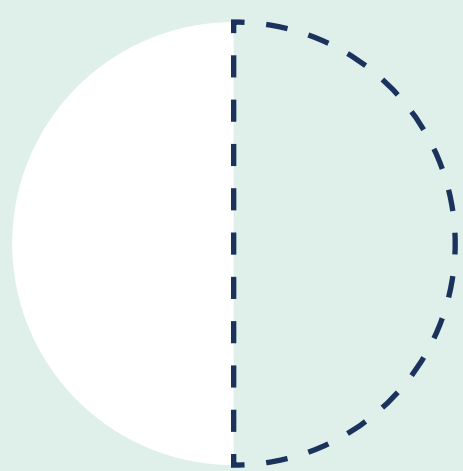


# CARDIOVASCULAR DISEASE: The Silent Killer of Hemodialysis Patients

There is an epidemic among patients with end-stage renal disease (ESRD).  
It is a cunning killer, quietly slipping in and taking your patients' lives.



## 1/2

CVD is responsible for half of deaths among ESRD patients



## 1/3

CVD is responsible for a third of hospitalizations among ESRD patients



### Cardiovascular disease (CVD)

is the leading cause of morbidity and mortality in patients with ESRD



### Major Cause of Complications

CVD is a major cause of complications during hemodialysis treatments

# 30X HIGHER

In ESRD patients, CVD mortality rates are approximately 30 times higher than those of the general population



## 35%

of deaths occur within the first 12 hours from the beginning of the dialysis session

# 1,000X HIGHER

In adolescent ESRD patients, CVD mortality rates are approximately 1,000 times higher than those of their peers



**27%**  
of these deaths occur during dialysis



**33%**  
occur in the first hour after dialysis

## Arteriovenous (AV) Access

is an often overlooked source of cardiac dysfunction



## 25%

Access flow that exceeds 25% of cardiac output indicates a potential cardiac problem

### 20% Decrease

Cardiac output decreases an average of 20% during hemodialysis treatment, causing less blood flow to be available to sustain the vital bodily functions.

### Thorough Cardiac Assessment

should be performed in patients prior to placing an arteriovenous fistula (AVF) as well as during treatment to monitor the patient's cardiovascular status.

### Ultrasound dilution methodology

Provides a way for hemodialysis professionals to recognize and forestall the devastating consequences of CVD



Source: Better Hemodialysis Patient Care Through Cardiac Function Assessment