Drug Status Report

Drug: Acetylfentanyl

Drug Name Status: Acetylfentanyl is the common name

Chemical Name: N-phenyl- N-[1-(2-phenylethyl)-4-piperidinyl]- acetamide

Chemical structure:

![Chemical structure of Acetylfentanyl](image)

Molecular Formula: C$_{21}$H$_{26}$N$_2$O

Pharmacological class / Application: Fentanyl

International status:

US: Acetylfentanyl is not currently listed in the Schedules to the CSA and is not mentioned on the DEA website.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control nor the Green List - List of Psychotropic Substances under International Control.

Canadian Status: Acetylfentanyl is not currently listed in the Schedules to the CDSA. However the substance is an analogue of fentanyl$^1$ and contains the common root structure of the fentanyls as shown below:

![Chemical structure](image)

$R_1$=ethyl group substituted variously at the 1 and 2 position
$R_2$=hydrogen, methoxymethyl or carboxylate alkyl ester
$R_3$=phenyl or substituted phenyl
$R_4$=alkyl
$R_5$=hydrogen or alkyl

Therefore, acetylfentanyl must be included under the heading “Fentanyls, their salts, derivatives,

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and analogues and salts of derivatives and analogues, including”of item 16 of Schedule I to the CDSA.

Recommendation: Acetylfentanyl is included under item 16 of Schedule I to the CDSA and is a controlled substance.

June 20th 2010