

**TITLE: ANTI-INFECTIVE DOSING RECOMMENDATIONS FOR RENAL DYSFUNCTION:
ADULT**

GUIDELINES:

Based on recommendations from the Subcommittee on Anti-Infective Use and the Formulary and Therapeutics Committee, these guidelines shall be used by prescribers and pharmacy personnel to aid in the appropriate dosing of antimicrobials in patients with renal dysfunction.

PURPOSE:

To recommend appropriate dosage adjustments in patients with renal insufficiency in order to reduce the likelihood of adverse drug reactions and improve efficacy.

APPLICABILITY:

Prescribers, pharmacists, nurses

PROCEDURE:

1. Determine patient's dosing weight (DW)
 - A. Non-Obese patients: Use ideal body weight (IBW) unless total body weight (TBW) is less. Non-obese is defined as TBW < 30% over ideal body weight
 - 1) IBW (males) = 50 kg + (2.3 x height in inches > 60 inches)
 - 2) IBW (females) = 45 kg + (2.3 x height in inches > 60 inches)
 - B. Obese patients: Use adjusted body weight (ABW) in obese patients (TBW > 30% over IBW)
 - 1) ABW (kg) = IBW + 0.4 (TBW – IBW)
2. Estimate patient's creatinine clearance (CrCL)
 - A. CrCL (male) mL/min = $\frac{(140 - \text{age}) \times \text{DW}^* (\text{kg})}{72 \times \text{SCr}}$ (x 0.85 for females)
 - B. For patients on dialysis, determine the type of dialysis method
 - 1) Hemodialysis (HD)
 - 2) Peritoneal Dialysis (PD)
 - 3) Continuous Renal Replacement Therapy (CRRT)
3. Determine which antimicrobial will be initiated in the patient
4. Once an antimicrobial is selected, follow the row across to the appropriate column based on CrCL or type of dialysis.

RESPONSIBILITY:

Joint Subcommittee on Anti-Infective Use

POLICY/GUIDELINE DATES:

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