What is Antimicrobial Stewardship?

Antimicrobial stewardship is an activity that includes *appropriate selection*, *dosing*, *route*, and *duration* of antimicrobial therapy.

What is the Primary Focus?

1. Optimize antimicrobial use
2. Achieve the best patient outcomes
3. Reduce the risk of infection
4. Reduce the levels of antibiotic resistance
5. Promote patient safety

What are the Potential Risks?

- ➢ Toxicity
- ➢ Selection of pathogenic organisms
- ➢ Development of antimicrobial resistant organisms

How do we improve the effectiveness of Antimicrobial prescribing?

- *Antibiogram Reporting:*
  - o Percentage of microbial isolates susceptible to various antimicrobials
  - o Updates on microbial resistance patterns for a facility or region
  - o Assessment performed by the pharmacy, physician, and laboratory committee members
  - o Attendant document highlighting changes of clinical significance

How do we track Antimicrobial usage?

- ➢ **Defined Daily Dose (DDD):**
  - o Amount of an antimicrobial used (in grams) divided by the average daily dose for the antimicrobial set by the WHO
  - o Applies to *pharmacists/nursing staff*

- ➢ **Quarterly reports** generated for:
  - o *ICU or other Critical Care*
  - o *General Medicine*
  - o *Surgery*
  - o *Pediatrics*

- ➢ Enter audited units into the **NTHSSA Antimicrobial Usage Tracking sheet**:
  - o Automatically calculates the number of *DDD/1000 patient days*

- ➢ Results submitted to **NTHSSA Antimicrobial Stewardship Committee** annually

- ➢ **Annual reports** created and shared with practitioners as an *indicator to monitor antimicrobial usage in NWT.*

How do we convert from IV to oral therapy?

- *Antimicrobial De-escalation:*
  - o IV antimicrobials reviewed every 72 hours for cultures and sensitivities
  - o Monitoring: 10 random chart audits will be conducted every quarter
  - o See full criteria in Antimicrobial De-escalation Policy

While the Antimicrobial stewardship committee is in the process of being formed, the NTHSSA Pharmacy and Therapeutics committee is completing the work.

NORTHWEST TERRITORIES
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