Viral Hepatitis Prevention Board Meeting:
can the UK control viral hepatitis?
17th – 18th November 2005

Hepatitis B: public health aspects – Glasgow
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Immunisation Coordinator
NHS Greater Glasgow
## GGNHSB compared to Scotland

<table>
<thead>
<tr>
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<th>GGNHSB</th>
<th>Scotland</th>
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<tbody>
<tr>
<td>Population</td>
<td>870,000</td>
<td>5.06 x 10^6</td>
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<tr>
<td>Asian and Chinese</td>
<td>4%</td>
<td>1.4%</td>
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<tr>
<td>ethnic origin</td>
<td>4%</td>
<td></td>
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<tr>
<td>Deprivation Category 6 and 7</td>
<td>48%</td>
<td>18%</td>
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<tr>
<td>Prevalence of problem drug use (estimated in 2003)</td>
<td>13,228 (2.64%)</td>
<td>51,582 (1.84%)</td>
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Glasgow: good news

- Friendliest city in the UK
- 4th most popular shopping venue in the world
- Has one of the highest immunisation uptake rates in the UK
% completed primary course at 24 months (1\textsuperscript{st} April to 30\textsuperscript{th} June 2005)

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<th>T</th>
<th>P</th>
<th>Pol</th>
<th>MMR</th>
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<tbody>
<tr>
<td>GGNHSB</td>
<td>97.5</td>
<td>97.5</td>
<td>97.1</td>
<td>97.5</td>
<td>90.3</td>
</tr>
<tr>
<td>Scotland</td>
<td>97.4</td>
<td>97.4</td>
<td>97.0</td>
<td>97.4</td>
<td>89.5</td>
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Lab reports of hepatitis B in Greater Glasgow NHS Board area

Year


Number

100 120 140 160 180 200

IDU
Other
Lab reports of hepatitis B in Greater Glasgow NHS Board area by age group: 2004 (provisional data)

<table>
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<tr>
<th>Age Group</th>
<th>Number</th>
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<tr>
<td>0-14</td>
<td>3</td>
</tr>
<tr>
<td>15-24</td>
<td>17</td>
</tr>
<tr>
<td>25-34</td>
<td>43</td>
</tr>
<tr>
<td>35-44</td>
<td>26</td>
</tr>
<tr>
<td>&gt;45 years</td>
<td>27</td>
</tr>
<tr>
<td>Not known</td>
<td>2</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>118</strong></td>
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</tbody>
</table>
Current UK Hep B immunisation policy (1): targetable groups

- Babies born to infected mothers
- Haemophiliacs
- Patients with chronic renal failure
- Health care workers
- Other occupational groups
- Prison population?
Current UK Hep B immunisation policy (2): difficult to target groups

- Injecting drug users
- Individuals who change sexual partners frequently (not well defined)
- Men having sex with men
- Sex workers
- Travellers to areas of high prevalence
- Close family contacts of a carrier
Selective Hep B immunisation programme in Glasgow

- Antenatal universal Hep B screening since 1993
- Special IDU programmes in the community including Item of Service fee to GPs
- Special Hep B programme in clinics for homosexual men
- Special clinics for female sex workers
- Others (health care workers, travel clinics, contacts etc.)
- Routine immunisation of prison population since 1999
Figure 1: Self-reported uptake of (at least one dose of) hepatitis B vaccination among current injecting drug users (IDUs), who had injected in the previous two months, recruited in five cross-sectional surveys in Glasgow during 1993, 1994, 1999, 2001-02 and 2004.

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<tr>
<td>Current IDUs who had began injecting within the previous five years</td>
<td>16% (26/166)</td>
<td>19% (26/138)</td>
<td>15% (19/128)</td>
<td>25% (36/144)</td>
<td>52% (200/387)</td>
<td>65% (108/167)</td>
</tr>
<tr>
<td>All current IDUs</td>
<td>19% (88/463)</td>
<td>21% (102/484)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>68% (372/546)</td>
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Lab reports of hepatitis B in Greater Glasgow NHS Board area

• 34.6% of men aged 16-44 and 19.4% of women reported at least ten lifetime partners
• 14.1% of men aged 16-24 and 9.2% of women had more than ten partners in the previous 5 years
• 5.4% of 16-44 year olds ever had homosexual partners
• 19.6% of men aged 16-24 and 12.3% of women had new sexual partners from outside the UK in the past 5 years
Selective Vaccination Programme – limitations (1)

- Not well resourced or co-ordinated
- Remuneration issues for GPs
- Vaccine coverage not recorded systematically
- Success often depends on enthusiasm and/or resources available
Selective Vaccination Programme – limitations (2)

- Target population not always well defined group
- Target groups not aware of the risk
- A proportion do not fall into any defined risk group and do not perceive themselves as being at risk
- Many young people are not registered with GPs
Selective Vaccination Programme – limitations (3)

• Often not a “captive” group
• Target group not identified before exposure to infection
• Need to educate much wider group of HCWs compared to universal programme
• Programme based on ethnic risk does not often work
Hepatitis B vaccination policy: future strategy

• JCVI looking into this
• Possible options
  – Status quo
  – Universal infant
  – Universal adolescent
  – Both (for a limited period)
The adolescent hepatitis B vaccination study in Glasgow: Sept 2001 to May 2002

• Two stage study to assess feasibility and acceptability
  – Focus group study
  – Vaccination campaign
• 11,000 school children age 11-12 years targeted
• Vaccine administered at school by nurses
• 81 schools (state, independent and special schools)
Hep B Vaccination: Focus Group Study

• Most pupils and parents knew very little about Hep B Infection
• Risk factors for acquiring Hep B were not irrelevant to them/their children
• Wanted more information about vaccine side-effects
• Most pupils and nearly all parents favour vaccination

A Hinds, J C Cameron. CDPH 2004; 7(4) 278-82
Glasgow leads way in fight against Hepatitis B

Kids offered vaccinations in £200,000 programme

Thousands of pupils get jab to beat Hep B

Glasgow is the pioneer to set the example for the rest of Britain
The adolescent hepatitis B vaccination campaign in Glasgow: summary

- 91.3% received at least one dose
- 89.3% received at least two doses
- 80.2% received three doses
- Drop off greatest between 2nd and 3rd schools visit

Bramley J C et al; CDPH 2002; 5(4) 318-20
Acknowledgements

• **HPS:**
  – C Cameron
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  – D Goldberg
  – S Hutchinson

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  – W Carman

• **GGNHSB**
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