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# Does the detection of Hepatitis C match the distribution of methadone prescriptions and multiple deprivation in Scotland?

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# Does the detection of Hepatitis C match the distribution of methadone prescriptions and multiple deprivation in Scotland?

## **Abstract**

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# Does the detection of Hepatitis C match the distribution of methadone prescriptions and multiple deprivation in Scotland?

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**Introduction:** By December 2006, approximately one in 260 of Scotland's population had been diagnosed with Hepatitis C. It is estimated that the number of people infected with Hepatitis C remaining undiagnosed exceeds those known by a factor of 1.5. The lowest rates of referral of Hepatitis C patients are in more remote, rural locations. Some geographical factors that might explain this could be: poorer Hepatitis C screening practices; poorer access to treatment centres; and a lower exposure of rural populations to the major risk factors. Recent work in France suggests that geographic access to medical care may affect the diagnosis of Hepatitis C.<sup>1</sup> Unfortunately, that research did not control for the substantial difference in the number of Hepatitis C diagnoses expected between urban and rural areas, due to injecting drug use.

**Aims & Methods:** This paper tests the spatial inequality of Hepatitis C detection and the likely distribution of injecting drug use in Scotland. Negative binomial regression methods are used to examine the detection of approximately 20 000 Hepatitis C antibody positive tests and surrogate indicators of injecting drug use: (1) area deprivation; (2) methadone prescriptions.

**Results:** Positive relationships were found between Hepatitis C antibody positive tests, deprivation, and methadone prescriptions in increasingly urban areas.

**Conclusion:** Hepatitis C has been detected throughout Scotland, but is not evenly spatially distributed. People diagnosed with Hepatitis C are likely to live in urban areas characterised by high levels of deprivation and high numbers of methadone prescriptions. This information will be used in a follow-up study, building on and increasing the sophistication of previous research, which questions whether geographic access to healthcare influences the detection of Hepatitis C in Scotland.

1. Monnet E, Collin-Naudet E, Bresson-Hadni S, et al. Place of residence and distance to medical care influence the diagnosis of hepatitis C: a population-based study. *J Hepatol* 2006;44:499–506.