Official websites use .gov A .gov website belongs to an official government organization in the United States. Secure .gov websites use HTTPS A lock ( ) or https:// means you've safely connected to the .gov website. Share sensitive information only on official, secure websites. More than 800,000 people in the U.S. live with end-stage kidney disease, and more than half of them belong to a racial or ethnic minority group. High blood pressure and diabetes are medical conditions that increase a person’s risk of developing end-stage kidney disease. Some people with end-stage kidney disease have a kidney transplant, but most receive dialysis treatments (a process of filtering and removing waste products and excess fluid from the body). Dialysis treatment puts patients at higher risk for serious infections because it requires frequent access to the bloodstream using needles or catheters (soft plastic tubes inserted into large veins). If germs get into a patient’s blood, they can cause serious infections that may lead to sepsis (a potentially life-threatening immune system response) and even death. Many germs can cause dialysis bloodstream infections. The most common is a group of germs called Staphylococcus aureus (staph). Staph infections can be difficult to treat and may be deadly. More than 14,000 bloodstream infections occurred in patients on dialysis in the U.S. in 2020, and more than one in three were caused by staph. The risk for staph bloodstream infection is strongly affected by how a person’s blood circulation is connected to the dialysis machine, known as vascular access type. Staph bloodstream infections happen more often in Black and Hispanic patients on dialysis than White patients on dialysis, although other factors besides race and ethnicity may be involved. There are more staph bloodstream infections in areas of the U.S. with higher poverty, more household crowding, and lower education levels (from U.S. census data). The good news is that bloodstream infections in patients on dialysis have gone down since 2014 with the widespread use of proven practices to prevent and control infections. Preventing infections among patients receiving dialysis requires a broad and equitable approach to prevention and care of kidney disease for people from all racial, ethnic, and

socioeconomic* groups, including: *A way of describing people often based on their level of education, income, place of residence, and job type. People on dialysis are at risk for staph bloodstream infections, which can be serious or fatal. Remove barriers to chronic kidney disease care for all people. Increase use of lower-risk vascular access types for dialysis, such as fistulas and grafts. People on dialysis are at risk for staph bloodstream infections, which can be serious or fatal. Remove barriers to chronic kidney disease care for all people. Increase use of lower-risk vascular access types for dialysis, such as fistulas and grafts. More than 800,000 people in the U.S. live with end-stage kidney disease, and more than half of them belong to a racial or ethnic minority group. High blood pressure and diabetes are medical conditions that increase a person's risk of developing end-stage kidney disease. Some people with end-stage kidney disease have a kidney transplant, but most receive dialysis treatments (a process of filtering and removing waste products and excess fluid from the body). Dialysis treatment puts patients at higher risk for serious infections because it requires frequent access to the bloodstream using needles or catheters (soft plastic tubes inserted into large veins). If germs get into a patient's blood, they can cause serious infections that may lead to sepsis (a potentially life-threatening immune system response) and even death. Many germs can cause dialysis bloodstream infections. The most common is a group of germs called Staphylococcus aureus (staph). Staph infections can be difficult to treat and may be deadly. More than 14,000 bloodstream infections occurred in patients on dialysis in the U.S. in 2020, and more than one in three were caused by staph. The risk for staph bloodstream infection is strongly affected by how a person's blood circulation is connected to the dialysis machine, known as vascular access type. Staph bloodstream infections happen more often in Black and Hispanic patients on dialysis than White patients on dialysis, although other factors besides race and ethnicity may be involved. There are more staph bloodstream infections in areas of the U.S. with higher poverty, more household crowding, and lower

education levels (from U.S. census data). The good news is that bloodstream infections in patients on dialysis have gone down since 2014 with the widespread use of proven practices to prevent and control infections. Preventing infections among patients receiving dialysis requires a broad and equitable approach to prevention and care of kidney disease for people from all racial, ethnic, and socioeconomic* groups, including: *A way of describing people often based on their level of education, income, place of residence, and job type. High risk for infection: Infections are common among patients on dialysis. These patients are more likely to get a staph bloodstream infection than people not on dialysis. Staph bloodstream infections can be serious or lead to death, and some infections are resistant to some of the most common antibiotics used to treat them, making the drugs ineffective. Racial and ethnic gaps: End-stage kidney disease affects Black and Hispanic people more than White people. Black and Hispanic people have greater numbers of medical conditions, such as high blood pressure and diabetes, which increase their risk of developing end-stage kidney disease. There are also differences in the types of therapies and treatments that Black and Hispanic patients receive for end-stage kidney disease. In addition, more Black and Hispanic patients on dialysis get staph bloodstream infections than White patients on dialysis. Social and economic factors: Lack of prevention and care of kidney disease, socioeconomic and insurance status, and lack of patient education about treatment options are all factors in end-stage kidney disease treatment differences. Catheter use: Vascular access type is the major risk factor for bloodstream infections regardless of race, ethnicity, or socioeconomic status. There are three access types: fistula, graft, and central venous catheter. People with any access type can develop an infection, but fistulas have the lowest risk of infection and central venous catheters have the highest risk of infection. Adults on dialysis are 100 times more likely to have a staph bloodstream infection than adults not on dialysis. Rate per 100,000 people per year Adults not on dialysis: 42 Adults on dialysis (100 times more likely to have a staph bloodstream infection): 4,248

Race, ethnicity, and socioeconomic factors can lead to more dialysis bloodstream infections. Socioeconomic Factors: Poverty Household Crowding Limited Education Staph Bloodstream Infection Rates by Race/Ethnicity* Rate per 100,000 patients on dialysis per year Black: 4,751 Hispanic: 4,500 White: 3,866 *2017–2020 Emerging Infections Program surveillance data Adults on dialysis are 100 times more likely to have a staph bloodstream infection than adults not on dialysis. Rate per 100,000 people per year Adults not on dialysis: 42 Adults on dialysis (100 times more likely to have a staph bloodstream infection): 4,248 Race, ethnicity, and socioeconomic factors can lead to more dialysis bloodstream infections. Socioeconomic Factors: Poverty Household Crowding Limited Education Staph Bloodstream Infection Rates by Race/Ethnicity* Rate per 100,000 patients on dialysis per year Black: 4,751 Hispanic: 4,500 White: 3,866 *2017–2020 Emerging Infections Program surveillance data Reducing the use of central venous catheters for people on dialysis can help prevent bloodstream infections. Risk of Bloodstream Infections Low Risk: Fistula Medium Risk: Graft High Risk: Central Venous Catheter Bloodstream infections are preventable in all patients on dialysis. Actions by healthcare providers, dialysis providers, dialysis partner organizations, and public health professionals can help prevent these infections. Extra attention should be focused on people from groups experiencing racial, ethnic, and socioeconomic differences in staph bloodstream infections. Actions include: Better information can lead to more effective infection prevention programs and catheter reduction policies that will benefit everyone on dialysis. More data about dialysis bloodstream infections in patients of different races, ethnicities, and socioeconomic statuses can be gained by: Bloodstream infections are preventable in all patients on dialysis. Actions by healthcare providers, dialysis providers, dialysis partner organizations, and public health professionals can help prevent these infections. Extra attention should be focused on people from groups experiencing racial, ethnic, and socioeconomic differences in staph bloodstream infections. Actions include: Better

information can lead to more effective infection prevention programs and catheter reduction policies that will benefit everyone on dialysis. More data about dialysis bloodstream infections in patients of different races, ethnicities, and socioeconomic statuses can be gained by: *A way of describing people often based on their level of education, income, place of residence, and job type. Get email updates about Vital Signs VITAL SIGNS RESOURCES

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