Currently available methods of emergency contraception (EC) only work during a very narrow time period prior to the hormonal trigger for ovulation or the release of an egg. Women having unprotected sex outside this window receive no benefits from this emergency therapy. Prostaglandins are critical before, during, and after ovulation, thus their inhibition may cause an EC effect that works over a longer time period. We wanted to determine if celecoxib might work as an EC with a wider window of action. We performed a randomized controlled trial of women taking celecoxib before and after the hormonal trigger (LH surge) for ovulation. Hormone levels and ovarian activity were closely tracked. We found that celecoxib does appear to affect ovulation when dosed both before and after the LH surge but only 20 percent of the time making its usefulness as an EC limited.