Oral Sodium Phosphate (OSP) Products for Bowel Cleansing (marketed as Visicol and OsmoPrep, and oral sodium phosphate products available without a prescription)

FDA ALERT [12/11/2008]

FDA has become aware of reports of acute phosphate nephropathy, a type of acute kidney injury, associated with the use of oral sodium phosphate products (OSP) for bowel cleansing prior to colonoscopy or other procedures. These products include the prescription products, Visicol and OsmoPrep, and OSPs available over-the-counter without a prescription as laxatives (e.g., Fleet Phospho-soda). In some cases when used for bowel cleansing, these serious adverse events have occurred in patients without identifiable factors that would put them at risk for developing acute kidney injury. We cannot rule out, however, that some of these patients were dehydrated prior to ingestion of OSPs or they did not drink sufficient fluids after ingesting OSP.

Acute phosphate nephropathy is a form of acute kidney injury that is associated with deposits of calcium-phosphate crystals in the renal tubules that may result in permanent renal function impairment. Acute phosphate nephropathy is a rare, serious adverse event that has been associated with the use of OSPs. The occurrence of these events was previously described in an *Information for Healthcare Professionals* sheet and an FDA Science Paper issued in May 2006. Additional cases of acute phosphate nephropathy have been reported to FDA and described in the literature since these were issued.

Individuals who appear to have an increased risk of acute phosphate nephropathy following the use of OSPs include persons: who are over age 55; who are hypovolemic or have decreased intravascular volume; who have baseline kidney disease, bowel obstruction, or active colitis; and who are using medications that affect renal perfusion or function (such as diuretics, angiotensin converting enzyme [ACE] inhibitors, angiotensin receptor blockers [ARBs], and possibly nonsteroidal anti-inflammatory drugs [NSAIDs]).

As a result of new safety information received, FDA is requiring the manufacturer of Visicol and OsmoPrep, the two OSPs available by prescription only, to add a Boxed Warning to the labeling for these products. FDA is also requiring that the manufacturer develop and implement a risk evaluation and mitigation strategy (REMS), which will include a *Medication Guide*, to ensure that the benefits of these products outweigh the risk of acute phosphate nephropathy, and to conduct a postmarketing clinical trial to further assess the risk of acute kidney injury with use of these products.

FDA acknowledges that OSP products, in addition to use for bowel preparation, have a long history of safe use as non-prescription products as laxatives (i.e. for relief of constipation) and accordingly, they will continue to be available over-the-counter for this use. However, in light of the risk of acute phosphate nephropathy, over-the-counter laxative OSP products should not be used for bowel cleansing. Consumers should only use OSPs for bowel cleansing pursuant to a prescription from a healthcare professional. FDA intends to amend the labeling conditions for OSP products available in the OTC setting to address this concern with bowel cleansing use and to improve the safe use of OSPs that are available over-the counter. FDA's amendment to remove the professional labeling for bowel cleansing for these OSPs available over-the-counter will be published in a future *Federal Register* notice.

This information reflects FDA's current analysis of data concerning these drugs. FDA intends to update this sheet when additional information or analyses become available..