

CUT

A Guide to the Adulterants, Bulking agents and other Contaminants found in illicit drugs.



Terminology

- Adulterants
 - pharmacologically active ingredients (synergistic or antagonistic effects)
- Contaminants
 - by-products of the manufacturing process
- Diluents
 - inert substances added bulk (decreases the amount of active ingredient)



Perception & Myth



Presentation Aim

- To provide an evidence-based overview of illicit drug adulteration

Method

- Systematic searching of peer reviewed publications, grey literature and internet sources



Reasons for the presence of adulterants

- To add bulk
- To enhance or mimic
- To facilitate administration
- As the result of poor/unsterile manufacture



Add Bulk

Usually....

- Relatively cheap
- Legal
- Readily available

Their purpose:

- To dilute
- Increase profit



Caffeine, Sugars, Paracetamol



Enhance or mimic

- Similar to an illicit drug, adulterants may:
 - Have pain relieving properties
 - E.g. procaine in cocaine
 - Have the same taste and/or look
 - E.g. paracetamol in heroin and MSM in methamphetamine
 - Cause the same effects/feelings in drug users
 - E.g. lidocaine in cocaine (similar anesthetic effects)



Facilitate administration

- There are a number of substances which make it easier to smoke drugs
 - Heroin - caffeine, procaine, quinine
 - Cocaine – caffeine

Public health consequences of drugs manufactured for a specific administration route becoming available to other users (i.e. injecting drug users)



Manufacture & Packaging

- Manufacture by-products/residues
 - E.g. lead from cooking pots (heroin/methamphetamine)
- Bacteria caused by unsterile or inferior storage/packaging/distribution
 - E.g. recent anthrax outbreak in UK amongst IV heroin users



Country specific adulteration



Levamisole
– Cocaine



* MSM –
Methamphetamine
** PMMA/PMA –
Ecstasy



Clenbuterol – Heroin
Lead - Methamphetamine
Dextromethorphan – Ecstasy

*MSM - Methylsulfonylmethane

**PMMA - paramethoxymethamphetamine

PMA - paramethoxyamphetamine



Recent/emerging adulterants

- Phenacetin in cocaine
- Lidocaine in cocaine
- Anthrax contaminated heroin
- Other MDMA analogues in/as Ecstasy



Public Health Response



Identification of illicit drug adulteration

Immediate response

Specific response

Treatment

Review & debrief

- Dissemination of information**
- (Potential) adulterant & (suspected) source
 - Potential harm(s)
 - Spread & how to avoid
 - Guidance for identification & to avoid further contamination
 - Alternative routes of drug administration
 - Emergency response
 - Treatment & support
 - Dissemination of warning to other orgs
 - Contact for further information

The Media

- Messages about drug adulteration are often disseminated through the media.
- The media often sensationalize these messages
- Media messages should be assessed for effectiveness





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New warning over dirty cocaine

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Thursday, 3 August, 2000, 18:47 GMT 19:47 UK

Killer heroin claims new victim



Harm Reduction Messages

- Early warning systems and improved surveillance
- Standardised reporting
- Evidence-based interventions
- Improved awareness and information availability for emergency & drug treatment personnel



Conclusions

- There are a variety of reasons why illicit drugs are adulterated
- Most adulteration substances are benign, enhancers, facilitators or by-products/bacteria
- Improved surveillance, early warning systems and information are required
- Interventions guide & communication strategies





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<http://www.cph.org.uk/showPublication.aspx?pubid=632>

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