

# ADA listens to the science: “BPA in dental sealants safe”

BY STEVEN HENTGES, PH.D ON AUGUST 24, 2016 IN INDUSTRY

Many of today’s consumer products are safer and more effective, thanks to [bisphenol A \(BPA\)](#). Every day we benefit from clear, shatter-resistant polycarbonate plastic and tough epoxy resins, both made from BPA.

From eyeglass lenses to bicycle helmets, and security shields to life-saving medical devices, polycarbonate makes our lives more livable. Almost invisibly, epoxy resin coatings protect metal surfaces from degradation and support food safety by protecting canned foods from contamination.

But the single product that provides the most benefit for the least amount of BPA is almost certainly dental sealants. While BPA itself has no direct use in dental sealants, many sealants are based on a derivative of BPA known commonly as bis-GMA (or for the chemists, bisphenol A glycidyl methacrylate). As [noted by the American Dental Association \(ADA\)](#), “[t]he introduction of [bis-GMA] by Dr. Raymond Bowen in the 1950’s revolutionized dentistry.”

Because bis-GMA may contain ultra-trace levels of residual BPA, it has been suggested that bis-GMA based sealants may not be safe. In response to these claims, ADA has invested considerable effort over the years to carefully evaluate sealant safety. That’s to be expected since ADA is America’s leading advocate for oral health and there’s a lot at stake.

The latest chapter from ADA should emphatically put safety concerns to rest. In a new study, the ADA Science Institute analyzed 12 dental sealants to provide a more complete understanding of the U.S. market. As reported in ADA’s [Professional Product Review](#), the study “demonstrates extremely low BPA release” from the sealants. The median amount of BPA released was 0.09 nanograms from the amount of sealant applied to four teeth (you read that right, nanograms!).

Compared to total BPA exposure from all sources, as recently estimated by the [European Food Safety Authority](#), the contribution from dental sealants is limited to 0.001%. Needless to say, this amount is orders of magnitude below safe intake limits set by government bodies worldwide. Although exposure to BPA from sealants only occurs over a period typically limited to a couple of hours after application, the tooth-saving benefit of sealants lasts for years.

Listening to the science, ADA’s overall conclusion, as summarized in the headline to its news release, is “[BPA in dental sealants safe](#).” That conclusion is consistent with the conclusions of government bodies worldwide that have reviewed the science on BPA. Most

notably, the U.S. Food and Drug Administration answers the question “[Is BPA safe?](#)” with the most straightforward answer possible – “Yes.”

Learn more about BPA by visiting [www.FactsAboutBPA.org](http://www.FactsAboutBPA.org).