

# HTTPS Defense (RFC 5246)

*Attacks discovered by Bleichenbacher and Klima et al. ... can be avoided by treating incorrectly formatted message blocks ... in a manner indistinguishable from correctly formatted RSA blocks. In other words:*

- 1. Generate a string **R** of 46 random bytes*
- 2. Decrypt the message to recover the plaintext  $M$*
- 3. If the PKCS#1 padding is not correct*  
$$\text{pre\_master\_secret} = \textbf{R}$$