Provider Guidance Fact Sheet:
12-dose Isoniazid (INH)/Rifapentine Regimen for Latent TB Infection Treatment

NOTE: It is imperative to rule out active disease in all persons prior to initiating treatment for LTBI

How many are infected with tuberculosis?
In Virginia, it is estimated that 2.8% of the population have tuberculosis (TB) infection. In 2019 latent TB infection (LTBI) will be a reportable condition for all ages. In 2017, 204 persons were diagnosed with TB disease in Virginia. An essential element of TB control is the treatment of latent TB infection.

What is the 12-dose INH/rifapentine 3HP regimen?
It consists of 12 once-weekly doses of INH and rifapentine administered by directly observed therapy (DOT) for the treatment of LTBI.

Is the regimen effective?
Randomized controlled trials in adults\(^1\) and children\(^2\) showed that the 12-dose regimen administered by DOT is as effective as 9 months of daily INH self-administered therapy (SAT) for LTBI treatment. The 12-dose regimen was more likely to be completed when compared to 9 months of daily INH.\(^1,2\)

What are the advantages of this regimen?
- The 12-dose regimen reduces treatment time by two-thirds (from 9 months to 3 months)
- Weekly dosing offers convenience
- Higher rates of treatment completion
- Lower rates of hepatotoxicity

Who should be considered for treatment with the 12-dose regimen for LTBI?
- 3HP is recommended for treating LTBI in persons age 2 and older who do not take medications that interact with Rifapentine
- Short course regimens are preferred whenever possible to enhance the likelihood of LTBI treatment completion

Who is NOT recommended for treatment with the 12-dose regimen?
- Children under 2 years of age
- HIV infected persons taking certain antiretrovirals (potential drug interactions between rifapentine and antiretrovirals)
- Individuals taking medications that may have drug interactions that are difficult to manage with the 12-dose regimen

Does this regimen have to be administered via DOT?
- The Virginia Department of Health (VDH) recommends the use of DOT to ensure treatment adherence and completion
- A CDC-sponsored trial recently investigated SAT of 3HP and evidence supports that SAT is non-inferior to DOT of 3HP for treatment in the United States\(^3\)
- As a result of this data many clinicians are applying SAT or modified DOT approaches with 3HP
- Clinicians may choose to provide 3HP by SAT or DOT based on individual risk and need

What is the completion of therapy?
Completion of therapy is defined in the study as completing at least 11 weekly doses of treatment within 16 weeks. Doses should be given at least 72 hours apart.

What are the doses?

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<thead>
<tr>
<th>Drug</th>
<th>Dosage</th>
<th>Maximum dose</th>
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<tbody>
<tr>
<td>INH</td>
<td>15 mg/kg rounded to nearest 50/100 mg in patients ≥ 12 years</td>
<td>900 mg</td>
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<td></td>
<td>25 mg/kg rounded to the nearest 50/100 mg in patients 2-11 years</td>
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<tr>
<td>Rifapentine</td>
<td>10.0 – 14.0 kg = 300 mg</td>
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<td></td>
<td>14.1 – 25.0 kg = 450 mg</td>
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<td>25.1 – 32.0 kg = 600 mg</td>
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<td>32.1 – 49.9 kg = 750 mg</td>
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Rifapentine tablets can be crushed and administered with semi-solid food for children unable to swallow pills

Does this regimen have to be administered via DOT?
- The 12-dose regimen was more likely to be completed when compared to 9 months of daily INH.\(^1,2\)

What are the toxicities observed in the 12-dose regimen in the clinical trial participants?
- Possible hypersensitivity (3.8%)
- Rash (0.8%)
- Hepatotoxicity (0.4%)
- Thrombocytopenia (infrequent)
- Other toxicities (3.2%)

Note: Refer to product insert for full list of side effects.
What can a hypersensitivity reaction include and how should I respond?
Hypersensitivity reactions may include a flu-like syndrome (e.g., fever, chills, headaches, dizziness, musculoskeletal pain), thrombocytopenia, shortness of breath or other signs and symptoms including wheezing, acute bronchospasm, urticaria, petechiae, purpura, pruritus, conjunctivitis, angioedema, hypotension or shock.

- If moderate to severe reaction (e.g., thrombocytopenia, hypotension, syncope), hospitalization or life-threatening event **Discontinue treatment**
- If mild reaction (e.g., rash, dizziness, fever) **Continue to monitor patient closely with a low threshold for discontinuing treatment**

How do I report an adverse event regarding the 12-dose regimen?
All adverse events should be reported to FDA MedWatch, [https://www.accessdata.fda.gov/scripts/medwatch/medwatch-online.htm](https://www.accessdata.fda.gov/scripts/medwatch/medwatch-online.htm)

Report adverse events leading to death or hospitalization to the local health department, who will report to VDH.

Final Recommendations:
- At completion of treatment, provide client with documentation of their TB test, chest x-ray results, medication treatment regimen and duration of treatment.

For questions, contact the VDH TB Control Program at 804-864-7906.

Resources
Virginia Department of Health
Tuberculosis Control Program
www.vdh.virginia.gov/tuberculosis-and-newcomer-health
804-864-7906

Centers for Disease Control and Prevention, Division of Tuberculosis Elimination  http://www.cdc.gov/tb/
800-232-4636

FDA MedWatch
https://www.accessdata.fda.gov/scripts/medwatch/medwatch-online.htm
888-463-6332

Adapted from LA County DOH, April 2017