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Institute of Medicine's Workshop on Potential Health Hazards Associated with Consumption of Caffeine in Food and Dietary Supplements

Public Comments Provided to the Working Group

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"My comments relate to poison control adverse event data presented here today and also submitted to the committee in the form of a recent publication in the journal clinical toxicology. In the published article providing a breakdown of the 1480 non-alcoholic energy drink exposures, when tabulating the outcomes for all age groups but especially for the <12y populations, it's disappointing that 2 of the most important outcome categories in the entire database; the asymptomatic outcomes of no follow-up non-toxic and no follow-up, not-more-than minor effects possible, were left out of the data presentation.

When including these outcomes for the non-alcoholic energy drink exposures that involved children <6y, although they had the highest exposure rate, it demonstrates that they also had the lowest incidence of any adverse effects including the fact that there was no serious outcomes. In fact, 85% of the cases were either non-toxic in nature or resulted in no adverse consequences. In those cases where adverse effects were reported, almost all were minor in nature. When including 6-12y populations the non-toxic events were still >80% and serious outcomes were rare (0.1%). Leaving out these 2 outcome categories distorts the denominator and exaggerates the overall relative percentage of adverse effects in all populations. A more meaningful statistic would be to highlight the average age of all symptomatic exposures which would likely demonstrate that older teens and adults are the target populations for risk mitigation efforts.

For the 13-<20y population which is straddling both underage teens, and legal adults, as well as targeted and non-targeted markets, the overall numbers of incidents were extremely low considering the ubiquitous availability of products. Even for the 249 cases tabulated, serious outcomes appear to be uncommon (<0.5%) within the reported incidents.

Regarding serious outcomes for all populations, the data appears to suggest that serious outcomes are uncommon in all populations, under any circumstance. So, notwithstanding the possibility of coding errors, lack of incident confirmation and even anonymous reporting, 7 major effects is small.

It's further disappointing that virtually no incident details were provided for the 7 cases such as an indication of which products may have been involved, the formulation characteristics, doses of caffeine producing the reported effects and investigation of all other factors potentially contributing to the reported adverse effects. Lastly, for the data presented today by Dr. Bronstein, I pointed out earlier that an important distinction for unintentional exposures in children <12y was omitted from the conclusion, and that is that more than 80% of exposures resulting from unintended events in this population do not result in any reported adverse effects. A positive and important message from the presentation is that more focused post-market surveillance is needed to define which products and formulations do give rise to adverse effects especially in those populations routinely consuming various products. This will certainly help focus injury prevention methods for the appropriate populations."