

The Hong Kong Poison Control Network and the Role of Department of Health

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Poisoning

- Adverse effects occurring after exposure to known or potentially toxic substance with symptoms & signs compatible with toxicity of that substance.
 - may be organ specific or systemic
- Poisoning cases of public health significance are reported to DH (excluding suicide/self-harm, domestic accidents & self-medication errors).
- Commonly involve Chinese herbal medicines, western drugs, oral products/slimming products adulterated with western drugs, heavy metal poisoning, etc.

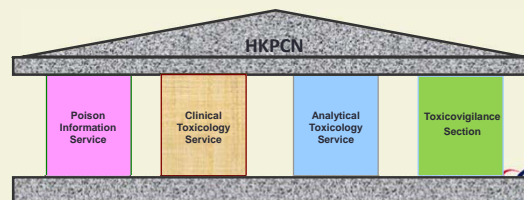
Effective management of poisoning incidents

- Poison information for healthcare professionals
- Laboratory support
- Treatment
- Reporting & surveillance
- Epidemiological investigation
- Public health measures
- Training & education
- Research

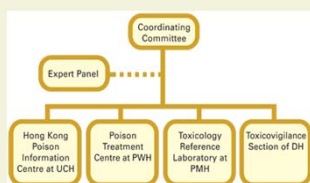


Hong Kong Poison Control Network (HKPCN)

- Established in April 2007 as an infrastructure for prevention & control of poisoning in HK.
- A network for enhancement of coordination of works & communication among various stakeholders in managing poisoning incidents.



- Comprises a Coordinating Committee, an Expert Panel and units in HA, DH & relevant government departments (e.g. CFS, Govt. Lab.)
- 4 key functional units:
 - Toxicovigilance Section (DH)
 - Hong Kong Poison Information Centre (HA)
 - Toxicology Reference Laboratory (HA)
 - Poison Treatment Centre (HA/CUHK)



Scope of services of HKPCN

1. Poisoning information and consultative service to healthcare professionals;
2. Poison treatment service;
3. Tertiary level clinical toxicology laboratory service;
4. Toxicovigilance (surveillance and epidemiology);
5. Risk communication;
6. Publicity and education;
7. Professional training; and
8. Research

Hong Kong Poison Information Centre (HKPIC)



- Provides 24-hr telephone consultation on poison information and management advice in clinical toxicology to all healthcare professionals
- Maintains a poison database for rapid access to updated poison information
- Provides inpatient & outpatient toxicology service in UCH
- Collaborates with DH in surveillance of poisoning
- As portal of reporting of all poisoning cases from 16 AEDs
- Provides training in clinical toxicology to healthcare professionals



Poison Treatment Centre (PTC)



- Jointly established by HA & Faculty of Medicine of CUHK
- Tertiary referral centre, esp. for management of patients with unusual poisoning
- Provides expert information and consultative service on clinical management of poisoning
- Provides general & specialist training in clinical toxicology for healthcare professionals



Toxicology Reference Laboratory (TRL)



- Set up as a toxicology reference laboratory for HA
- Provides tertiary level laboratory service on clinical / analytical toxicology
- Provides consultative service in herbal toxicology
- Provides diagnostic services for new or uncommon toxins / substances of abuse



DH's roles



- Main players - Toxicovigilance Section, Drug Office & Chinese Medicine Division
- Public health protection roles:
 - Epidemiological investigation of reported poisoning cases / outbreaks
 - Implementation of control measures to reduce exposure (e.g. product recall)
 - Risk communication to alert the public & healthcare professionals
 - Enhancement of surveillance
 - Coordination with HA, other government departments, academia & media
 - Enforcement actions if necessary



Chinese medicine related



- Examples:
 - Aconitine poisoning (烏頭鹼中毒) caused by herbs containing aconitine alkaloids, such as Processed Radix Aconiti Kusnezoffii (製草烏) & Processed Radix Aconiti (製川烏)
 - Anticholinergic poisoning caused by herbs containing tropane alkaloids, such as Flos Daturae Metelis (洋金花)
 - Matrine poisoning caused by Radix Sophorae Flavescentis (苦參)
 - Liver impairment induced by herbs with potential hepatotoxicity, such as Rhizoma Dioscoreae Bulbiferae (黃藥子)



Chinese medicine related (2)



- Causes:
 - Prescription errors, such as over dosage, improper duration
 - Contamination of benign herbs with toxic herbs (hidden)
 - Dispensing errors due to misidentification of herbs with similar appearances
 - Improper decoction or consumption, e.g. inadequate decoction
 - Misuse of herbs without consulting CMP



Western medicine related



- Main types of western medicines:
 - Steroids causing iatrogenic Cushing's syndrome, adrenal insufficiency
 - NSAIDs causing renal impairment
 - Anti-diabetic drugs causing hypoglycemia
 - Sibutramine causing psychosis
- Underlying causes:
 - Adulteration of slimming products / oral products / proprietary Chinese medicines with undeclared or banned western medicines
 - Dispensing error in old age homes
 - Intake of prescription-only medicines related to malpractice of pharmacies



Others



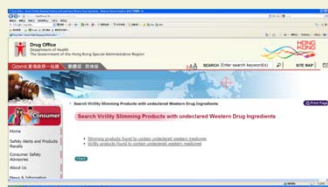
- Heavy metal poisoning
 - Mercury, e.g. related to facial cream
 - Lead, e.g. related to pCm
 - Arsenic, e.g. related to pCm
- Mushroom poisoning (investigated as food poisoning)
- Pesticide poisoning



Risk communication



- Timely announcement of details of cases & warnings
 - Press releases
 - Alert on Chinese Medicines
 - Safety Alerts and Products Recalls
- Database on slimming products & virility products with undeclared western drug ingredients



Publicity and education to raise public awareness



Control measures



- Measures to reduce exposure
 - Removing advertisement from internet auction site
 - Seizing incriminated products from involved shops
 - Recall of products
- Measures to enhance surveillance
 - Enhance market surveillance in local pharmacy shops, retailers and the internet
 - Collect product samples for chemical analysis
 - Test purchase from alleged sources, including pharmacies, websites, etc.
- Enforcement of related legislations/regulations with the Police if there is sufficient evidence, e.g. raid operations



Chinese Medicine related legislation



- **Chinese Medicine Ordinance (Cap. 549)** enacted in 1999
 - Regulation of Chinese Medicine Practitioners
 - Registration system
 - Disciplinary system
 - Continuing education system
 - Regulation of Chinese Medicines
 - Licensing of Chinese medicines traders
 - Import & export control
 - Monitoring system for safety
 - Registration of pCm
- Chinese Medicine Council of HK is responsible for implementing regulatory measures.



Western medicine related legislations



- **Pharmacy and Poisons Ordinance (Cap. 138)** imposes regulation on drugs containing any western medicine as ingredients
 - Registration of pharmaceutical products
 - Licensing control on manufacturers, wholesalers, importer/exporters & retailers
- **Antibiotics Ordinance (Cap. 137) & Dangerous Drugs Ordinance (Cap. 134)**
 - Antibiotics & dangerous drugs are prescription medicines and could only be sold on doctor's prescription in registered pharmacies under supervision of a registered pharmacist.



Other related ordinances



- **Public Health and Municipal Services Ordinance (Cap. 132)** imposes regulation on medicines & foods on whether they are suitable for human consumption, and affixing of false label
- **Undesirable Medical Advertisements Ordinance (Cap. 231)** imposes regulation on advertising of medicines and orally consumed products
- **Trade Descriptions Ordinance (Cap. 362)** imposes regulation on counterfeit medicines & false representations
- **Import and Export Ordinance (Cap. 60)** controls importation of pharmaceutical products & medicine
- **Pesticides Ordinance (Cap. 133)** regulates the import, manufacture, formulation, distribution, sale and supply of all pesticides



Regional collaboration



- Maintain close communication with counterparts in areas outside HK, e.g.
 - China Food and Drug Administration
 - Macau Health Authority
 - World Health Organization



Thank you