



# Poison HOTLINE

Partnership between Iowa Health System and  
University of Iowa Hospitals and Clinics

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## Did you know .....

Broken glass thermometers containing mercury account for 57% of the mercury exposures reported to the ISPCC this year. Spills from broken thermometers, barometers, or damaged electrical switches may result in exposure to mercury vapors in indoor air. Special care is needed when cleaning up a mercury spill since the potential exists for inhalation exposure to the mercury vapor. A vacuum or broom should never be used to clean up a mercury spill.

If you discover a mercury spill of any kind, call the ISPCC (800) 222-1222 for clean-up recommendations.

## Wellbutrin (bupropion) SR and XL Overdose: Frequent Cause of Delayed-Onset Seizures

Bupropion (Wellbutrin®, others) is available in 75 mg and 100 mg immediate release (IR) formulation and from 100 to 300 mg in the sustained release (SR) and extended release (XL) formulations. Bupropion works by inhibiting the reuptake of dopamine and norepinephrine and is FDA approved for smoking cessation and depression.

Mild to moderate overdose can manifest dizziness, tremor, agitation, lethargy, and tachycardia. Severe overdoses can result in hyperthermia, status epilepticus, EKG changes and ventricular arrhythmias. Three specific concerns from a bupropion OD are seizures, EKG changes and serotonin syndrome.

### Seizures

Bupropion is structurally similar to amphetamines, and the most serious effects of bupropion in acute overdose are tremors and seizures. Seizures usually occur within 6 to 8 hours following ingestion of immediate release products. After ingestion of SR and XL products, seizures may be delayed up to 19 hours post-ingestion. One abstract reported seizures occurring 32 hours after ingestion of 4.5 grams of bupropion SR. Tachycardia is almost always seen in patients who develop seizures after bupropion overdoses.

### Changes in QRS and QT/QTc Intervals

Sinus tachycardia is common in bupropion overdose and widening of the QRS and QT/QTc intervals has been documented to occur as a result of bupropion OD. Therefore, obtaining a 12-lead EKG and providing continuous cardiac monitoring is recommended for patients presenting with a bupropion overdose.

### Serotonin Syndrome

Bupropion weakly inhibits neuronal reuptake of serotonin. Because of this, patients are, at least theoretically, at risk of serotonin syndrome following a bupropion-alone overdose. Serotonin syndrome has been reported after an overdose of bupropion with other serotonergic drugs. Serotonin syndrome is manifested by neurological excitation (hyperreflexia, clonus, etc.), autonomic hyperactivity (tachycardia, diaphoresis, etc.) and mental status changes (agitation, confusion, etc.).

Carol Searls, MS, RN  
Specialist in Poison Information

**POISON**  
**Help**  
**1-800-222-1222**

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