

## NSAID Risks-Singh-Wolfe

**Gurkirpal Singh, George Triadafilopoulos, Epidmiology of NSAID Induced Gastrointestinal Complications. J. Rheumatol 1999, Apr;26 Suppl 56:18-24. Department of Medicine, Division of Immunology, Stanford University School of Medicine, Palo Alto, California 94304, USA.**

NSAIDs are one of the most commonly used classes of medications worldwide. 30 million people take NSAIDs daily. GI complications are the most prevalent category of adverse drug reactions. Patients with arthritis are the most frequent users, therefore at greater risk.

NSAID related deaths among patients with RA and OA are even more startling. **It is conservatively estimated that 16,500 NSAID-related deaths occur in these patients every year in the US.**

15th most common cause of death in the US.

Stats DO NOT include nonarthritis indications.

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## NSAID Risks-Wolfe

**Wolfe, M.D., Lichtenstein, M.D., Singh, M.D. Gastrointestinal Toxicity of Nonsteroidal Anti-inflammatory Drugs. The New England Journal of Medicine, June 17, 1999, Review Article, Medical Progress.**

113 References.

NSAID agents constitute one of the world's most widely used classes of drugs, with more than 70 million prescriptions and more than 30 billion over-the-counter tablets sold annually in the US.

*“Although the annual mortality rate is low, it must be emphasized that because a large number of patients are exposed to NSAIDs often for extended periods of time, the risk over a lifetime is substantial.”*

Hospitalization due to GI complications 103,000/yr.  
Estimated cost \$15,000 to \$20,000 per hospitalization. Annual cost exceeds \$2 Billion.

*“It has been estimated conservatively that 16,500 NSAID-related deaths occur among patients with RA and OA every year in the US.”*

Doses of aspirin as low as 30 mg are sufficient to suppress prostaglandin synthesis in the gastric mucosa initiating gastric-duodenal mucosal injury, resulting in the release of oxygen-derived free radicals.

Peptic ulcers-gastroduodenal hemorrhage-perforation-death!

Acetaminophen is nontoxic to the GI mucosa, however, recall that acetaminophen is a leading cause of end-stage renal disease.

Cox-2 inhibitors will hopefully have a reduced capacity to cause injury to the gastroduodenal mucosa.

However, Cox-2 inhibitors are also known to cause defects in renal function, alter the regulation of bone resorption, impair female reproductive physiology, and increase the rate of thrombotic events in patients with increase risk for cardiovascular disease.

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