

$p=0.825$ and psychrotrophic bacteria was $p=0.884$ (level of significance=0.05). Depend on year, contrast to 2001 May, the significance of spring water for standard plate counts was $p=0.114$ (2002 May), $p=0.208$ (2002 Nov) and psychrotrophic bacteria was $p=0.109$ (2002 May), $p=0.213$ (2002 Dec) separately. There was no significant difference on quality of spring water using standard plate count depend on region in seoul for two years.

Poster Presentations – Field A4. Toxicology

[PA4-1] [04/17/2003 (Thr) 14:00 – 17:00 / Hall P]

Report on Trends of the Fatalities related to Drug-Toxicant and Drug Abuse in Central Area of Korea in 2002

Baeck SeungKyung^o, Kim SunChun, Kim DongWoo, Park YunSin, Seo JoongSeok

Central District Office of National Institute of Scientific Investigation

This report surveyed the trends of the fatalities related to the drug-toxicant (DT) and the drug abuse (DA), requested to analyze to the Central District Office of National Institute of Scientific Investigation for a year, 2002.

The mortality related to DT in men was more common than that in the women. The most common age group of DT intoxication was 30's. The causative DT, detected from the postmortem, were medicine (46.2%), pesticide (39.2%), cyanide (13.3%) and others (1.3%), in order of percentage.

The kinds of detected causative DT were paraquat (dipyridyl herbicide), cyanide (rodenticide), doxylamine (hypnotic and antihistaminic), acetaminophen (antipyretic & analgesic), caffeine (stimulant), parathion (organophosphorus insecticide and accaricide), cypermethrine (pyrethroid insecticide), chlorpheniramine (antihistamine), ibuprofen (analgesic and anti-inflammatory), endosulfan (organochlorine insecticide and accaricide), and methomyl (carbamate insecticide), in the order of frequency.

Men were more liable to DA than women, and the most common age group of DA was 30's. The detected abuse drugs (AD) were marijuana (42.3%), psychotropic (30.4%), opiate (11%), inhalant (7.9%), dextromethorphan (6.8%), and carisoprodol (1.6%).

Cannabinoid was abused by smoking, injection, oral administration, both smoking and oral administration, both smoking and injection, and methamphetamine, by injection, both smoking and oral administration, inhalation, and both oral administration and smoking, in sequence of frequency.

[PA4-2] [04/17/2003 (Thr) 14:00 – 17:00 / Hall P]

Case study of cyanide detection in fatalities by fire in Korea

Kim DongWoo^o, Baeck SeungKyung, Kim SunChun, Seo JungSeok

Central District Office of National Institute Scientific Investigation

Hydrogen cyanide is one of the toxic agents with carbon monoxide in fire victims and is released by combustion of nitrogen-containing organic material such as plastic and wool. Until now there are few reports about blood cyanide concentrations in fatalities by fire in Korea. So in