



NBCD

Current Drug Problems and Preventive Strategies in Taiwan



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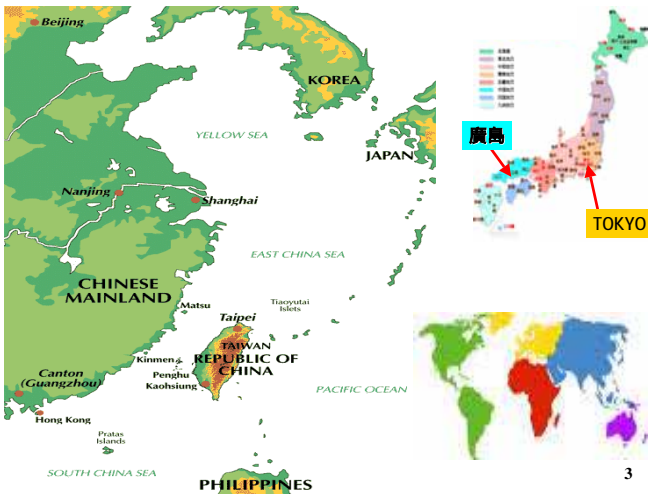
Department of Health



NBCD

Missions

- ❖ Crack down illicit use of controlled drugs
- ❖ Construct effective drug abuse control system

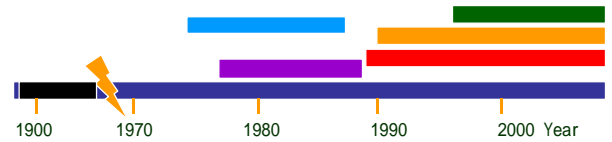


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Drug Problems in Taiwan

- Opium
- Barbiturates
- Methaqualone
- Pentazocine
- Heroin
- Pentazocine
- Heroin
- Amphetamines
- Benzodiazepines
- Heroin
- MDMA
- Marijuana
- GHB
- Ketamine
- Amphetamines
- Benzodiazepines
- Heroin



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Drug prevalence comparisons in the world

	Drug Abuser	Marijuana	Amphetamines		Cocaine	Opiates	Heroin
			Amphetamine	MDMA			
Number of drug abusers in the world (million)	200.0	160.9	26.2	7.9	13.7	15.9	10.6
% of the pop. aged 15-64 (%)	5.0	4.0	0.6	0.2	0.3	0.4	0.23
% of the pop. aged 12-65 in Taipei, Taiwan (2004)	1.5	0.5	0.7	0.2	0.05		0.1
% of the pop. aged 12-64 in Taiwan (2005)	1.2	0.3	0.6	0.5	0.1		0.2

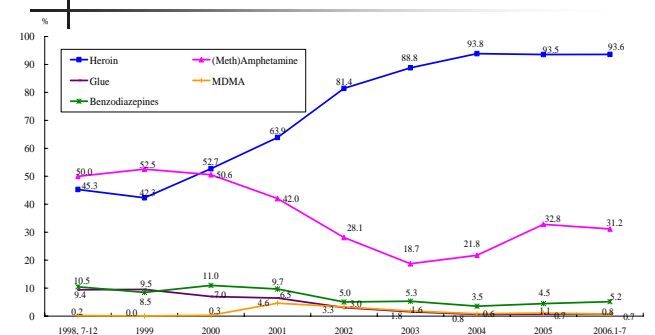
Source : UNODC, 2005 Annual Reports

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Percentage of Addiction Cases of Different Drugs Reported by Treatment Institutions in Taiwan

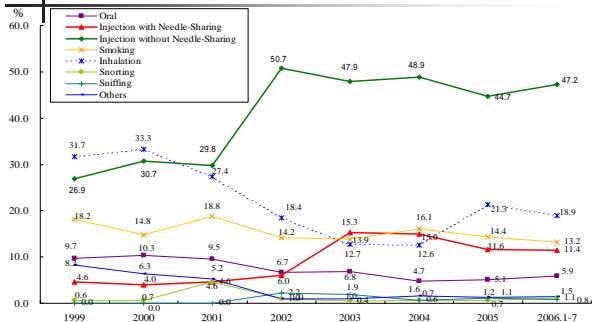


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Statistics of Means of Drug Abuse Reported by Treatment Institutions in Taiwan

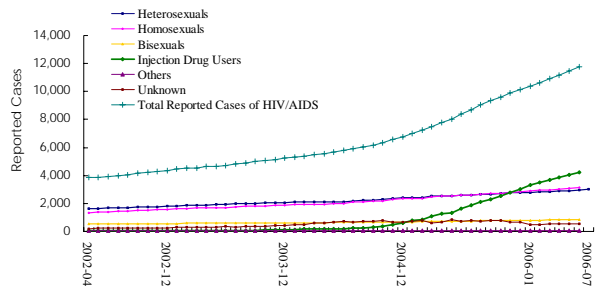


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Reported Cases of HIV/AIDS in Taiwan (2002.4-2006.7)



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Drug Abuse Characteristics



- More varieties of abused drugs
- The purity of drugs varies widely
- Multiple ingredient drugs
- Different approaches to drug abuse
- Diversion and abuse of legal drugs
- Rapid increase of HIV/AIDS cases related to injection drug use
- The increase of Counterfeit drugs

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Drug Abuse Characteristics— More Varieties of Abused Drugs



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PMMA



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2C-B Caffeine Lidocaine (Xycaine)



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AMT (α -methyltryptamine)



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4-Methylaminorex



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Diphenoxylate



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Various logos on seized MDMA containing tablets

7	Ice cream	Kangaroo	SPA	Bo	XO	T	Euro
Ap	88	Dove	mm	People	F1	Dove	Heart
Tulip	Fish	CU	EVA	Tai chi	Horse	Apple	McDonald
Castle	Maple	D	Lady	F	KO	Duck	Nike
HO	Foot	3	Pepper.	Benz	Panda	Mitsubishi	

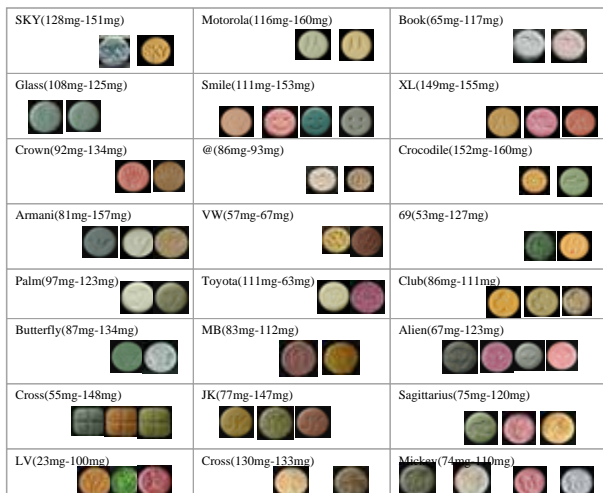


Drug Abuse Characteristics— The Purity of Drugs Varies Widely



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The Purity of Seized Drugs

Picture of Seized Drug	Purity (highest)	Purity (lowest)	Average purity	RSD
	159.5mg	116.2mg	137.8mg	17
	116.6mg	65.3mg	88.1mg	27
	148.6mg	121.4mg	131.8mg	9



Drug Abuse Characteristics— Multiple-ingredient drugs



Multiple-Ingredient Drugs

Content (%) year	1 drug	2 drugs	3 drugs	4 drugs	5 drugs	Over 6 drugs
1998	98.78	1.19	0.03	0.00	0.00	0.00
1999	85.50	12.66	1.84	0.00	0.00	0.00
2000	85.15	11.02	3.83	0.01	0.00	0.00
2001	74.47	13.30	11.92	0.28	0.03	0.01
2002	71.18	18.22	10.44	0.12	0.02	0.02
2003	82.28	7.90	9.54	0.19	0.08	0.01
2004	82.27	9.57	6.09	0.83	1.05	0.19
2005	72.70	15.02	7.48	2.57	1.54	0.69
2006	75.61	12.52	11.22	0.33	0.16	0.16

A drug contains more than 10 drugs inside: Ketamine + Nimetazepam + Acetaminophen + Caffeine + Chlorpheniramine + Ethenzamide + Lidocaine + Procaine + Phenytoin + Zolazepam + Tiletamine.



Poly-Drug Combination

The bottles were suspected to contain liquid Ecstasy, but MDMA, MDA, PCP, Ketamine, PMMA and Caffeine were found





**Diazepam
Flunitrazepam
Ketamine
Methamphetamine
Caffeine
Diphenhydramine**



◎ Diazepam, Flunitrazepam, Ketamine, Methamphetamine
Caffeine, Diphenhydramine 0212257 9 4 8 8 8 8 8



**Flunitrazepam
Methamphetamine
Nimetazepam
Nitrazepam
Acetaminophen
Caffeine**



◎ Flunitrazepam, Methamphetamine, Nimetazepam, Nitrazepam,
Acetaminophen, Caffeine 0202251 9 4 8 8 8 8 8

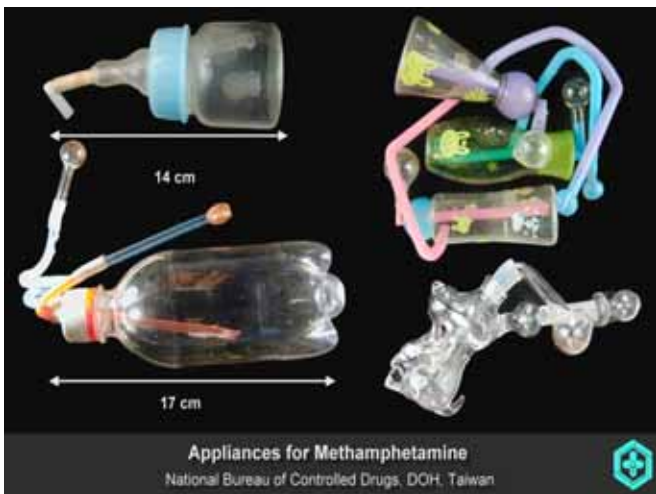


**Drug Abuse Characteristics—
Different approaches to Taking Drugs**



Appliances for Methamphetamine

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Appliances for Methamphetamine

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Appliances for Methamphetamine

Appliances for Methamphetamine

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Drug Abuse Characteristics— Diversion and Abuse of Legal Drugs



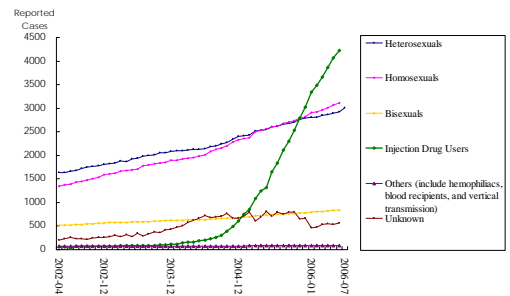
**Ketamine
PMMA
Nicotinamide
Caffeine**



Drug Abuse Characteristics— Rapid Increase of HIV/AIDS Cases Related to Injection Drug Use



Reported Cases of HIV/AIDS by Exposure Category in Taiwan (2002.4-2006.07) (Cumulative Cases)





Drug Abuse Characteristics— The Increase of Counterfeit Drugs



The Drug Looks Like **ERIMIN**, But is **Zaleplon**



The Drug is Labeled as **Stilnox** , but it does not Contain **Zolpidem**



The Drug Looks Like **FM2**, but is **Diazepam**



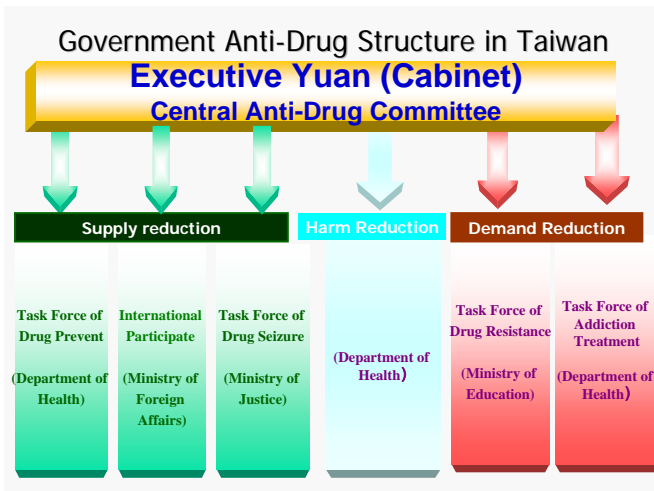
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Drug Abuse Preventive Strategies





Harm Reduction

- Pilot Projects for IDUs(2005.8~ 2006.12)
 - ❖ Clean Needle-Syringe Exchange Program (2005.8)
 - ❖ Substitution Treatment(2006.1)
 - Methadone
 - Buprenorphine
 - 4 Counties
 - Free for AIDS



Substitution Treatment Pilot program

Criteria for

- Patient Admission
- The Use of Substitute Medicine
- A Qualified Treatment Organization



Substitution Treatment Pilot program

Guideline for Pilot Substitution Treatment

- Patient Admission Criteria
 - DSM IV definition of opioid dependence
 - No adverse reaction to substitute medicine (Pregnant patients first)
 - Treatment agreement between patient and clinics in charge
 - Psychiatrist's evaluation and report
 - Patient drops out for 2 weeks, notice sent, and treatment terminated



Substitution Treatment Pilot program

Guideline for Pilot Substitution Treatment

- Substitute medicine
 - Methadone HCL oral solution
 - take medicine every day
 - initial dose 10-40mg/day
 - maintenance dose 20-120mg/day
 - Buprenorphine HCL/ Naloxone Sublingual tablet
 - daily dose 8mg, adjust as necessary
 - Take Every other day
- Take medicine at clinic, under medical staff supervision



Substitution Treatment Pilot program

Guideline for Pilot Substitution Treatment

- Treatment Organization
 - Designated by DOH for drug dependence or AIDS treatment
 - Medical quality assurance procedures
 - Separated space for Substitution Treatment and drug safety storage
 - Qualified Medical Team: Psychiatrists, Pharmacists, nurses, clinical physiologists, social workers, etc.
 - Psychiatrists have licenses to use controlled drugs and attend continuous education seminars for drug dependence treatment held by DOH 8 hr per year
 - Should have Controlled Drug Registration



New Drug Rehabilitation Program

Cooperation between Department of Health and Ministry of Justice

- Designated medical teams stationed in correctional institutions
- Drug Dependence Treatment & Community Rehabilitation



Thank you for your attention

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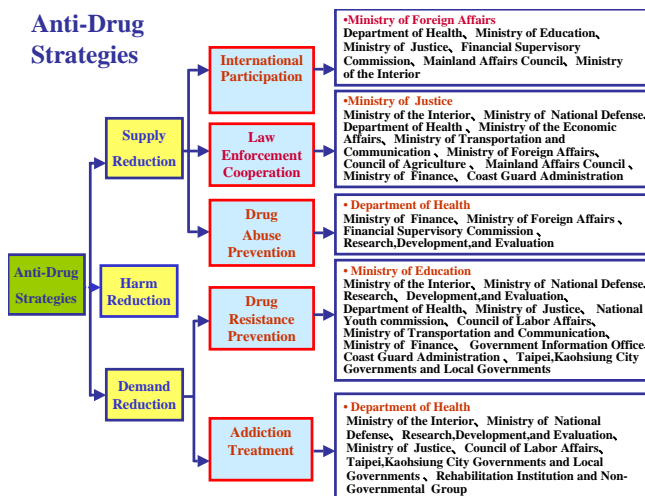


Ranking of the Amount of Seized Drugs in Taiwan

Rank Year	No. 1	No. 2	No. 3	No. 4	No. 5
2001	(Meth)Amphetamine 1421.0 kg	Heroin 362.5 kg	Marijuana 107.0 kg	MDMA 44.7 kg	Ketamine 9.5 kg
2002	(Meth)Amphetamine 1298.1 kg	Heroin 599.1 kg	Tramadol 147.2 kg	MDMA 132.6 kg	Ketamine 63.2 kg
2003	(Meth)Amphetamine 3980.5 kg	Ketamine 600.5 kg	Heroin 532.6 kg	MDMA 405.6 kg	Marijuana 121.2 kg
2004	(Meth)Amphetamine 3,165.5 Kg	Heroin 644.5 kg	Ketamine 613.4 kg	Ephedrine 363.6 kg	MDMA 303.3 kg
2005	Pseudoephedrine 5,400.0 kg	(Meth)Amphetamine precursor 3,300.1 kg	(Meth)Amphetamine 1,728.6 kg	Methylephedrine 835.1 kg	Ketamine 441.2 kg

Source : Office of Statistics and Informatics, Ministry of Justice

Anti-Drug Strategies



Drug Rehabilitation Therapeutical Community

- To reduce drug abuser's recidivism rate, DOH cooperates with MOJ
- Integrate rehabilitation and medical treatment program
 - The drug abuse treatment group of Tsaotun Psychiatric Center support Taichung Rehabilitation Institution
 - The drug abuse treatment group of Taipei City Hospital – Song De Branch, Taoyuan Psychiatric Center and Bali Psychiatric Center support Sindian Rehabilitation Institution
- Therapeutical Community
 - Provide follow-up counseling service and comprehensive drug abuse rehabilitation treatment