

web**POISONCONTROL** Background

web**POISONCONTROL** is an innovative online triage tool and app that offers a new way for the public to find out what to do in a poison emergency. It provides age, weight and substance-specific recommendations for possible poisonings like these:

- My toddler just got into grandma’s blood pressure pills.
- The baby ate a cigarette butt.
- I sprayed cleaner in my eye.
- Oops, the blue liquid in that cup wasn’t soda. I just swallowed antifreeze.
- My teen took 6 pain pills for her headache.
- My wife inhaled bleach fumes.
- My 2 year old drank hand sanitizer.
- My husband splashed gasoline on his leg.
- My son ate half a bottle of gummy vitamins.
- I took my husband’s medicine instead of mine.

web**POISONCONTROL** guides users through a series of simple questions to help you decide what to do when substances that could be poisonous are swallowed, splashed in the eye or on the skin, inhaled, or injected. After providing the name of the substance, amount, age and weight, the user is given a case-specific recommendation. That recommendation could be: it’s safe to stay home because toxicity is minimal; go immediately to the ER; or call Poison Control (1-800-222-1222) for further guidance. When it’s safe to stay home, the user is also given information on symptoms that are likely to occur and not of concern, and symptoms that should trigger a call to Poison Control or an ER visit, should they develop.

Get it Now – Be Prepared for a Poison Emergency

web**POISONCONTROL** is an online web tool (www.webpoisoncontrol.org) as well as a free mobile app downloadable on the [App Store](#) or on [Google play](#). The mobile app offers the additional feature of product barcode scanning, allowing the user to select the implicated product more quickly and accurately.

Parents and childcare providers are encouraged to be prepared for a poison emergency and should download the app to a mobile device *before* it’s needed. Or go to webpoisoncontrol.org and try it out. Click on the orange button labeled “HELP ME with a possible poisoning”, then check the box labeled “I’m just trying the tool. This is not a real case.”

While the triage tool is the unique component of web**POISONCONTROL**, the online version has an accompanying pill identifier, scores of articles on specific poisons with toxicity information and prevention tips, downloadable prevention materials, and a summary of U.S. poisoning stats. The site also offers an opportunity to [subscribe](#) to a free, quarterly poison safety e-newsletter: The Poison Post[®].

Forging Change in the Way Poison Control Services are Delivered

The safety and feasibility of web**POISONCONTROL** were established through intensive pilot testing that began on Dec 30, 2014. Now, the online tool is being promoted for broad public use. Continued enhancements are improving the user experience. Sponsored by the National Capital Poison Center in

Washington, DC, [15 accredited U.S. poison centers](#) are participating in the project. web**POISONCONTROL** is entirely funded by charitable contributions.

The Need for Online Poison Control

web**POISONCONTROL** was developed to respond to a shift in the way people access health information, with a growing use of computers and smart phones to obtain information on the internet instead of by telephone. According to the U.S. Census Bureau, 83.8% of U.S. households owned computers and 73.4% had high-speed internet connections in 2013. Seventy-two percent of internet users look for health information online. Studies conducted by the Pew Research Center show that 64% of Americans own smartphones, and 62% of owners use their phone to obtain health information. This shift has contributed in part to a 13.1% decline in human poison exposures reported to poison centers from 2008 to 2014, indicating that a growing portion of the public prefers to get poison help online rather than by phone.

In the past, turning to the internet for guidance in a poison emergency wasn't a safe option. Case-specific poison information available on the internet was limited and often inaccurate. The primary reason we developed web**POISONCONTROL** was to provide an online Poison Control resource that the public can trust. That's why web**POISONCONTROL** was created and meticulously reviewed by poison control experts – board-certified clinical and medical toxicologists and Certified Specialists in Poison Information at accredited poison centers.

The second reason for developing web**POISONCONTROL** relates to the U.S. poison centers' constant struggle to secure adequate funding. Time and time again, poison centers have been shown to provide life-saving and cost-saving services, with a recent [study](#) estimating the return on investment at \$13.39 saved per dollar spent. But despite undisputed efficacy of services, poison center funding at most of the 55 U.S. poison centers remains unstable. web**POISONCONTROL** has the potential to decrease the cost of providing poison control services nationally, lessening the fiscal challenges facing traditional poison centers.

The third reason for developing web**POISONCONTROL** was to improve the efficiency of delivering poison control services by establishing standardized triage algorithms. These algorithms form the core of web**POISONCONTROL** and also guide Specialists in Poison Information in the eight participating poison centers. As a result, the inefficiencies of repeatedly researching a substance's toxic threshold are eliminated, as are the inefficiencies of each poison center developing guidelines independently. Furthermore, care becomes more uniform both within centers and from one geographic region to another.

How it Works

web**POISONCONTROL** is powered by 1,540 ingredient-based algorithms, each matched to the corresponding ingredient(s) in more than 63,000 products. An additional 222,000 product barcodes are linked in the product database to enable product identification by scanning. The algorithms provide age- or weight-based triage thresholds for each ingredient. Algorithms also outline the justification for the threshold, list the expected symptoms and the symptoms which require further medical evaluation, specify appropriate home treatment where appropriate, define the onset and duration of symptoms, and set a risk window beyond which significant toxicity is unlikely if clinical manifestations have not already begun. Special logic is incorporated to handle each formulation type, multi-ingredient products, multiple routes (swallowed, eye, skin, inhalation, injection), unknown amounts, unknown weight, and

the minimum possible weight for age. Users are encouraged (but not required) to provide an email address to receive a copy of the case and recommendations. The email address also serves as the key to case follow-up, and users are emailed at intervals appropriate to the substance kinetics and urged, for their own safety, to follow a link to a follow-up module. That module gathers information on what was actually done (stayed home, went to ER, admitted to hospital, etc) and what specific symptoms developed, if any. Any specific symptoms are further evaluated and compared to worrisome effects of the poison exposure, triggering a change in the triage recommendation for the case if indicated.

When to Call Poison Control and When to Use the App:

More than a third of human poison exposure cases handled over the phone by traditional poison centers could potentially be handled online if the user preferred to do so. web**POISONCONTROL** is a game changer, and may dramatically alter the delivery of poison help in the U.S., but it certainly will not make poison centers obsolete. Human experts are still required to provide triage or treatment guidance for complex cases. Use web**POISONCONTROL** for unintentional, acute, single substance cases. The app is for people who are between the ages of 6 months and 79 years and are not pregnant. For all other cases call Poison Control at 1-800-222-1222. If you'd rather talk to a real person, you can always call Poison Control for immediate and expert assistance. Your call is free and confidential. Above all, don't guess. Either use web**POISONCONTROL** or call.

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