

Column E Explanation

1. Reporting Date: October 1, 2019 – September 30, 2020
2. Registration Number: 33-R-0113
3. Number: 67
4. Species: Chinchilla

5. Procedure:

Animals were subjected to noise exposure in a sound booth. The noise exposure was one of two types for each animal; none received both. One exposure was of 6 hours duration with the noise centered at 4 kHz and generated by a TDTGNS 40x white noise generator. Each animal was exposed at a level of 105 dB SPL for the 6 hours. The other exposure was an impulse noise exposure that consisted of 155 dB SPL impulse noise repeated 150 times over a 75 second time period.

6. Explanation:

The chinchillas experienced noise exposure. Sedation was not used because levels of sedation cannot be adequately monitored during the noise exposure without violating the chamber and thus the exposure. In addition, as this study was a continuation of previous work where sedation was not used, the ability to make scientific comparisons would be jeopardized by the addition of a new variable. Sedation can deactivate acoustic reflexes of the middle ear and alter noise exposure in an unpredictable manner. The noise exposure was considered possibly unpleasant but not so distressing as to warrant the risks associated with sedation. This model recapitulates human occupational noise exposure. Humans exposed to this level of noise do not receive sedatives.