Prevention Efforts Have Mixed Results for Injection-Drug Users

More people who need them are using syringe services programs (SSPs), but they still aren’t always using sterile needles, according to a Centers for Disease Control and Prevention (CDC) Vital Signs report. Thus, they’re still at risk for human immunodeficiency virus (HIV), hepatitis B, and hepatitis C (HCV) infection.

Researchers conducted a study of people who inject drugs in 22 U.S. cities with a high number of HIV cases. In 2015, more than half of people who inject drugs said they used an SSP in the previous year, compared with about one-third in 2005. But the percentage of people who received at least one syringe from an SSP and shared syringes was about the same as those who had not received any syringes from SSPs (31% versus 38%).

The good news is that annual acquired immunodeficiency syndrome (AIDS) diagnoses among people who inject drugs have dropped by a stunning 90%. Nonetheless, about 9% of HIV infections diagnosed each year are due to injecting drugs. Injection drug use has also contributed to a 150% rise in acute HIV infections.

But prevention efforts are paying off in the African-American and Latino communities, says Eugene McCray, MD, Director of the CDC’s Division of HIV/AIDS Prevention. The number of African-Americans getting all syringes from SSPs was up by 48%, and the number sharing syringes was down 34% from 2005. The number of HIV diagnoses among African-Americans who inject drugs declined by 60% from 2008 to 2014.

Syringe sharing was also down 12% among Latinos, and HIV diagnoses dropped by 50% from 2008 to 2014 in that population.

In contrast, whites who inject drugs continue to share at similar levels—45% in 2005 versus 43% in 2015. The number receiving all syringes from sterile sources remained unchanged at 22%, and HIV diagnoses remained stable from 2012 to 2014.

Recent trends indicate that heroin use and injection drug use among whites are on the rise; that, coupled with high rates of syringe sharing, might “challenge the decades of progress in HIV prevention,” the researchers say. They also point to obstacles such as a potential lack of sufficient sterile equipment, too few SSPs in rural areas, and absence of legal support in many states.

Decisions about SSPs are made at state and local levels, the report notes. In 2015, Congress gave states and local communities the opportunity to use federal funds to support “certain components of comprehensive SSPs,” which also offer or refer people to prevention, care, and treatment.

“Until now, the nation has made substantial progress in preventing HIV among people who inject drugs, but this success is threatened,” says Jonathan Mermin, MD, MPH, Director of the CDC’s National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. “Syringe services programs work, and their expansion is pivotal for progress in the coming decades.”

Source: CDC, December 2016

Even “Just A Few” Cigarettes Have Long-Term Consequences

“There is no safe level of smoking”—that’s the conclusion of National Cancer Institute researchers, based on data from 290,215 adults in the 2004–2005 NIH-AARP Diet and Health Study. “Smoking even a small number of cigarettes per day has substantial negative health effects,” said lead author Maki Inoue-Choi, PhD.

The participants responded to a questionnaire that assessed lifetime smoking intensity. Those who smoked between one and 10 cigarettes a day had an 87% higher risk of earlier death. But even people who smoked an average of less than one cigarette per day over their lifetimes still had a 64% higher risk of earlier death compared with never-smokers.

The researchers also looked at specific causes of death. Not surprisingly, they found a “particularly strong” association for lung cancer mortality. But again, even people who consistently averaged less than one cigarette per day over their lifetimes had nine times the risk of dying from lung cancer than never-smokers. Among those who smoked between one and 10 cigarettes a day, the risk of dying from lung cancer was nearly 12 times higher.

People who smoked between one and 10 cigarettes a day also had more than six times the risk of dying from respiratory disease and about one and a half times the risk of dying of cardiovascular disease compared with never-smokers.

The younger people were when they quit smoking, the lower their risk of early death.

Source: National Institutes of Health, December 2016

Multiple Myeloma and Stroke: What’s the Risk?

Some 20% to 40% of patients with multiple myeloma have renal impairment and may also be taking drugs that raise the risk of venous thromboembolism (VTE). Are those the factors responsible for the higher risk of arterial thrombosis in this patient group? Researchers from the University of Arkansas and Ohio State University conducted a large retrospective, comparative case-control study to find out.

The patients were all enrolled in total therapy protocols that tested varying combinations of thalidomide, bortezomib, lenalidomide, and dexamethasone. Of 1,148 patients, 46 (4%) had strokes, usually ischemic stroke (33 patients or 72%). Hypercoagulability, atrial fibrillation, and small-vessel occlusion were common mechanisms. While other research has found a higher risk of arterial thrombosis from activated prothrombotic factors, especially during the early period of chemotherapy, in this study, vascular events occurred even months later.

Seven patients died in the hospital (15% compared with a national average of 5%). Although six of those deaths were stroke-related, most patients (78%—similar to the national average) were discharged home or to a rehabilitation facility; two were discharged to a long-term nursing facility. During a
median follow-up of 10 years, six patients had another stroke. The cumulative risk of recurrent stroke was 15% compared with 5% for the general population.

Stage I and II cancer and renal insufficiency independently predicted stroke. Also noteworthy, the researchers said, is that patients with multiple myeloma who developed renal insufficiency had worse clinical outcomes despite improvement in their renal function or lack of significant difference in their baseline renal functions between various treatment protocols. Thus, the increased risk of stroke, recurrent stroke, and mortality could partly be due to renal disease, which might or might not have resulted from myeloma.

Use of combination chemotherapy has “markedly improved” clinical outcomes for multiple myeloma patients, the researchers said, but those drugs have also been associated with an increased risk of VTE, especially during the first months of chemotherapy. Thalidomide alone did not increase the risk of VTE, nor did lenalidomide on its own. However, thalidomide combined with multiagent chemotherapy increased VTE risk as much as 34% in newly diagnosed patients, and lenalidomide with dexamethasone boosted risk as high as 75%.

The researchers found no significant relationship between mortality and use of thalidomide. Median survival was 103 months for a thalidomide-based regimen and 78 months for a regimen without thalidomide.

“Interestingly,” the researchers noted, the patients developed strokes despite a trend toward coagulopathy, to the extent that half were ineligible for immediate use of antplatelet agents. The study findings “heightened our awareness,” the researchers said, that aggressive preventive measures can help reduce the incidence of stroke in patients with renal insufficiency.


**Hospital-Acquired Conditions on the Decline**

Hospital-acquired conditions (HACs) are still trending downward, with 3 million fewer adverse events—a 21% drop—over a five-year period, according to the recently released *National Scorecard on Rates of Hospital-Acquired Conditions*. Thanks in part to provisions of the Patient Protection and Affordable Care Act, the Department of Health and Human Services (HHS) says, about 125,000 fewer patients died due to HACs, and more than $28 billion in health care costs were saved.

Agency for Healthcare Research and Quality (AHRQ) researchers used national data systems to analyze the incidence of 28 HACs that occurred from 2010 to 2015. The list included adverse drug events, catheter-associated urinary tract infections, central-line–associated bloodstream infections, pressure ulcers, and surgical-site infections, selected as focus areas because they’re common and considered preventable.

AHRQ’s Comprehensive Unit-based Safety Program (CUSP) is one of the tools used most often to cut down on HACs. It’s a proven method, HHS says, that combines improvement in safety culture, teamwork, and communications with evidence-based practices to protect patients. AHRQ has “worked hand-in-hand with front-line clinicians” to help them use CUSP in a series of “highly effective” nationwide projects.

“AHRQ has been building a foundation of patient safety research for the last decade and a half at the request of Congress,” said AHRQ Director Andy Bindman, MD. “Now we’re seeing these investments continue to pay off in terms of lives saved, harm avoided, and safer care delivery overall.”

Source: HHS, December 2016

**When Work Puts Employees at Risk for Asthma**

As many as 2.7 million American workers might have asthma that their work has caused or worsened, say Centers for Disease Control and Prevention (CDC) researchers. Data from the 2006–2007 Behavioral Risk Factor Surveillance System Asthma Call-back Survey of 208,788 adults in 33 states revealed that nearly half of adult asthma might be related to work, and thus potentially preventable.

Of the respondents employed in the previous year, 7.7% had asthma, ranging from 5% in Mississippi to 10% in Michigan. Among the 21 states that collected information on industry and occupation, prevalence was highest among workers in health care support occupations in Michigan (21.5%). In fact, health care ranked first among the five industries with the highest asthma prevalence, and health care practitioners ranked second among the five occupational groups with the highest asthma prevalence.

Different industries and occupations have different irritants. In health care, for instance, cleaning and disinfection products, powdered latex gloves, and aerosolized medications have doubled the likelihood of new-onset asthma, the report notes. But it’s possible to make a big dent in the illness prevalence with evidence-based changes. The researchers say powder-free natural rubber latex or nonlatex gloves, for instance, “considerably reduced” workplace asthma in the health care industry.

The researchers say their findings might help physicians and state public health officials identify workers who should be evaluated for work-related asthma in order to plan and target interventions.

Source: CDC, December 2016