

## IMPORTANT FINDINGS FROM THE UNIVERSITY OF GEORGIA STUDY

“These results indicate that IPIA Ice is produced under more sanitary and controlled conditions than the packaged ice produced and sold at retail establishments and self-service vending machines.”

“Overall, this study indicates a need for more sanitary practices in the packaging of ice on the premises of retail locations and for cleaner vending machines.”

“These results suggest there is also a need for more secure, sanitary methods of closing these bags, such as mechanically sealing.”

“These unacceptable retail samples could indicate a contaminated water source, mold and slime in the ice machine, unsanitized ice scoops or utensils, unsanitary packaging process or unhygienic staff handling.”

## THE STUDY FOUND THAT NO SAMPLES TAKEN FROM IPIA FACILITIES HAD NEGATIVE FINDINGS.



## IMPORTANT TO READ... THE STUDY RESULTS REINFORCE THESE TWO FACTS:

- If you make and bag your own ice or if you own ice vending machines, your customers are at an increased risk of being exposed to contaminated or adulterated ice and you may be liable for damages and/or recall expense.
- The only way to completely protect your business against this risk is to make sure you are selling packaged ice manufactured by a member of the IPIA. The logo is on the ice packaging.

## BE WARY OF THE RETAIL BAGGED ICE AND VENDING MACHINE ICE “CERTIFICATION” MYTH:

*Both retail bagged ice machines and vending machine ice equipment tend to be manufactured to meet NAMA and/or NSF standards which are often cited by the retailers/vendor owners and manufacturers as a certification of quality. The NAMA and NSF standards cited are production standards only for the equipment and structures, not for food quality and safety. The NAMA and NSF standards do not cover the necessary frequent cleaning and sanitizing of the ice making or bagging equipment, scoops, source water quality and staff hygiene, all vital to safe packaged ice as the study reiterates.*



[www.packagedice.org](http://www.packagedice.org)



To learn more, scan the code or visit our safe food web site at [www.safeice.org](http://www.safeice.org)

# NEW STUDY ASKS ... ARE YOU SELLING CONTAMINATED ICE TO YOUR CUSTOMERS?

The most comprehensive and important study to ever look at the safety of packaged ice is finished.

Millions of pounds of packaged ice are produced by retailers and vending machines. The study results definitively show that a lot of this ice could put the consumer at risk.



*The Seal of Approval for Packaged Ice*

[www.packagedice.org](http://www.packagedice.org)

[www.safeice.org](http://www.safeice.org)

## THE STUDY

The University of Georgia, Department of Food Science, examined the microbiological quality of packaged ice produced and bagged at retail locations (convenience stores, liquor stores, fast-food restaurants and gas stations) as well as self-serve vending machines and compared those results with ice produced by IPIA manufacturers that comply with the IPIA's Packaged Ice Quality Control Standards (PIQCS).

## IMPACT ON PUBLIC HEALTH

Contaminated ice is a serious public health concern. Leading causes of packaged ice contamination are source water contamination, mold, mildew- and slime-contaminated contact surfaces in the ice machines, unsanitized ice scoops, and non-hygienic handling and packaging. It is apparent from the study results, as you will see, that sanitary practices in producing and packaging ice are not being followed by many retailers and vending owners.



## THE RESULTS: *not good for on-premises retail store and self-serve vending machine-produced packaged ice*

A summary of the retail stores and self-serve vending machines testing:

- 13.6% contained one of the two potent contaminants E. Coli\* and enterococci.
- 71% contained heterotrophs – indicators of bacterial growth
- 38% fell outside the acceptable range for PH in the chemical analysis.
- 25.6% contained an unsatisfactory level of coliforms – significant enough to indicate sanitation problems.
- 6.4% contained an unsatisfactory level of heterotrophs – may indicate improper personnel hygienic practices of the workers
- 1 sample contained Salmonella – a deadly bacteria seen recently in many food-borne outbreaks.
- 1 sample contained Enterobacter agglomerans – from a self-service vending machine

## THE TAKE AWAY: *approximately 25% of samples showing unsatisfactory levels of contamination.*

### For the Retail produced ice

- 27.5% of all samples manufactured on-site at retail locations exceeded the recommended limits of total coliforms, with the majority from convenience stores.
- 17.5% indicated the presence of enterococci.
- The E. Coli samples came from the retail category.
- The Salmonella sample also came from a retail outlet.

### Self-Serve Vending Machines

- 22.8% of all samples bought from vending machine locations exceeded the recommended limits of total coliforms.
- 5.9% indicated the presence of enterococci.

*The study found that no samples taken from IPIA facilities had negative findings.*

