

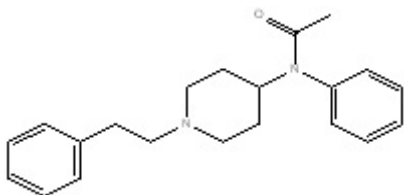
Drug Status Report

Drug: Acetylfentanyl

Drug Name Status: Acetylfentanyl is the common name

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

Chemical structure:



Molecular Formula: C₂₁H₂₆N₂O

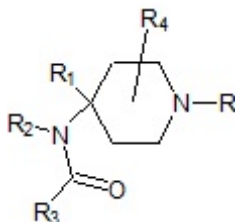
Pharmacological class / Application: Fentanyl

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 fentanyl¹ and contains the common root structure of the fentanyls as shown below:



R=ethyl group substituted variously at the 1 and 2 position

R₁=hydrogen, methoxymethyl or carboxylate alkyl ester

R₂=phenyl or substituted phenyl

R₃=alkyl

R₄=hydrogen or alkyl

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

¹Ruangyuttikarn, W. *et al.* (1990) Detection of fentanyl and its analogues by enzyme-linked immunosorbent assay, *J. Anal. Toxicol.* **14**:160-164.

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