

A+E SUNDAY YEAR IN REVIEW



Which winter

Tribune **Chicago**



QUESTIONS? CALL 1-800-TRIBUNE

SUNDAY, DECEMBER 18, 2016

Breaking news at chicagotribune.com

TRIBUNE WATCHOOG DANGEROUS DOSES



Filled without warning

Half of pharmacies fail to alert customers about serious drug interactions, Tribune testing found. Now major chains are promising safety fixes.

By SAM ROE, RAY LONG AND KARISA KING | Chicago Tribune

he Tribune reporter walked into an Evanston CVS pharmacy carrying two prescriptions: one for a common antibiotic, the other for a popular anti-cholesterol drug. Taken alone, these two drugs, clarithromycin and simvastatin,

are relatively safe. But taken together they can cause a severe breakdown in muscle tissue and lead to kidney failure and death.

When the reporter tried to fill the prescriptions, the pharmacist should have warned him of the dangers. But that's not what happened. The two medications were packaged, labeled and sold within minutes, without a word

of caution.

The same thing happened when a reporter presented prescriptions for a different potentially deadly drug pair at a Walgreens on the Magnificent Mile. And at a Wal-Mart in Evergreen Park, a Jewel-Osco in River Forest and a Kmart in Springfield.

In the largest and most comprehensive study of its kind, the Tribune tested 255 pharmacies to see how often stores would dispense dangerous drug pairs without warning patients. Fifty-two percent of the pharmacies sold the medications without mentioning the poten-

PHARMACIES' OVERALL FAILURE RATE: 52 PERCENT
Thirty tests were conducted at each of these Chicago-area chains, Independent pharmacies conformed in

CVS 63%

Kmart 60%

Costco 60%

Wal-Mart 43% Jewel-Osco **43**%

Mariano's **37**%

Walgreens 30%

Cabdrivers struggle as ride-sharing rises

plummets to \$66K from \$349K peak

By Leonor Vivanco

Caxi drivers and indus- Turn to Cabbies, Page 16



Road out of Aleppo paved with pain

No arrests after | IPRA clears 4 killed on + Killed on Far South Side Chicagoland, Page 7

cop in shooting of man in back



Chicago Tribune

Sunday, December 18, 2016



E. JASON WAMBSGANS/CHICAGO TRIBUNE

Reporters dropped off prescriptions for two medications that can be harmful or even fatal if taken together. Often, pharmacists did not say a word about the risks.

TRIBUNE WATCHDOG DANGEROUS DOSES

Filled without warning

Half of pharmacies fail to alert customers about serious drug interactions, Tribune testing found. Now major chains are promising safety fixes.

By Sam Roe, Ray Long and Karisa King

The Tribune reporter walked into an Evanston CVS pharmacy carrying two prescriptions: one for a common antibiotic, the other for a popular anti-cholesterol drug.

Taken alone, these two drugs, clarithromycin and simvastatin, are relatively safe. But taken together they can cause a severe breakdown in muscle tissue and lead to kidney failure and death.

When the reporter tried to fill the prescriptions, the pharmacist should have warned him of the dangers. But that's not what happened. The two medications were packaged, labeled and sold within minutes, without a word of caution.

The same thing happened when a reporter presented prescriptions for a different potentially deadly drug pair at a Walgreens on the Magnificent Mile.

And at a Wal-Mart in Evergreen Park, a Jewel-Osco in River Forest and a Kmart in Springfield.

In the largest and most comprehensive study of its kind, the Tribune tested 255 pharmacies to see how often stores would dispense dangerous drug pairs without warning patients. Fifty-two percent of the pharmacies sold the medications without mentioning the potential interaction, striking evidence of an industrywide failure that places millions of consumers at risk.

CVS, the nation's largest pharmacy retailer by store count, had the highest failure rate of any chain in the Tribune tests, dispensing the medications with no warning 63 percent of the time. Walgreens, one of CVS' main competitors, had the lowest failure rate at 30 percent — but that's still missing nearly 1 in 3 interactions.

In response to the Tribune tests, CVS, Walgreens and Wal-Mart said they would take significant steps to improve patient safety at stores nationwide. Combined, the actions affect 22,000 drugstores and involve additional training for 123,000 pharmacists and technicians.

"There is a very high sense of urgency to pursue this issue and get to the root cause," said Tom Davis, CVS' vice president of pharmacy professional services.

CVS, which filled about 1 billion prescriptions last year, said the company would improve policies and its computer system to "dramatically" increase warnings to patients.

Walgreens said it would, among other changes, increase training for pharmacists. "We take this very seriously," said Rex Swords, Walgreens' vice president of pharmacy and retail operations and planning.

Dangerous drug combinations are a major public health problem, hospitalizing tens of thousands of people each year. Pharmacists are the last line of defense, and their role is growing as Americans use more prescription drugs than ever. One in 10 people take five or more drugs — twice the percentage seen in 1994.

Some pharmacists who were tested got it right, coming to the counter to issue stern warnings. "You'll be on the floor. You can't have the two together," said one pharmacist at a Walgreens on Chicago's Northwest Side. Said a Kmart pharmacist in Rockford: "I've seen people go to the hospital on this combination."

But in test after test, other pharmacists dispensed dangerous drug pairs at a fast-food pace, with little attention paid to customers. They failed to catch combinations that could trigger a stroke, result in kidney failure, deprive the body of oxygen or lead to unexpected pregnancy with a risk of birth defects.

Location didn't matter: Failures occurred in poor neighborhoods on the South Side as well as in affluent suburbs and the Gold Coast. Even the Walgreens at Northwestern Memorial Hospital in downtown Chicago failed its test.

The newspaper also tested independent pharmacies, many of which take pride in providing personalized care. As a group, they had a higher failure rate than any retail chain, missing risky drug interactions 72 percent of the time. Chains overall failed 49 percent of their tests.



E. JASON WAMBSGANS/CHICAGO TRIBUNE

Most stores use computer software to flag drug interactions. But experts say alerts are so common that pharmacists can get "alert fatigue" and ignore many of the warnings.

The Tribune study, two years in the making, exposes fundamental flaws in the pharmacy industry. Safety laws are not being followed, computer alert systems designed to flag drug interactions either don't work or are ignored, and some pharmacies emphasize fast service over patient safety. Several chain pharmacists, in interviews, described assembly-line conditions in which staff hurried to fill hundreds of prescriptions a day.

Wal-Mart, operator of 4,500 U.S. pharmacies, failed 43 percent of its tests. The company said it would update and improve its pharmacy alert system and train pharmacists on the changes.

Kmart failed 60 percent of the tests. Phil Keough, pharmacy president for Sears Holdings, which owns Kmart, said he was disappointed with the results. "While not happy, we also take this as an opportunity to look in the mirror and see where we can get better," he said.

Costco, a membership warehouse club whose pharmacies are open to the general public, failed 60 percent of the tests; the company declined to comment.

The Tribune also tested two Chicago-area chains: Jewel-Osco, which failed 43 percent of the time, and Mariano's, 37 percent.

Jewel-Osco declined an interview request and instead emailed the Tribune a one-sentence written statement: "Osco pharmacists have a history of providing knowledgeable, exemplary care to our customers and their health, well-being and safety is our primary concern."

Mariano's also declined to answer questions. The chain said in a written statement: "None of our pharmacists are intentionally disregarding drug interactions or patient safety."

The chain wrote, "Our pharmacists look at each patient profile which includes patient history, allergy profile, pre-existing conditions and other factors such as age, all of which must be considered when assessing the potential for a drug interaction."

But in the Tribune tests, pharmacists at Mariano's stores rarely asked for all of that information.

Last line of defense

In the fight to protect patients from dangerous drug interactions, doctors shoulder significant responsibility. They are the ones who write the prescriptions.



E. JASON WAMBSGANS/CHICAGO TRIBUNE

Drug interactions expert John Horn says the drug pairs used to test pharmacies were "no-brainers" that should easily have been caught.

But one physician may not know what another has prescribed, and research has found that doctors' knowledge about specific interactions is often poor.

In filling prescriptions, pharmacists are uniquely positioned to detect potential drug interactions, warn patients and prevent harm. Pharmacists themselves say that is one of their primary duties.

Yet little data exists about how well they perform in real-world situations.

The Tribune set out to find the answer. To select drug pairs to be used in the tests, the newspaper enlisted the help of two leading experts on drug interactions: pharmacy professors Daniel Malone of the University of Arizona and John Horn of the University of Washington. Five pairs were chosen, three of which posed life-threatening risks. Another could cause patients to pass out. A fifth included an oral contraceptive and could lead to unplanned pregnancies.

According to the two experts, all of the drugs had been on the market for years, and the pairs presented well-established interactions that pharmacists should easily catch. "No-brainers," Horn called them.

Writing the prescriptions was Dr. Steven C. Fox, a Chicago physician who treats many elderly patients on multiple medications. He knew the risks of interactions firsthand.

Fox wrote the prescriptions in the names of 18 Tribune journalists, 15 of whom conducted tests in the field. They presented the prescriptions written in their names or, in some instances, their colleagues' names. The reporters tested 30 stores at each of seven leading chains as well as numerous independent pharmacies. Most stores were in the Chicago area; some were in Indiana, Wisconsin and Michigan.

Reporters presented the prescriptions together or a couple of days apart, then waited to see if the orders would be filled.

In Illinois, pharmacists who detect a serious interaction must contact the prescribing doctor to see if the order is correct or if an alternative therapy is available, according to the Illinois Department of Financial and Professional Regulation. Pharmacists are then supposed to alert the patient.

Carmen Catizone, executive director of the National Association of Boards of Pharmacy, said the professional standard is clear. "Anytime there's a serious inter-



E. JASON WAMBSGANS/CHICAGO TRIBUNE

Pharmacy professor Daniel Malone, also a leading expert in drug interactions, helped the Tribune choose drug pairs for its testing.

action, there's no excuse for the pharmacist not warning the patient about that interaction," he said.

In the Tribune study, a test was considered a pass if the pharmacist attempted to contact Fox about the interaction or warned the reporter.

Drug information leaflets placed inside the bag or stapled to the outside were not considered sufficient to warrant a pass. Illinois regulators said these materials typically are not adequate replacements for verbal warnings; some of the materials don't warn about specific interactions, and experts say patients frequently throw out the leaflets without reading them.

After the tests, reporters called many of the pharmacists to inform them of the results and to discuss the findings.

Why were so many pharmacies missing dangerous drug combinations?

Speed vs. safety

Mayuri Patel, a pharmacist at a Wal-Mart in west suburban Northlake, said she typically fills 200 prescriptions in a nine-hour shift, or one every 2.7 minutes.

At another Wal-Mart where she was trained, it was even busier, she said: "We were doing 600 a day with two pharmacists with 10-hour shifts." That works out to one prescription every two minutes.

In the Tribune tests, she caught a potentially deadly drug pair, warning the reporter at the counter: "This is a common interaction."

It is difficult to say why so many pharmacists failed the same test, but interviews and studies point to a possible explanation: the emphasis on speed.

Several stores dispensed risky drug pairs with no warning in less than 15 minutes. At a Kmart in Valparaiso, Ind., it was 12 minutes. At an independent pharmacy on the North Side, it was five.

The Tribune found that pharmacists frequently race through legally required drug safety reviews — or skip them altogether. According to Illinois law, pharmacies are required to conduct several safety checks, including whether the dose is reasonable and whether the medication might interact with other drugs the patient is taking.



E. JASON WAMBSGANS/CHICAGO TRIBUNE

Deepak Chande, a former head CVS pharmacist in Worth, says pressure is intense to fill prescriptions quickly. "Every prescription is timed," he said, "and this is the worst of the pharmacist's nightmares."

But in the Tribune tests, pharmacies rarely asked what other medications testers were using.

"They're cutting corners where they think they can cut," said Bob Stout, president of the New Hampshire Board of Pharmacy, which sampled data from two retail chains in the state and found that pharmacists spent an average of 80 seconds on safety checks for each prescription filled.

"What happens, I found on the board, is people stop doing (safety) reviews," Stout said. "They're not going in looking at patient records."

Most pharmacies use computer software designed to flag drug interactions. But experts say computer alerts are so common that pharmacists can get "alert fatigue" and ignore many of the warnings.

At the same time, chain pharmacies are increasingly promoting quick service. Drive-through windows are now common, and services like CVS' walk-in Minute-Clinics appeal to consumers' preference for speed.

These efforts may send a message to patients that speed is more important than quality health care. Patients have internalized that message and feel entitled to short wait times, pharmacists said.

"The patient will get mad if you call the doctor and take time," said Sadia Shuja, a pharmacist at Skypoint Pharmacy in Schaumburg who caught a dangerous drug pair in the Tribune tests. "Sometimes they think it is fast food."

To ease workload, most pharmacies employ technicians to manage tasks that require less medical expertise.

Arsen Mysllinj, a Kmart pharmacist in Rockford who passed the Tribune test, said technicians at his store and others often screen for drug interactions after entering patients' drug orders into a computer. If interactions appear, he said, the technicians are trained to print out the warning on the screen and hand it to a pharmacist. It would be better, he said, for pharmacists to do the screening.

Kmart said that in light of the test results, it would review its relevant policies, computer systems and training programs.

Unionized pharmacists, including those in Illinois, have periodically pushed for minimum staffing rules, but those efforts have not gone far. Some pharmacists say time spent pitching company promotions could be better spent on patient safety.

In the Tribune tests, the majority of Kmart pharmacists dispensed risky drug combinations without warning testers. But several did take time to try to enroll the reporters in the company's savings program.

'Scorecard' pressures

At CVS, prompt service isn't just a vague goal. It is a carefully measured metric that the chain uses, along with other assessments, to grade its pharmacies and rank them against one another, records and interviews show.

Several current or former CVS pharmacists criticized the practice, saying it pressures them to focus more on corporate criteria than on drug interactions and other safety checks.

"You get stressed, and it takes your mind away from the actual prescriptions," said Chuck Zuraitis, head pharmacist at a CVS in south suburban Park Forest and a union steward for Teamsters Local 727, which represents 130 CVS pharmacists in the Chicago area. His pharmacy was not among those tested.

Performance and business metrics are common at big chain pharmacies and in other industries. Supporters say they make companies more efficient and responsive to customers.

In 2012, the nonprofit Institute for Safe Medication Practices conducted a national survey of 673 pharmacists and found that nearly two-thirds worked at stores that track the time it takes to fill prescriptions. About 25 percent worked at companies that guaranteed short wait times.

Of the pharmacists at stores that advertised quick service, 4 in 10 said they had made a medication error as a result of hurrying to fill a prescription within a set time.

In 2013, the National Association of Boards of Pharmacy called on states to prohibit, restrict or regulate company policies that measure the speed of pharmacists' work. But, the association says, little has changed in state law.

Internal CVS records obtained by the Tribune show that the company tracks numerous pharmacist tasks, including whether prescriptions are filled in the time promised to customers and whether voicemails are retrieved in a timely fashion.

"Every prescription is timed," said Deepak Chande, a former head pharmacist at a CVS in southwest suburban Worth, "and this is the worst of the pharmacist's nightmares."

If pharmacists fall behind, the backlog pops up in color on their computer screens, said Chande, also a former union steward. "It's an unreal pressure," he said. "Your mind is kind of frantically trying to obey it."

CVS officials declined to be interviewed about metrics but issued a statement and answered questions in writing. The company said prescriptions do not have to be filled quickly, but it expects pharmacists to have medications ready by the time promised to the customer.

Records show that head pharmacists receive a monthly "WeCARE Scorecard" that tracks the percentage of prescriptions filled by the times promised. The pharmacies are ranked by district, by region and nationwide.

CVS' computer system prioritizes prescriptions based on patients' requested pickup times, with preference given to customers with urgent needs — for instance, someone on his way home from the hospital after surgery. Pharmacists can reset a promised pickup time if they think it cannot be met, the company wrote.

The color indicators on computer screens are meant to help pharmacists with prioritizing their work, CVS said. The company also wrote that several years ago it removed a red indicator for prescriptions that had gone beyond the promised



E. JASON WAMBSGANS/CHICAGO TRIBUNE

Audrey Galal caught a dangerous drug pairing she was asked to fill at her independent pharmacy, but independents as a group had the highest failure rate in Tribune tests.

pickup time because pharmacists "felt the color red denoted something negative or alarming."

"We switched to an 'orange' indicator to inform a pharmacy team which prescriptions may not be ready before a customer's expected arrival time," CVS wrote.

Another CVS metric, documents show, tracks how many patients sign up for automatic refills. Zuraitis said posters on pharmacy walls record how many flu shots have been administered. "You feel like you're trying to sell people something," he said.

CVS said automatic refills help patients stay on schedule with the drugs they need to treat chronic conditions. The company said it measures the number of flu vaccinations offered to customers to help support the recommendation by the federal Centers for Disease Control and Prevention that people receive a flu shot annually.

At Walgreens, officials said the company collects business metrics as a way to monitor staffing levels and service. The firm said it does not use them in a manner that emphasizes productivity over patient safety.

Alethea Little, a Walgreens pharmacist in west suburban Forest Park who properly warned a tester, said metrics are no excuse for missing drug interactions.

"Our flu shot goal is 10 a day, 12 a day, 50 a day," she said. "And the phone rings off the hook. You just got to do what you got to do, essentially."

Squeezed by chains

Independent pharmacies face a different kind of pressure: intense competition from the big chains.

B.M. Patel, a pharmacist for 40 years who owns Riteway Pharmacy on Chicago's Northwest Side, missed the test interaction but didn't make excuses. "It was a mistake," he said. "Maybe I should be paying more attention."

But he also said small pharmacies know that if they don't fill a prescription, the customer might simply go to a nearby chain store. Business at his store, he said, "is







E. JASON WAMBSGANS/CHICAGO TRIBUNE

Left: Muscle relaxant tizanidine, left, and ciprofloxacin, an antibiotic, can induce unconsciousness if combined. Center: Antibiotic clarithromycin, foreground, and cholesterol drug simvastatin are potentially fatal if taken together. Right: Gout drug colchicine, foreground, and blood pressure drug verapamil also can kill when combined.

not good. I can still survive, but not too long. We don't really know how long it's going to last."

The number of independent stores has been shrinking nationwide. In Illinois, the number dropped about 9 percent from 689 in 2013 to 624 last year, according to the National Community Pharmacists Association.

Several independents tested by the Tribune looked like classic drugstores, offering medications alongside greeting cards, stuffed animals and candy bars. Others were less inviting. One dispensed drugs behind a thick window; at another, a reporter had to knock several times to gain entry.

In Chicago's Pilsen neighborhood, independent pharmacist Audrey Galal passed her test while working at a Mexicare Pharmacy, a small storefront on a block of brick buildings. The store is in the process of closing, she said, in part because of competition from chains.

Galal said she doubts that small drugstores would knowingly sell harmful medications but thinks they might be reluctant to turn away business.

"These pharmacists are acting like businesspeople, just trying to keep their pharmacies afloat instead of being clinicians," said Galal, who now works at a Mexicare in Little Village.

Andy Politis, a pharmacist and part owner of Oakmill Pharmacy in north suburban Niles who passed the test, said he was surprised how many independents failed. "The independent guys should be better because they don't have the same pressure as the big stores with so many prescriptions," he said.

B. Douglas Hoey, chief executive of the national community pharmacists group, said the results were alarming. "It's something that shouldn't happen — both for chains and independents," he said. "Even one is too many."

Several independents said the findings prompted them to make changes. After failing its test, Summit Medical Pharmacy in the southwest suburbs beefed up internal checks and worked with a software company to ensure that even minor drug interactions are detected.

Since then, the new system has flagged several interactions that led to consultations with doctors and patients, head pharmacist Pankaj Bhalakia said.

"We changed the whole system," he said. "I don't think there could be a problem in the future."

CONTRIBUTORS: Tribune staffers who conducted the tests or who lent their names for the prescription orders were Chuck Burke, Angela Caputo, Alexia Elejalde-Ruiz, Ted Gregory, Vikki Ortiz Healy, Jared S. Hopkins, Karisa King, Colleen Kujawa, William Lee, Ray Long, Jennifer Smith Richards, Sam Roe, Nara Schoenberg, Nancy Stone, Kaarin Tisue, E. Jason Wambsgans, Lindsey Woods and Lauren Zumbach.