

Thesis Title      Amphetamine Uses among Truck Drivers and  
                         Comparison of Urine Amphetamine Tests  
                         After Oral Administration

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Degree              Master of Science (Toxicology)

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Date of Graduation    27 April B.E. 2535 (1992)

#### ABSTRACT

This research was conducted to study the use of amphetamine among the truck drivers and the comparison of methods used to test for amphetamine tests in the urine of volunteers who had taken different of drugs. The study was divided into two parts. The first part, 245 truck drivers from different regions were interviewed. 82% replied that they have used amphetamine. Only 56.70% believed amphetamine was an addicting agent and they used it only while driving. The quantity used was half a tablet ( $x=0.47$ ). They paid 15-25 Baht per tablet. Furthermore, various factors related to the use of amphetamine were analyzed. It was found that the driving distance the driving time, income, (number of trips), the knowledge and attitudes about amphetamine were significantly related to the use of amphetamine among truck drivers (P-value

<0.05). The stepwise multiple regression showed that attitudes about amphetamine and free to sleep were two unrelated factor that could explain the regression of the use of amphetamine, most at  $f = 19.00$  and  $15.00$  respectively.

The second part is a comparative study of methods used for amphetamine tests in the urine among volunteers who have taken various types of medicines including amphetamine and not including amphetamine. The check up was conducted by three Methods: ONTRACK, TDX and COLOR TEST. It was found that ONTRAK gave positive result only for amphetamine. TDX gave positive result for both amphetamine, methamphetamine and other medicines not including amphetamine such as was Ponderal®. COLOR TEST gave positive result for amphetamine, methamphetamine and cold relief medicine such as maxiphed® (pseudoephridine). From this study, it was possible to find out the positive predictive value of TDX, COLOR TEST and ONTRAK as follow:

Test	TDX	Color test	Ontrak
Positive predictive value	100%	64%	100%
Negative predictive value	87%	21%	67%
Sensitivity	95%	14%	38%
Specificity	100%	75%	100%
Accuracy	96%	28%	33%

Moreover, it was found that coffee and drinks containing caffeine gave negative result by the three test methods. Furthermore, the study of water loading and urinary alkalinization did not show any significant differences (P-value  $<0.05$ ). Thus the methods of testing amphetamine in the urine should be further studied.