



Shift Work Disorder (SWD) affects Cubs players, factors in late-season collapses

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(Third of a three-part series)

[Read Part One](#)

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As a board-certified occupational medicine specialist, I can state with medical certainty that the unique Wrigley Field home schedule since the 1940s has been a competitive disadvantage to the Cubs compared to their opponents.

The Cubs played exclusively day games at Wrigley Field until 1988, when lights were installed. The first official night game was played on Aug. 9, 1988. City ordinances and community opposition limited the Cubs an abbreviated schedule of night games ever since.

Cubs players during the past six decades have classic Shift Work Disorder (SWD), which is a recognized occupational medicine disorder and occurs when your work schedule is out of sync with your body's internal sleep-wake clock. Your body is telling you to go to sleep when your work schedule needs you to stay awake and perform at a high level.

The Cubs' Wrigley Field work schedule switching back and forth to a heavy road diet of night games upsets the body's circadian rhythm, also known as the body's biological time clock. This natural process regulates sleep time, release of hormones and other bodily processes.

The ban on Friday night home games is the Cubs players' biggest Shift Work Disorder disadvantage. The athletes further upset their internal time clocks traveling through multiple time zones with grueling, sleepless turnarounds from a Thursday night road game to a Friday 1:20 p.m. Wrigley game.



Cubs players are prime candidates to be afflicted with Shift Work Disorder as result of the still-heavy day-game schedule, as depicted here, switching back and forth to a predominately night-game schedule on the road. Photo credit: [Wally Gobetz](#)

Shift Work Disorder factor in lack of pennant since '45

The collective effect of SWD on Cubs players since the 1940s, when every other major-league team began to play night games, explains in part the Cubs common late-season collapses and one reason why they have not won a pennant since 1945. It is widely accepted that the Cubs collapse in 1969 was due in part to the effect of the exclusively day-game home schedule on veteran players, whom manager Lou Durocher rarely rested.

The 1969, 1973 and 1977 second-half Cubs collapses really exposed the Cubs day-game issues due to the body-schedule upheavals unique to only to one major-league team.

It is clear even now with 30 night games out of 81 total home contests on the schedule compared to an average of 54 night games every other major-league team plays, Cubs players work the most non-traditional work hours in the game. They struggle to stay awake and alert at work due to excessive sleepiness (ES) due to SWD.

A player like Ron Santo with Type I diabetes, performing in the days before tight diabetic control could be achieved with blood sugar monitors, really suffered the effects of the Cubs home-game work schedule. As his son Ron Santo, Jr. has stated (see Part 1 of George Castle's two-part night-game series) the Cubs day schedule aggravated his condition in the long run while probably shortening his playing career. The abrupt regular changes in his baseball work schedule further upset Santo's diabetes with wide swings in his blood sugar.



Ron Santo had to deal with Type 1 diabetes along with possible symptoms of Shift Work Disorder during his 14-year Cubs career.

Nuvigil used to battle shift work woes

As a physician, I can prescribe Armodafinil (Nuvigil) to combat the effects of SWD. Armodafinil (Nuvigil) is a stimulant-like drug produced by the pharmaceutical company Cephalon Inc., which was approved by the FDA on June 15, 2007. SWD is one of the conditions that is FDA-approved. For shift work sleep disorder, the recommended dose is 150 mg taken one hour before the start of the work shift.

Physicians heavily marketed Nuvigil to prescribe to workers with SWD. Major League Baseball bans this prescription drug as a stimulant. But it is commonly used by Air Force and Navy pilots in combat duty to overcome effects of fatigue.

Nuvigil is a slight modification of Provigil, an older stimulant that allegedly Barry Bonds used during his late-career home-run record seasons. The manufacturer tried to get the FDA to approve it for combating jet lag, which is a common off-label prescription practice by physicians, including myself.

Nuvigil is a Schedule IV controlled drug, meaning that it has low potential for abuse relative to the drugs or other substances in Schedule III. The drug has a currently accepted medical use in treatment in the United States. In contrast, amphetamine stimulants are Controlled Drug Schedule II with high abuse potential.

Players who require prescription medication, such as Nuvigil, can still use it with a "Therapeutic Use Exemption" granted by MLB.

It is unknown if MLB would grant a blanket "therapeutic use exemption" to an entire team (or even an individual player). I believe medically the Cubs have medical evidence to support the therapeutic use of Nuvigil to fight the effects of their unique work schedule.

As far back as the mid-1970s, the Cubs had evidence, compiled by then-team trainer Gary Nicholson, that the all-day-game schedule had a negative effect on the team. But top management, unwilling to upset owner Phil Wrigley, suppressed the findings.

"We don't have any players on Nuvigil," said Dr. Charles Bush-Joseph, head White Sox team physician and associate team physician for the Chicago Bulls, practicing out of the orthopaedic surgery department of Rush University Medical Center in Chicago.

Bush-Joseph said team doctors cannot write a Therapeutic Use Exemption order themselves to medicate players. The order must be approved by an MLB-appointed psychiatrist.

"There has always been some issue with the Cubs and day games," Bush-Joseph said. "But there is little sympathy in baseball for the Cubs and this issue. The bigger issue is that their players have more time to party after the game and end up in bed same time as if (playing night) night games."

Bush-Joseph is an authority on the issue, having been long involved in the care of high school, collegiate, and recreational athletes. Through his experience with high profile professional athletes, Bush-Joseph was elected to the Major League Baseball Medical Advisory Board. This exclusive group of team physicians advises Baseball Commissioner Bud Selig on medical policy and emerging trends in training and the medical care of the elite athlete. Bush-Joseph also was President of the Major League Baseball Team Physician Association for 2012.

In addition to the degradation of performance due to SWD, in my own experience, work injuries often occur when a shift worker rotates from one work schedule to another due to the immediate effects of the disruption of the circadian work schedule. This may also explain the high numbers of Cubs players on the disabled list over the years.

Until the Cubs and the City of Chicago address the competitive disadvantage of the Wrigley Field schedule due to Shift Work Disorder (SWD), the team's chances to finally make the World Series for the first-time in nearly seven decades will remain pretty slim.