

Workplace drug testing in Northern Greece during the period 2000 - 2006

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ABSTRACT: The aim of the present study is to present information concerning Workplace Drug Testing in Northern Greece for the period of 2000-2006, which is in continuation of previous testing. Cases included: professional drivers, individuals at pre-employment stage for security services, prostitute houses and housekeepers at prostitute houses.

During the period 2000 - 2006, we handled a total of 2665 cases, each of which was examined for the presence of 5 groups of controlled substances (cannabinoids, opiates, benzodiazepines, cocaine and amphetamines). Screening was performed with Enzyme Multiplied Immunoassay Technique (EMIT), while verification of positive results and identification of substances present was achieved through chromatographic techniques.

Of the 2665 cases handled in this period of 7 years, 67% concerned candidates for employment at security services, 18% concerned professional drivers, 13% concerned individuals pursuing employment at prostitute houses and 2% concerned individuals pursuing employment as housekeepers at prostitute houses.

Of the total 2665 samples tested, 105 samples were positive, corresponding to 4% of the total cases. Of the controlled substances abused, cannabinoids seem to be the most popular abused drug representing 72.81% of the positive samples. Opiate abuse corresponds to 16.27% of the positive samples, cocaine abuse corresponds to 5.19% of the positive samples and benzodiazepine abuse corresponds to 5.73% of the positive samples. Finally, we noticed no cases of amphetamine abuse.

Key words: Workplace drug testing, Drug abuse.

INTRODUCTION

The aim of this study is to present information concerning Workplace Drug Testing (WDT) in Northern Greece for the period of 2000-2006, which is in continuation of previous testing in the period of 1998-2000^{1,2}. Workplace Drug Testing seems to be gaining interest all over the world³. Our cases concerned professional drivers and individuals at pre-employment stage for security services, prostitute houses and housekeepers at prostitute houses.

According to the law of August 1997, people pursuing employment at security services must prove, through toxicological analysis, that they do not abuse controlled substances. In November 1999 the law was extended in order to include people pursuing work at prostitute houses.

Immunoassay screening procedures for cannabinoids, opiates, benzodiazepines, cocaine and amphetamine were primarily used and confirmation through GC-FID or GC-NPD followed.

MATERIALS AND METHODS

During the period 2000 - 2007 we handled a total of 2665 cases. Tests were performed on urine samples taken under supervision at the laboratory. In order to ensure authenticity the temperature of the specimen was checked, immediately after gathering.

Screening was performed with Enzyme Multiplied Immunoassay Technique (EMIT) to eliminate negative specimens from further analysis and to identify the class of drugs in positive samples that required the second confirmatory step. Verification of positive results and identification of substances present was

accomplished through gas chromatographic techniques coupled with FID or NPD, under the conditions used in the laboratory⁴.

RESULTS

Out of 2665 cases which were handled in a 7 year period, 67% concerned candidates for employment at security services, 18% concerned professional drivers, 13% concerned individuals pursuing employment at prostitute houses and 2% concerned individuals pursuing employment as housekeepers at prostitute houses (Figure 1).

Of the total 2665 samples tested, 105 samples were positive corresponding to 4% of the total cases. Of the controlled substances abused, cannabinoids seem to be the most popular abused drug representing 72.81% of the positive samples. Opiate abuse corresponds to 16.27%, benzodiazepine abuse corresponds to 5.73% and cocaine abuse corresponds to 5.19% of the positive samples. Finally, we noticed no cases of amphetamine abuse (Figure 2).

Out of 1779 people tested for employment at Security Services, 12 people (0.67%) were tested in the year 2000, 126 people (7.10%) were tested in the year 2001, 240 people (13.50%) were tested in the year 2002, 347 people (19.51%) were tested in the year 2003, 374 people (21.00%) were tested in the year 2004, 343 people (19.28%) were tested in the year 2005 and 337 people (18.94%) were tested in the year 2006; this indicates an increase in workload for our laboratory in the last 4 years (Figure 3).

In the group of people tested for employment at security services, 66 samples were positive representing 3.7% of the total security cases. The most favored drug of abuse among them was found to be cannabinoids, representing 73% of the total drugs abused. Two urine samples were found to be positive for benzodiazepines and cocaine, two other urine samples were found to be positive for benzodiazepines and opiates and three urine samples were positive for both cannabinoids and opiates (Figure 4).

Of the total 482 professional drivers tested, 35 people (7.30%) were tested in the year 2000, 85 people (17.65%) were tested in the year 2001, 94 people (19.50%) were tested in the year 2002, 94 people (19.50%) were tested in the year 2003, 45 people (9.35%) were tested in the year 2004, 96 people

(19.90%) were tested in the year 2005 and 33 people (6.80%) were tested in the year 2006 (Figure 5).

In the case of professional drivers 28 samples were found to be positive representing 5.8% of the drivers tested. The most favored drug of abuse among them was cannabinoids (75%). Three urine samples were found to be positive for opiates and only one urine sample was positive for benzodiazepines (Figure 6).

Out of 341 pursuing employment at prostitute houses, 6 people (1.76%) came in year 2000, 23 people (6.74%) in 2001, 73 people (21.41%) in 2002, 11 people (3.23%) in 2003, 96 people (28.15%) in 2004, 64 people (18.77%) came in year 2005 and 68 people (19.94%) in year 2006 (Figure 7).

In this group 11 samples were found to be positive corresponding to 3.2% of the total prostitute cases. The most favored drug of abuse among them was cannabinoids (80%). One sample was found to be positive for opiates and one urine sample was found to be positive for two groups of drugs (cannabinoids and benzodiazepines) (Figure 8).

Of the total 63 people tested for employment as housekeepers at prostitute houses, 21 people (33.33%) came in the year 2002, no people came in the year 2003, 23 people (36.51%) came in the year 2004 and the rest 19 people came in the year 2005 (30.16%) (Figure 9).

As far as the group of individuals pursuing employment as housekeepers at prostitute houses, we noted no positive samples for the drugs tested.

DISCUSSION

According to previous work in our laboratory², the cases handled during the period of 1998-2000 numbered 325 and during the period of 2000-2006 we found that the number of cases was 2665.

This increase can be attributed to two factors. Firstly, during the years 1998-2000 the cases concerned mainly professional drivers and individuals at pre-employment stage for security services. But due to the Law of November 1999, which was extended to include also people pursuing work at prostitute houses, the number of cases increased. Secondly, Workplace Drug Testing seems to gain continuous interest in Greece due to the legal system and the new policy that the government follows.

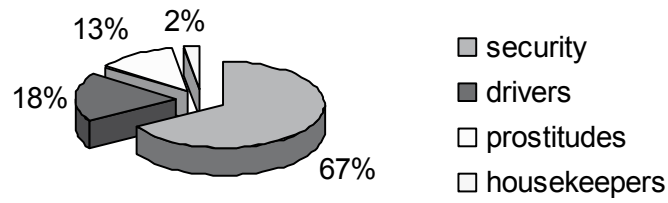


Figure 1. Distribution of different professional groups tested for WDT during the period 2000 - 2006.

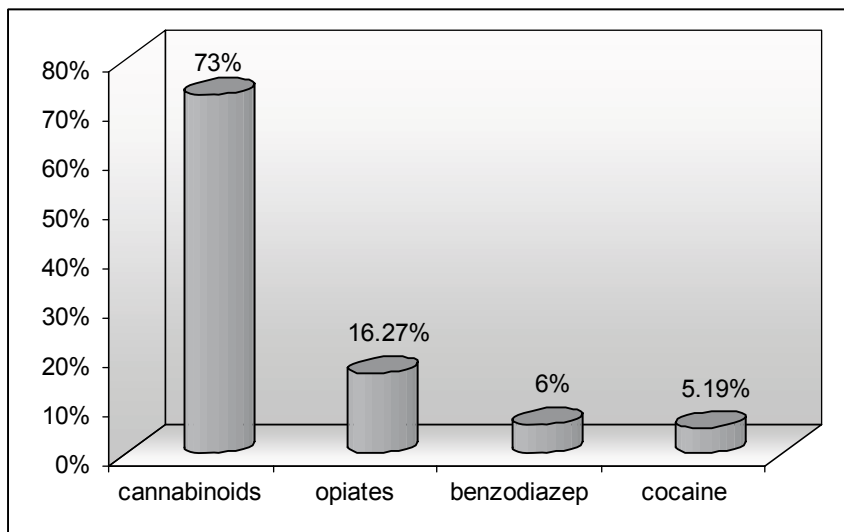


Figure 2. Drugs abused during the period 2000-2006.

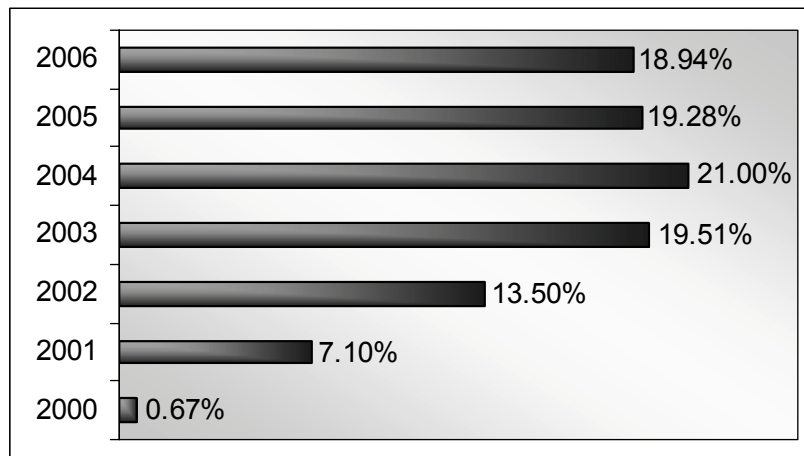


Figure 3. Distribution of security cases during the period 2000-2006.

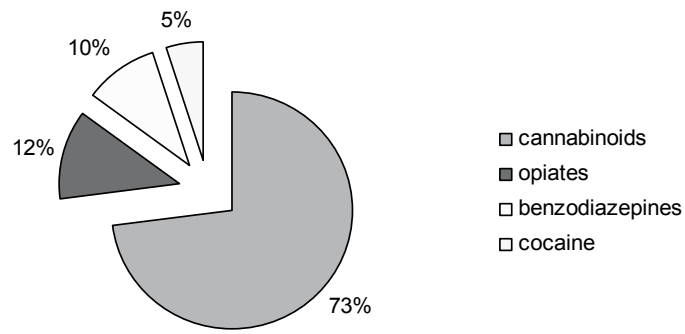


Figure 4. Drugs abused among candidates for security services during the period 2000-2006.

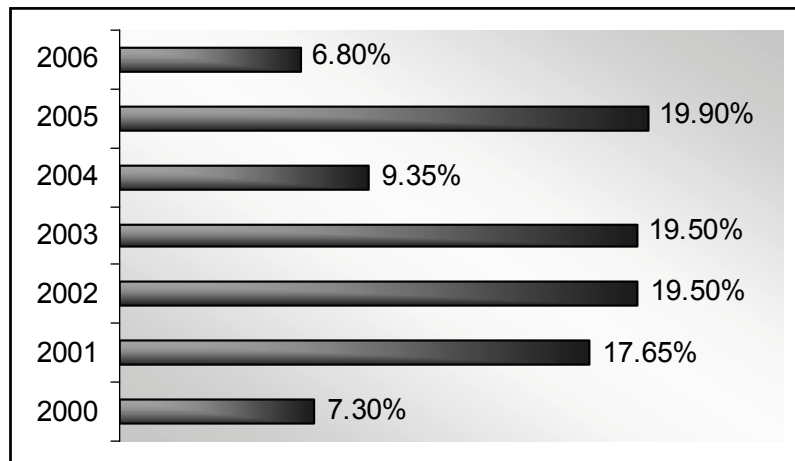


Figure 5. Distribution of drivers during the period 2000-2006.

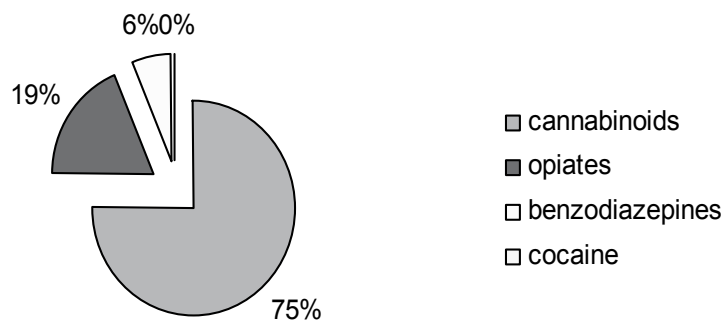


Figure 6. Drugs abused among drivers during the period 2000-2006.

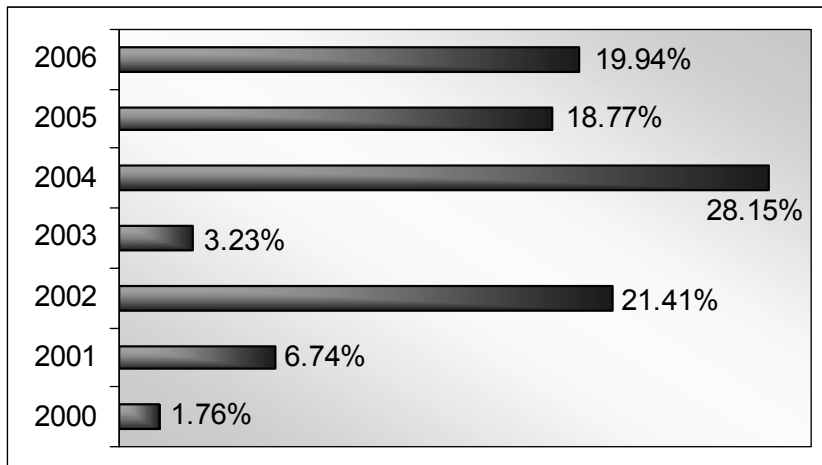


Figure 7. Distribution of prostitute cases during the period 2000-2006.

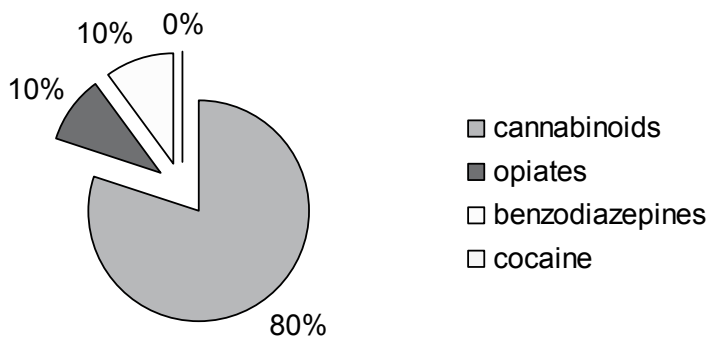


Figure 8. Drugs abused among prostitutes during the period 2000-2006.

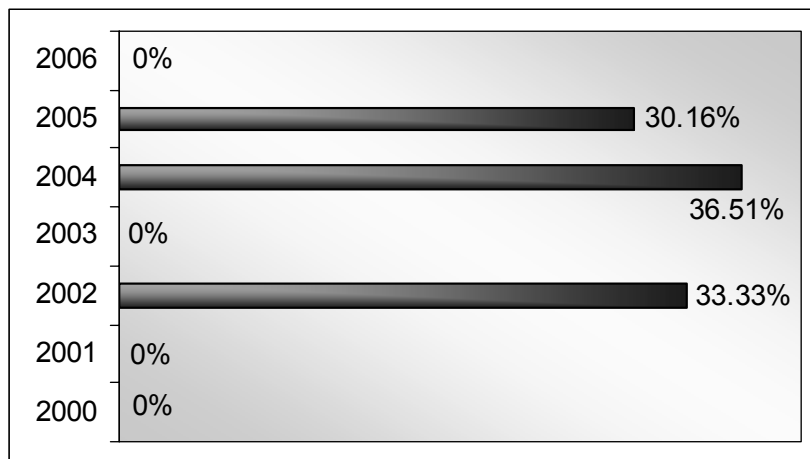


Figure 9. Distribution of housekeeper cases during the period 2000-2006.

Έλεγχος εξαρτησιογόνων ουσιών στο χώρο εργασίας στη Βόρεια Ελλάδα κατά το χρονικό διάστημα 2000 - 2006

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ΠΕΡΙΛΗΨΗ: Σκοπός της παρούσας εργασίας είναι η παρουσίαση δεδομένων σχετικών με τον έλεγχο εξαρτησιογόνων ουσιών στους χώρους εργασίας κατά το χρονικό διάστημα 2000-2006 στη Βόρεια Ελλάδα. Ο όρος εξαρτησιογόνες ουσίες χρησιμοποιείται για το σύνολο των ψυχοτρόπων ουσιών είτε αυτές είναι διεγερτικές (π.χ. κοκαΐνη, αμφεταμίνες) είτε κατασταλτικές (π.χ. οπιούχα, βενζοδιαζεπίνες) του ΚΝΣ. Οι περιπτώσεις που εξετάζονται αφορούν σε επαγγελματίες οδηγούς, σε άτομα που επιθυμούν να εργαστούν σε ιδιωτικές υπηρεσίες ασφαλείας (Security) και σε γυναίκες που επιθυμούν να εργαστούν σε οίκους ανοχής ως εκδιδόμενες ή ως υπηρετικό προσωπικό.

Στο χρονικό αυτό διάστημα εξετάστηκαν 2665 περιστατικά, κάθε ένα από τα οποία ελέγχθηκε για την παρουσία 5 κατηγοριών απαγορευμένων ουσιών (κανναβινοειδή, οπιούχα, βενζοδιαζεπίνες, κοκαΐνη, αμφεταμίνες). Ο αρχικός έλεγχος (screening) πραγματοποιήθηκε με ανοσοχημικές μεθόδους, ενώ η επιβεβαίωση των θετικών αποτελεσμάτων έγινε με χρωματογραφικές μεθόδους.

Από τα 2665 περιστατικά που εξετάστηκαν στα 7 χρόνια, το 67% αφορούσε σε υποψηφίους για πρόσληψη σε ιδιωτικές εταιρείες ασφαλείας, το 18% αφορούσε σε επαγγελματίες οδηγούς, το 13% αφορούσε σε γυναίκες που επιθυμούν να εργαστούν ως εκδιδόμενες σε οίκους ανοχής και το 2% αφορούσε σε άτομα που επιθυμούν να εργαστούν ως υπηρετικό προσωπικό σε οίκους ανοχής.

Από τα 2665 περιστατικά που εξετάστηκαν 105 δείγματα ήταν θετικά εκπροσωπώντας το 4% του συνόλου των δειγμάτων. Από τις διάφορες ουσίες που ελέγχθηκαν, τα κανναβινοειδή είναι τα πιο δημοφιλή εκπροσωπώντας το 72,81% του συνόλου των θετικών δειγμάτων. Τα οπιούχα αντιστοιχούν στο 16,27%, η κοκαΐνη στο 5,19% και οι βενζοδιαζεπίνες στο 5,73% του συνόλου των θετικών δειγμάτων. Τέλος αξίζει να αναφερθεί ότι δεν υπήρξαν δείγματα θετικά σε αμφεταμίνες.

Λέξεις Κλειδιά: Έλεγχος εξαρτησιογόνων ουσιών στο χώρο εργασίας.

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