

The W-series compounds

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What are the W-series compounds?

The “W-series” compounds were discovered at the University of Alberta in 1982. There are 32 compounds, denoted W-1 to W-32. The PhD thesis research was performed on mice; it was reported that some of these compounds decreased the physical response of mice to painful stimuli. Although these substances were previously referred to as synthetic opioids, recent studies suggest that they likely do not bind to opioid receptors. One of these compounds, W-18, has been found in drug samples seized by Canadian law enforcement in forms made to appear like legitimate prescription tablets such as oxycodone. On June 1st, 2016 Health Canada decided to add W-18 to Schedule 1 of the Controlled Drugs and Substances Act, rendering unauthorized activities such as production, possession, importation, exportation, and trafficking of W-18 illegal. The new legislation is intended to help law enforcement across Canada keep this potentially dangerous substance off Canadian streets and away from vulnerable individuals.

How are W-series compounds detected?

Special tests allow certain labs to test for the presence of W-series compounds. Unlike more commonly available drugs, they are not a part of routine drug testing and screening. Therefore, the laboratory must specifically look for the W-series compound in question, and they must have the standard compound to test against. Thus, testing for the compounds is limited, and detection can take longer than other drug tests.

What is the effect of W-series compounds on humans?

Although the W-series compounds were initially developed for potential pain relief, there is no human data publicly available, and they have not been used in clinical situations. Knowledge regarding effects on humans, the mechanisms of action, and the pharmacology of these compounds is largely unknown.

Will naloxone reverse the effect of W-series compounds?

There is little evidence for the use of naloxone in these compounds. However, despite the fact that it may not reverse the action of W-series compounds, administration of naloxone is recommended. Naloxone will not cause harm and if the overdose is due to a mixture of substances, naloxone will take any opioid out of the picture.

For those who choose to use substances, what can be done to be safer?

You can't be sure what is in the illegal drug you are taking, so...

- * Use in a supervised site if possible (InSite in Vancouver)
- * Make a plan and tell someone you are using; have a sober buddy who can call for help if needed
- * Don't mix drugs or mix drugs with alcohol
- * Know your tolerance. If you are sick or had a time of abstinence or reduced use, use much less
- * Test a small amount first and go slow
- * Get overdose prevention, recognition, and response training; carry naloxone
- * Call 911 right away if someone ODs
- * Administer naloxone if someone ODs

What should be done in the event of an overdose?

In any suspected overdose, it is important to immediately call 911 for professional guidance. If there are signs of respiratory depression, the following algorithm can be followed:

Monitor and support the patient's respiratory efforts immediately and throughout the overdose by maintaining a clear airway and providing ventilation.

1. Pause ventilation temporarily to administer one dose (0.4 mg) of naloxone from the "Take Home Naloxone" kit, and then re-establish respiratory support.
2. If there is no improvement in spontaneous breathing 3-5 minutes after naloxone administration, administer another 0.4 mg dose of naloxone.
3. Repeat the above steps until the patient can be seen by a healthcare professional.

Follow the **SAVE ME** steps below to respond.



If the person must be left unattended at any time, put them in the recovery position.



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