

Health  
Protection  
Scotland



# Epidemiology of HCV in the UK

Dr Kirsty Roy

Health Protection Scotland

Viral Hepatitis Prevention Board, 17-18<sup>th</sup> November 2005

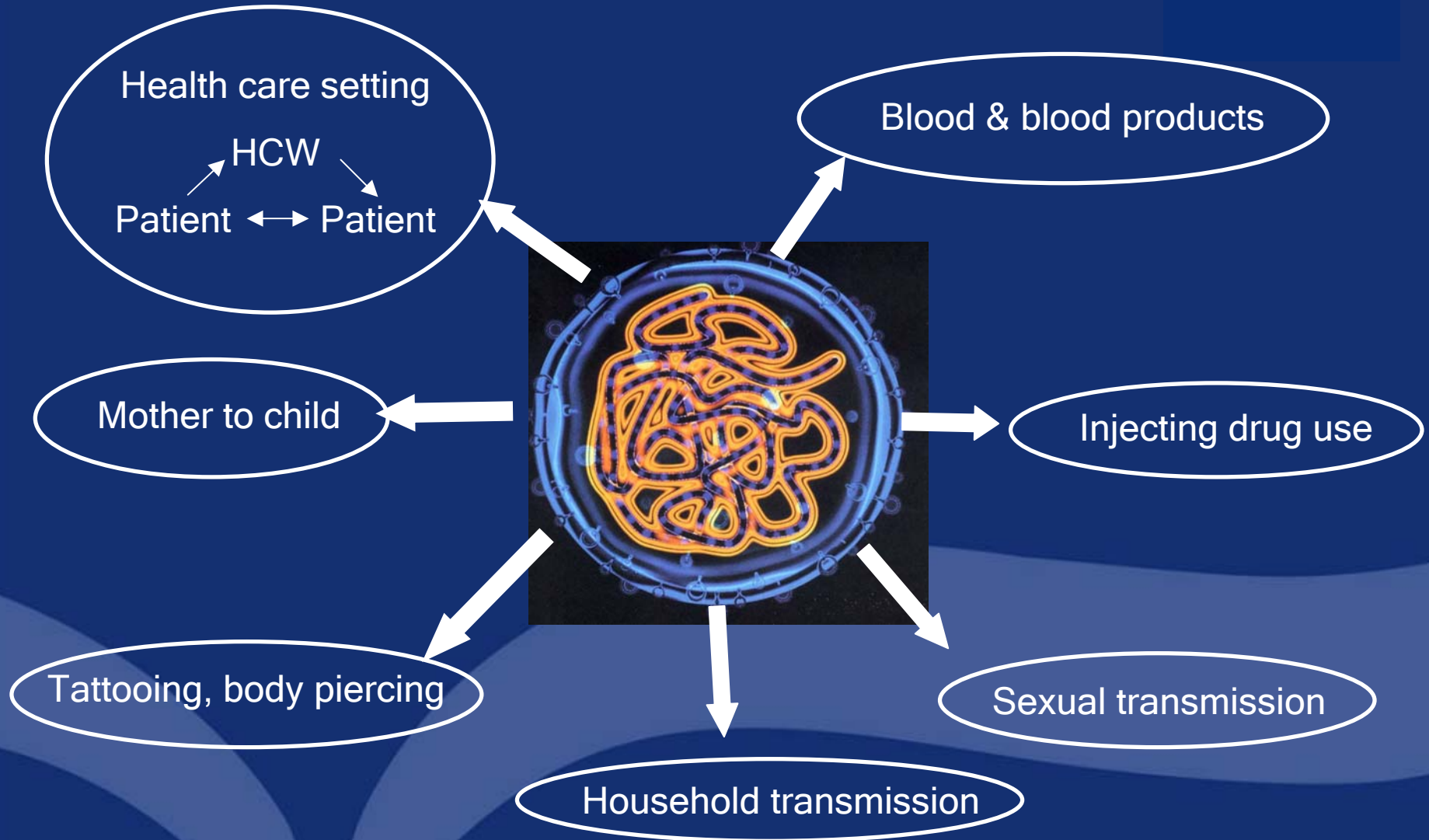
# Epidemiology of HCV infection in the UK

- Hepatitis C infection, the disease and how it is spread
- Extent of hepatitis C infection in the UK
  - prevalence among different population groups
  - prevalence of diagnosed infection
  - estimated burden of hepatitis C infection

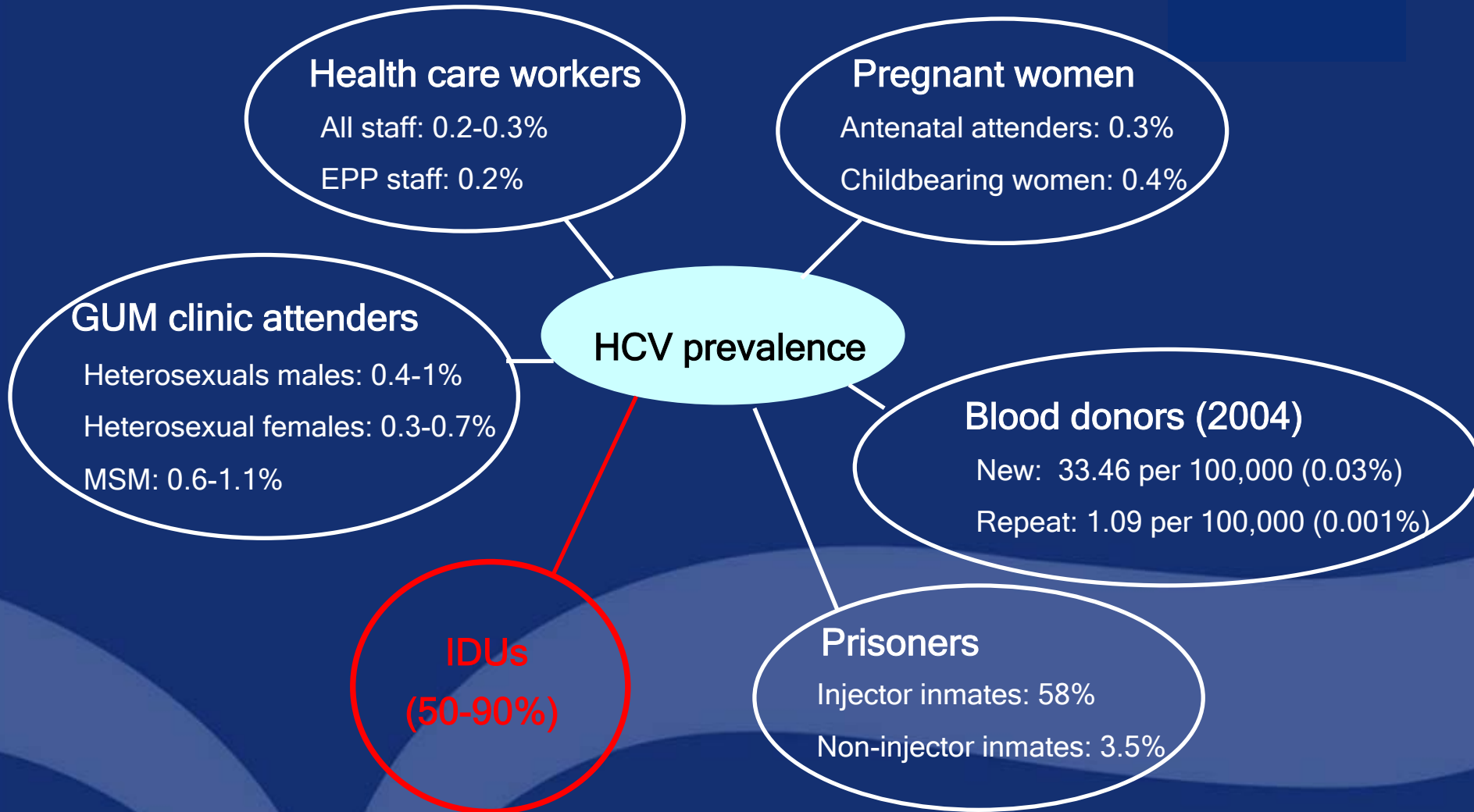
# Hepatitis C virus

- Acute Infection
  - 5% symptomatic disease
  - 60-85% develop chronic infection
- Chronic Infection - 5-15% develop cirrhosis by 20 years
- Factors affecting disease progression
  - Age at infection, gender, alcohol and HIV
- Treatment - Pegylated Interferon and Ribavirin
- No Vaccine available

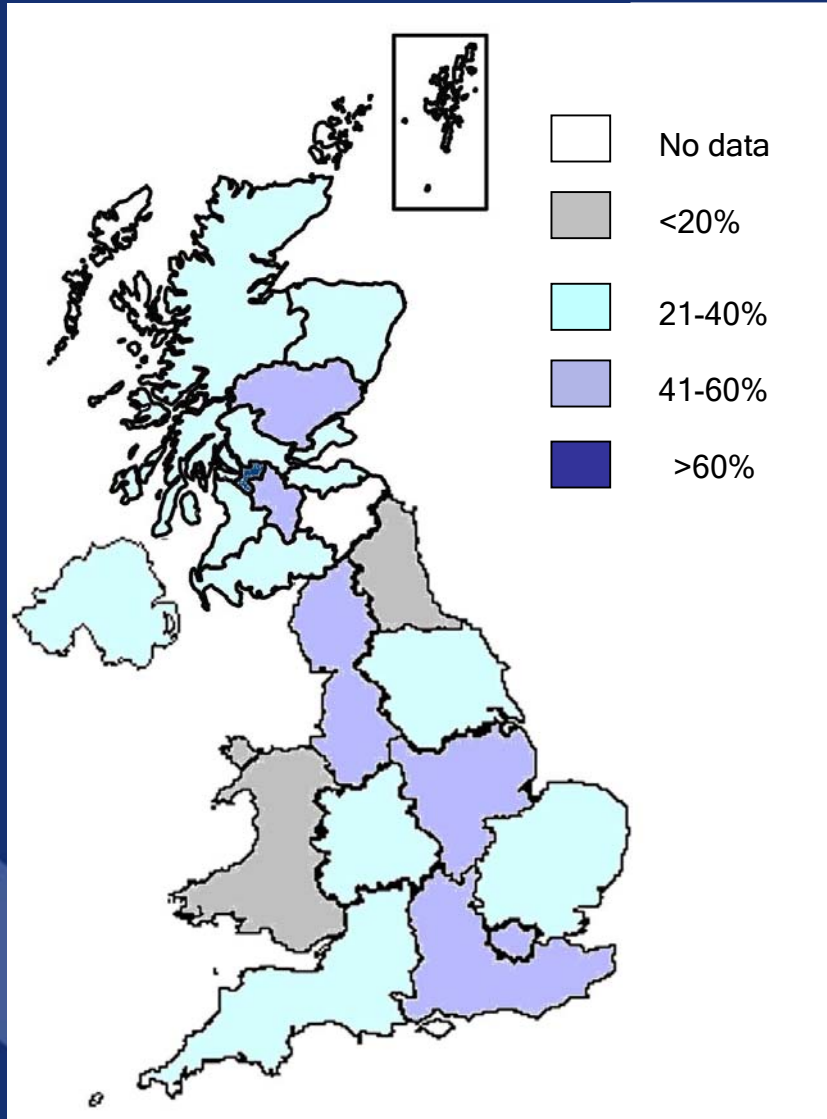
# HCV transmission



# HCV prevalence in different populations

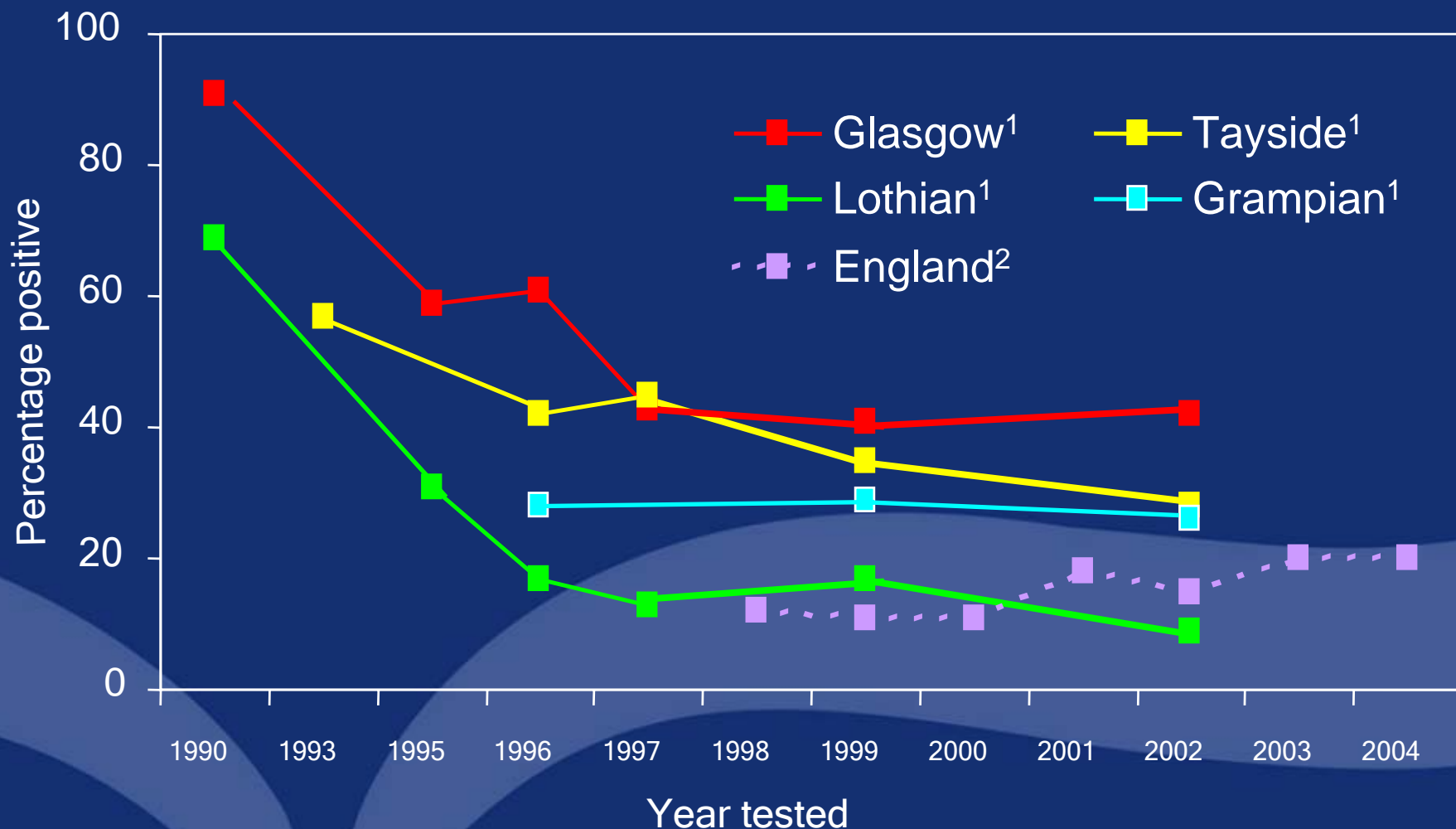


# Geographical variation in the prevalence of HCV infection among IDUs in the UK



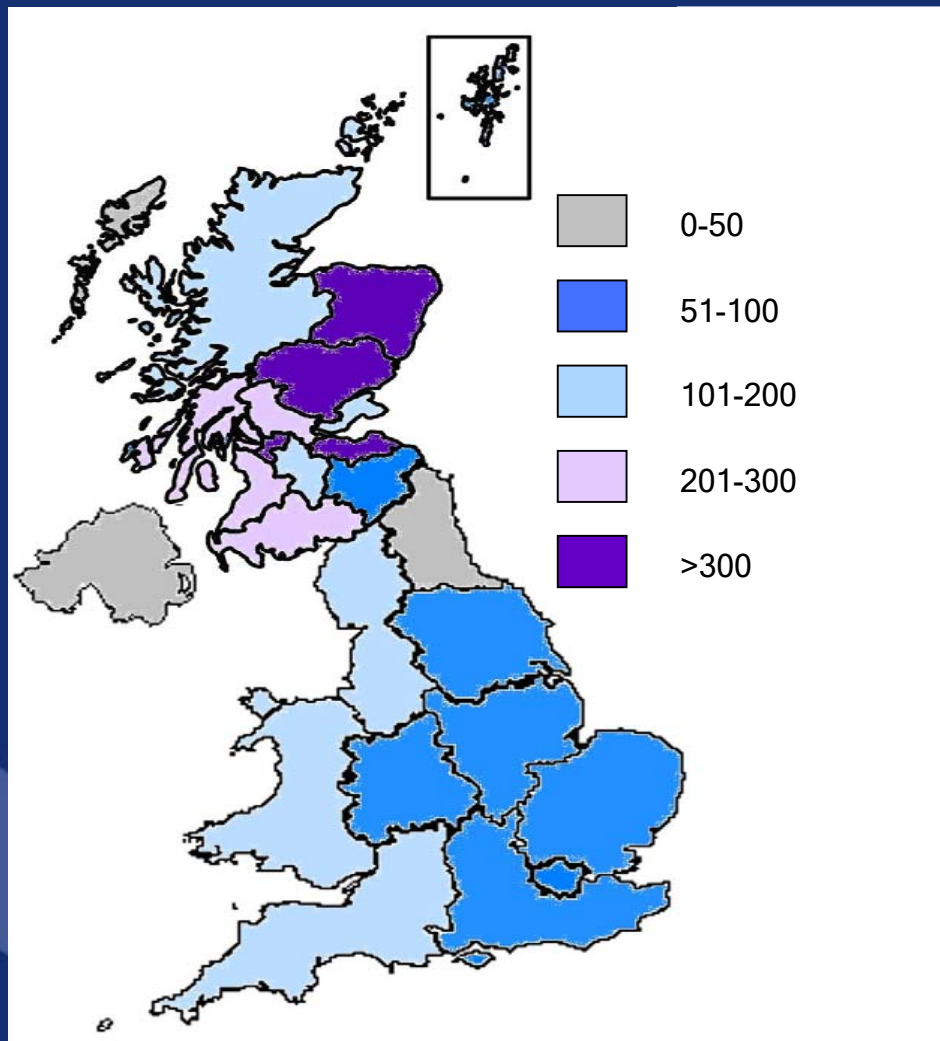
- England, Wales and N Ireland 18-59%  
(UAPMP survey of injectors in contact with drug agencies, 2004)
- Scotland 23-62%  
(Unlinked anonymous survey of injectors having voluntary confidential HIV test 1999/00)

# Trends in HCV infection among injecting drug users in the UK



<sup>1</sup> IDUs aged <25 years; <sup>2</sup> IDUs who started injecting in the three years prior to participating in the UAPMP survey

# Persons reported to be HCV antibody positive in the UK (rate per 100,000 population)



- England and Wales

83 per 100,000 ( 1 in 1200)

(Laboratory surveillance of hepatitis C to end 2004)

- N Ireland

62 per 100,000 (1 in 1600)

(laboratory surveillance of hepatitis C to Oct 2005)

- Scotland

358 per 10,0,000 (1 in 280)

(Surveillance of known hepatitis C antibody cases to end 2003)



# Persons reported to be antibody positive by gender, age group and risk factor

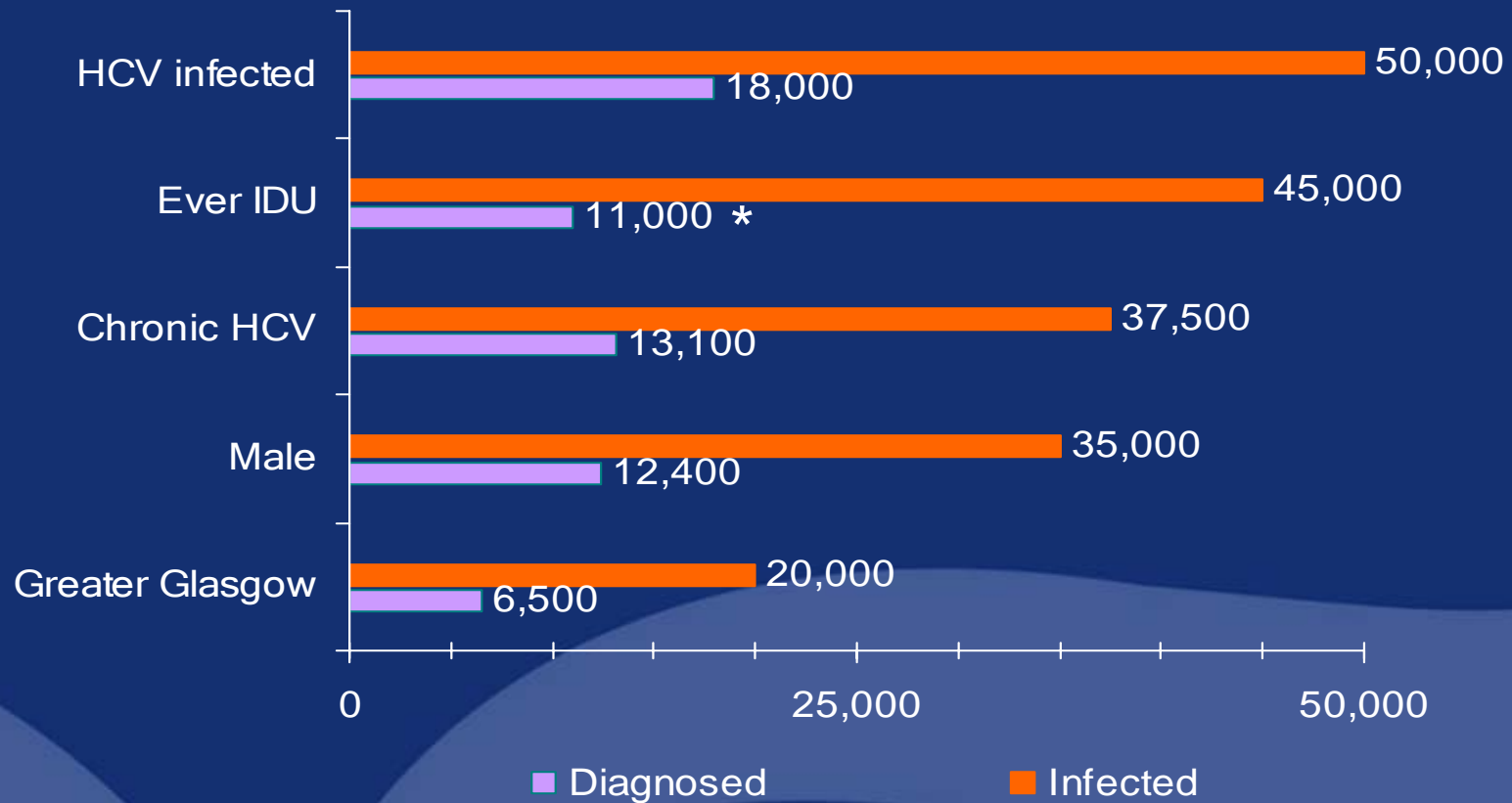
	Scotland	N.Ireland	Eng & Wales
Diagnosed <sup>1</sup>	18 109 (to end 2003)	1055 (to end Oct 2005)	49 819 (to end 2004)
(% dead)	12%	/	/
Male	67%	63%	68%
Aged 24-44	66%	52%	64%
Known risk	(n=12 166)	(n=291)	(n=14 221)
• Injected drugs	90%	44%	88%
• Blood factor	3%	52%	2%
• Other <sup>2</sup>	7%	4%	10%
Unknown risk	(n=5 943)	(n=764)	(n=35 598)
• Male	65%	59%	66%
• Aged 25-44	61%	65%	61%

<sup>1</sup> HCV antibody positive; <sup>2</sup>Other includes sexual contact, tattoo/body piercing, needlestick, bite, blood spillage, blood transfusion, or perinatal risk

# Burden of hepatitis C virus infection in UK

	Scotland	England
Estimated HCV infected persons	50 000	300 000
% total population	1%	0.5%
Diagnosed (%)	18 109 (36%)	49 819 (17%)

# Scotland's epidemiological landscape



\* known to have injected drugs

# Summary

- Overall prevalence of HCV infection in the UK is low
- Burden of infection greatest in IDUs
- Many are unaware of their infection
- Incidence of infection among injectors remains high

## Challenges in the UK

- Prevention of HCV infection among current IDUs
- Diagnosis of infected persons who most need therapy to prevent progression