

# You Put **WHAT** Down the Drain?



## The Problem

DEA regulations governing drug waste capture, storage and removal have made sinks the de facto method for eliminating controlled substances. Additionally, USP <797> allows for a shorter expiration data for a compounded item, than a FDA inspected manufacturer can provide.

As a result, recent water supply studies have been finding trace levels of pharmaceuticals in our drinking water. While not the sole source, hospitals are a large contributor to the problem.

Because multiple work flows need to be redesigned to capture all surplus drug waste in active clinical areas, the pharmacy decided to begin addressing the problem by targeting the 5 pharmacy-made compounds that produce the greatest amount of waste.

## Aim/Goal

The goal of the project was to eliminate drug waste from the five most heavily wasted pharmacy-made drug compounds.

## The Team

David Mangan, PharmD, Pharmacy  
 Amy Lipman, EdM, Environmental Sustainability  
 Gary Schweon, RN, Environmental Health and Safety

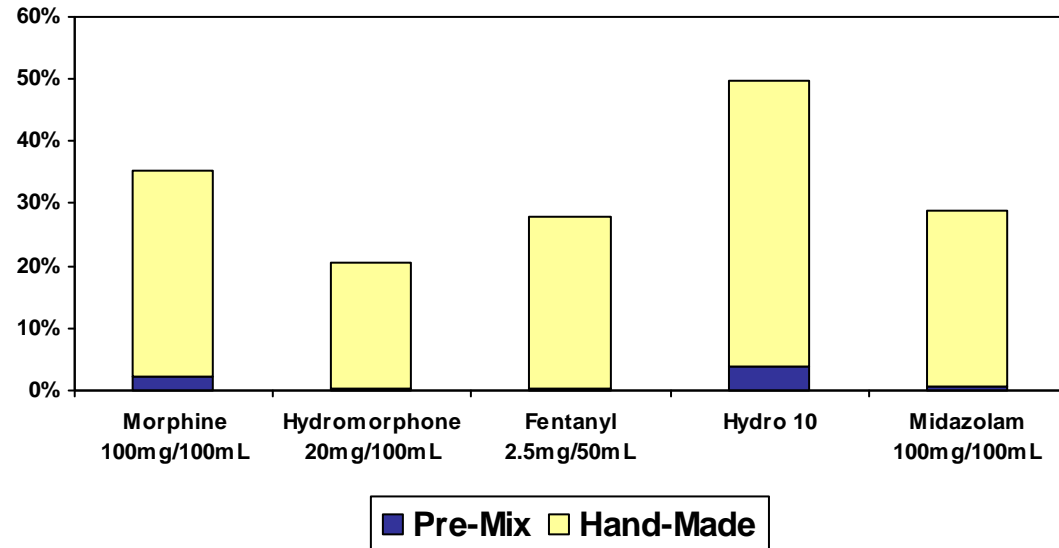
## The Interventions

The first step was to compare handmade compounds to their pre-mixed compounds:

	Cost/unit	Shelf-Life	Waste Rate
Hand-Made		9 days	31%
Pre-Mixed	\$16.39	30-45 days	1.5%

Based on this analysis, the second step was to switch to pre-made compounds

## The Results/Change in Percent Wasted



## Lessons Learned

What is better for the environment can also be better for the hospital:

- The option that appears to be more expensive per unit may be cheaper if it enables you to waste fewer overall units.
- The greener option made work easier on the nursing floor because the larger bags required fewer changes.

## Next Steps/What Should Happen Next

- The pharmacy's FY13 focus is on eliminating the waste generated by the purchase of duplicate bottles of under-prescribed drugs for both sides of the street.
- EH&S and Sustainability are exploring alternative systems for capturing drug waste in clinical areas.