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Antihistamines:
Effects on Human Performance and Behavior

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Antihistamines: Effects on Human Performance and Behavior

Antihistamines, or H1-antagonists, are indicated for the treatment of allergic conditions. The most frequent reported side effects of antihistamines are drowsiness or sleepiness and slower responding. This sedation is due to the blockade of the H1-receptors in the brain, which are involved in the regulation of processes such as the maintenance of optimal alertness and cognitive functioning. However, the magnitude of sedation varies greatly among antihistamines. This has led to a division in categories of antihistamines: first and second generation antihistamines. First generation antihistamines have been shown to decrease work productivity and to increase risk of injuries and traffic accidents, whereas second generation antihistamines produce little or no impairment of alertness or cognitive performance at therapeutic doses. Yet, only a few antihistamines have been demonstrated to be free of sedative effects at any given dose. On the other hand, some antihistamines have sporadically been found to improve alertness or cognitive performance.

This presentation will give an overview of the sedating potential of antihistamines on human performance and behavior. Special attention will be given to the effects of antihistamines on driving performance.