

# HAS THE COCAINE EPIDEMIC ARRIVED IN THE UK?

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## INTRODUCTION

National surveys of the UK drug situation in 2000 found that cocaine was the most frequently seized Class A drug, and it was estimated that between 25 and 40 tonnes of cocaine were being smuggled into the UK each year (1,2).

In the light of these findings, an audit of the analytical monitoring for cocaine abuse has been performed covering the period from 1996 to 2002. Requests for cocaine analysis were received from hospitals, drug dependency units, and general practitioners.

It was hoped that this audit would demonstrate if the growth in cocaine availability and abuse was having an impact on the general health of the Nation, and on the resources of the NHS. In this way, adequate future provision of resources could be planned for, so that appropriate treatment would be available to those abusing cocaine.

## METHODS

A retrospective survey of the numbers of specimens received in the Laboratory accompanied by a request for analysis to determine the presence of cocaine was performed from 1996 to 2002. In addition, the results of this analysis were also collected.

The analysis for cocaine in urine was performed using an Olympus AU600 analytical platform and the Microgenics CEDIA<sup>®</sup> automated immunoassay technique to detect the presence of benzoylecgonine, the primary metabolite of cocaine. The between batch reproducibility of the assay was less than 6% (n = 60 days) for both low and high controls.

Subsequent confirmation was performed as required using an Agilent 6890 gas chromatograph in conjunction with a 5972 mass selective detector, incorporating Chemstation data handling software. The analytical capillary column used was a 30 m HP-5MS column 0.25 mm internal diameter with a 5% phenyl-methyl-siloxane stationary phase, 0.25 µm film thickness. The limit of detection of the assay was 65 ng/mL, linearity up to 4000 ng/mL with a precision of 5.5% at 150 ng/mL and 6.6% at 1000 ng/mL.

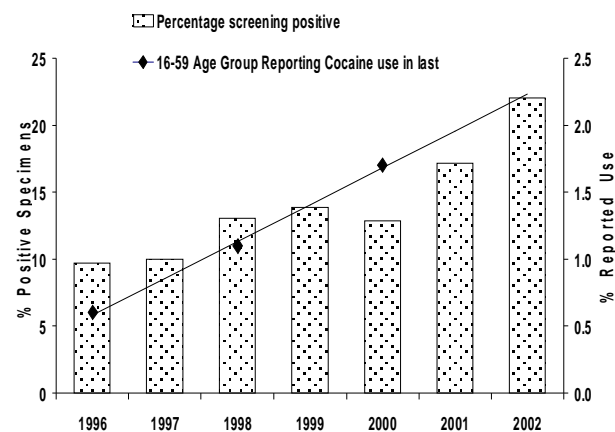
## RESULTS

The number of requests for cocaine received in the Laboratory over this audit study period increased from 9,900 in 1996 to 13,000 in 2002. Over this same period, the number of specimens that were found to be positive for benzoylecgonine, indicating cocaine use, increased from 966 (9.7% of specimens) in 1996 to 2841 (22% of specimens) in 2002 (see Figure below).

This growth in the percentage of specimens found to demonstrate cocaine use has been calculated to increase by around 50% every three years.

For the sake of completeness, and to facilitate comparisons, the self-reported use of cocaine in the 16 to 59 age group (3) is also shown in the Figure below.

It can be seen from this data that the growth rate in self-reported cocaine use and the Laboratory findings closely match each other over the entire audit study period.



## DISCUSSION

Although it has long been proposed, the growth in the abuse of cocaine in the UK has not been supported by empirical data. All data currently available has been based on surveys of seizures, criminal activity and self-reported use.

The self reported use and analytical data suggests that the use of cocaine in the UK has been seen to increase dramatically over the past few years.

It has been calculated that the growth in the number of specimens positive for cocaine increase by 50% every three years, but the same increase in self-reported use occurs every two years.

What is apparent from the findings of this audit, is that the UK is witnessing a significant growth in cocaine use, both self-reported and analytically confirmed, potentially reflecting the fact that the cocaine epidemic has finally reached the UK.

## REFERENCES

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