram distribution (<5000) - No shoes versus shoes



- **Visualisation** of data is a **powerful** tool when done thoughtfully
- **Scientific communication** is central to research
- **Several options** for visualising data: **try** different ones and decide which **communicates information best**; get **feedback** from others
- Use **format and text effectively** to produce **easy-to-understand graphs**: Title, label axes, indicate units, large font, adjust margins, include legends, carefully choose colours, line types and bullets
- **R is flexible**, play around with its tools!