

# Glitzy video slots seen as particular addiction risk

By Carey Goldberg, Globe Staff | March 7, 2009

Among addiction specialists, video slot machines have come to be known as the "crack cocaine" of the gambling industry.

The mechanical wheels of spinning fruit used in the old one-armed bandits have gone the way of the typewriter. Modern-day slot machines are computerized sound-and-light shows so skillfully designed to keep players glued to their seats that some have been known to wear adult diapers to avoid bathroom breaks.

As state Treasurer Timothy P. Cahill promotes the idea of licensing three slot parlors in Massachusetts, some mental health and gambling specialists warn that the newer machines deliver such potent gambling highs that they can be particularly addictive.

The video slots allow players to gamble incredibly rapidly, winning or losing a game every several seconds without a break, to the point that their brains are undergoing the equivalent of an intravenous drip of an intoxicating drug, said Bob Breen, director of the Rhode Island Hospital Gambling Treatment Program.

"When you sit in front of the slots, especially if it's 24/7, there are no cues for you to quit," he said. "There's no time to stop and think. You're getting that constant drip, and people describe it as being in the zone," he said.

The gaming industry defends the computerized slots, saying their widespread use has not led to increased addiction problems.

But in 15 years of clinical experience, Breen has found that gambling descends into pathology much more quickly among slots players than among people who bet on sports, races, cards, or lotteries.

It tends to take just a year, as opposed to up to five for other types of gambling, said Breen, who has published two studies that analyzed more than 200 addicted patients.

It is not only the speed of the games that makes so addictive the playing of new-style electronic gaming machines, which include video lottery and electronic poker games along with high-tech versions of traditional slots. The machines produce a highly intense and continuous experience for players, said Natasha Schull, an MIT professor who has studied the machines, their designers, and their players.

There is no waiting for the horses to run or the wheel to stop spinning, she said. And the machines have been cramming more and more betting possibilities into each wagering moment, so that a nickel machine might actually allow 100 bets of a nickel at one push of the button.

"It's like playing 100 machines at once," she said.

Brain studies have shown that gambling causes the release of dopamine, a feel-good chemical that spurs the desire to repeat a pleasurable behavior and that is involved in drug addiction. The pleasure comes not just from winning, but from the process of playing and anticipating a possible win.

"Worldwide evidence shows that slot machines tend to be more problematic than most other types of gambling, in terms of addiction," said Mark Griffiths professor of gambling studies at Nottingham Trent University in England. In some European countries, he said, up to 80 or 90 percent of the calls to help lines for gambling addiction now concern slot-machine problems.

Overall, there are perhaps 30 different ways in which electronic slot machines keep players playing, Griffiths said, including their use of lights, colors, "ka-ching!" sounds, familiar television characters such as those in "The Simpsons," and rapid-fire payouts. "It's the kitchen-sink approach," he said.

One trick: Though the machines generate their winning or losing combinations randomly, they also tend to be programmed to make it look as if players have a great number of near-wins, said Roger Horbay, president of Game Planit Interactive, a Canadian company that develops educational tools to prevent problem gambling. "You get the impression your odds are good, you're about to win," he said.

Horbay, a former addiction counselor, and Breen both say that slots gamblers they have treated tend to differ from other gambling addicts, who often have preexisting psychiatric or life problems that put them at risk for addiction.

After slot machines came to Ontario, Horbay said, "what stuck out for me was that a lot of these folks had never had a problem before they met a machine."

Cahill has argued that slot machine parlors would not generate any more social problems than the resort casinos proposed last year by Governor Deval Patrick; both have a revenue model that relies heavily on slot machines. And, he says, people are gambling in other states anyway - Rhode Island has slots emporiums, and Connecticut has casinos - and bringing slots to Massachusetts would allow the state to establish a fund to treat gambling addictions.

"All we're saying is to let Massachusetts people do what they want with their money in their state, as opposed to having to drive out of state," Cahill told reporters this week. "We're not looking to exacerbate the problem, just try to capture it here in the state."

Some also dispute whether the machines are more of a problem than other forms of gambling.

"We don't believe any one activity is more addictive than any other," said Christine Reilly, executive director of the Institute for Research on Pathological Gambling and Related Disorders, which receives most of its funding from the gambling-industry-supported National Center for Responsible Gaming.

"What the research is telling us now is that addiction is a relationship between a vulnerable person and the object of addiction, which can be just about anything," she said.

She pointed out that despite the huge growth in the gambling industry in recent years, gambling addiction in the United States has remained steady at about 1 percent of the population, with an additional 2 to 3 percent having a gambling problem that falls short of full-blown addiction.

Holly Thomsen, spokeswoman for the gambling industry's leading trade group, the American Gaming Association, cited those unchanging figures, as well.

"They put the lie to the premise that these machines are causing more addictions," she said. The machines "are clearly in more locations than they've ever been, and yet the studies keep coming back the same."

Schull countered that while addiction may be relatively rare in the general population, a number of studies have found that problem gamblers generate between 30 percent and 50 percent of the revenue from machine play, indicating that the figures cited by the industry understate the addiction's impact.

The gambling industry "promotes the idea that there's a small group of people who are predisposed and the rest of us can gamble normally," she said.

But machine manufacturers aim to maximize their profits by "getting people to sit there as long as possible and gamble as intensively as possible," she said.

While they may not intend to produce addicts, Schull said, they can.

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# Fast game

Critics say computerized slot machines create a faster and more addictive game experience. Some techniques used to keep gamblers playing:

Larger combinations of bets give more possible jackpots.

Many slots are themed with pictures and music based on popular films or TV.

Touchscreens and tactile feedback

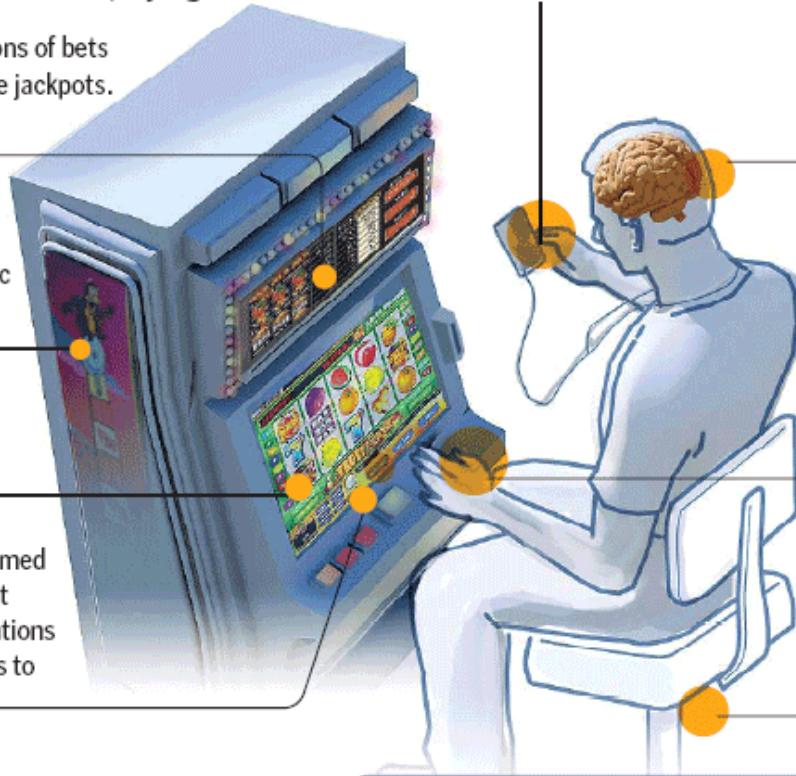
Slots are programmed to display frequent near-win combinations to tempt gamblers to keep playing.

Instead of coins, transactions are done with "ticket-in-ticket-out" or player cards with credit.

In gamblers' brains, anticipation of a possible win releases dopamine, a feel-good chemical involved in drug addiction.

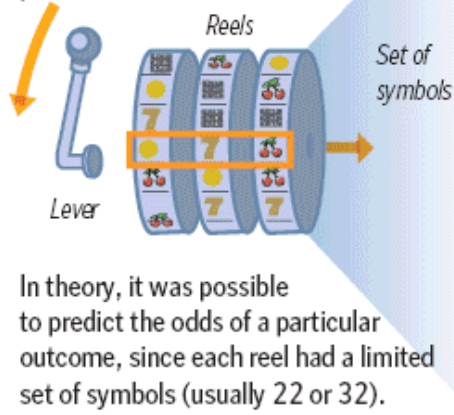
Computerized machines allow faster bets. On average a gambler makes a bet every 5 seconds.

Ergonomic stools allow long game sessions.



## MECHANICAL SLOTS

In traditional machines, reels were set into motion by pulling a lever and stopped mechanically at random positions.

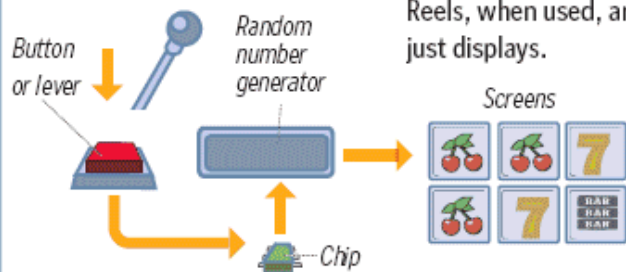


In theory, it was possible to predict the odds of a particular outcome, since each reel had a limited set of symbols (usually 22 or 32).

## VIDEO SLOTS

Nowadays, a microprocessor generates a random number at the pull of the lever or the press of a button.

The number determines the result, displayed as figures on screens. Reels, when used, are just displays.



Unlimited numbers make it impossible to predict the outcome of individual bets, but the chip determines the average odds in the long term.