Multidrug-resistant (MDR) tuberculosis is a major health threat globally. Nearly half a million MDR TB\(^1\) cases are estimated to occur worldwide annually, including cases that are extensively drug-resistant (XDR).\(^2\)

While MDR and XDR TB are relatively rare in the U.S., their treatment comes at a terrible price – it is very expensive, takes a long time to treat, disrupts lives, and has potentially life-threatening side effects.

### The Outsized Financial Toll of MDR and XDR TB

Cost increases with greater resistance:

- **TB** Treatment: 6-9 mo.
- **MDR TB** Treatment: 20-26 mo.
- **XDR TB** Treatment: 32 mo.

<table>
<thead>
<tr>
<th>Average Treatment Costs, Per Case (2015 dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$45,000</td>
</tr>
<tr>
<td>$27,000</td>
</tr>
<tr>
<td>$18,000</td>
</tr>
<tr>
<td>$288,000</td>
</tr>
<tr>
<td>$134,000</td>
</tr>
<tr>
<td>$154,000</td>
</tr>
<tr>
<td>$450,000</td>
</tr>
<tr>
<td>$184,000</td>
</tr>
<tr>
<td>$678,000</td>
</tr>
</tbody>
</table>

- **Productivity loss during treatment, including deaths**
- **Direct treatment costs, including:**
  - Drugs & diagnostics
  - Case management & social work
  - Housing & transportation
  - Hospitalization

### A Major Human Cost

Of those treated for drug-resistant TB:

- **9%** Die During Treatment
- **27%** Stop Working
- **73%** Hospitalized
- **37%** Require Home Isolation

### Severe Treatment Side Effects

- Depression/Psychosis: 19%
- Hearing Impairment: 13%
- Hepatitis: 13%
- Kidney Impairment: 11%
- Loss of Mobility: 8%
- Vision Impairment: 7%
- Seizures: 1%

### Preventing and Controlling MDR and XDR TB in the U.S. Requires:

- **Better Treatment Options**
- **Rapid Diagnosis**
- **Expert Treatment of Every TB Case**
- **Improving Global TB Diagnosis and Treatment**

### Footnotes

\(^1\) Multidrug-resistant TB is resistant to at least two of the best and most important anti-TB drugs: isoniazid and rifampin.

\(^2\) Extensively drug-resistant TB is resistant to isoniazid and rifampin among first-line drugs, resistant to any fluoroquinolone and at least one second-line injectable drug.