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Assessment of exposure to impulsive and continuous noise by
auditory brainstem response

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The aim of the work was to measure the wave V latency or thresholds in the auditory brainstem responses (ABRs) produced by impulsive and continuous noise. A forward-masking paradigm was used in which the ABR was evoked by a 4-kHz tone pip. The tone pip was masked by a preceding 201-ms or 501-ms interval of click trains or band-pass noise presented at various levels. The inter-click interval ranged from 20 ms (50 clicks/s) to 100 ms (10 clicks/s). The center frequencies of the noise bands ranged from 250 to 4000 Hz. Results show that changes in wave V latency may be used as an indicator of the equivalence of the effect of various kinds of noise on the human auditory system. [Work supported by the Polish Ministry of Science and Higher Education, grant 4T07B00428].