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Was the content of the article relevant to current AT practice? Yes No

Was reading the article and completing the quiz a good way for you to learn? Yes No

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## 28.4A Quiz Proposed Pedestrian Pathway Roughness Thresholds to Ensure Safety and Comfort for Wheelchair Users

1. What are the thresholds for fatigue, safety and comfort called which are part of the standard for vehicle vibration analyses?

- a. Vehicle shock region
- b. Exposure caution zone
- c. Vibration exposure expanse
- d. Vibration exposure area

ANSWER: \_\_\_\_\_

2. Which combination of brick characteristics resulted in the lowest WBV and significantly lower WBV than the control, standard poured concrete surface?

- a. 8mm bevel and 45° brick
- b. 4mm bevel and 90° brick
- c. No bevel and 45° brick
- d. No bevel and 90° brick

ANSWER: \_\_\_\_\_

3. Which brick surface characteristics had the highest WBV?

- a. No bevel and 45° brick orientation
- b. 8mm bevel and 45° brick orientation
- c. 4 mm bevel and 90° brick orientation
- d. No bevel and 90° brick orientation
- e. 8mm bevel and 90° brick orientation

ANSWER: \_\_\_\_\_

4. What is the name of the index that calculated the vertical deviations of the surface itself over a horizontal distance?

- a. IRI
- b. NRI
- c. PRI
- d. URI

ANSWER: \_\_\_\_\_

5. How were the Pathway Roughness Indices of the various surfaces determined?

- a. by using a custom-built roughness detector called the Pathway Roughness Indicator (PathRoughI))
- b. by using a planar level device
- c. by using a custom-built measurement device called the Pathway Measurement Tool (PathMeT)
- d. by using an ultra-refined pathway cushion sensor

ANSWER: \_\_\_\_\_

6. What was one critical objective of this study?

- a. to assess whether the sidewalk or pathway was durable enough to withstand the heavy traffic
- b. to determine whether the pathway was safe enough for wheelchair users
- c. to gauge the pathway for adequate width
- d. to observe pathway traffic patterns in order to optimize pathway dimensions

ANSWER: \_\_\_\_\_

Name: \_\_\_\_\_ Email: \_\_\_\_\_

7. What was the damage caused by whole body vibration (WBV) related to?

- a. a surface that is too short
- b. a surface that is too long
- c. a surface that is too rough
- d. duration of exposure
- e. a combination of extremely rough surface and body movement synchronization

ANSWER: \_\_\_\_\_

8. What did the results of previous vibration study reveal?

- a. some surfaces are too soft and don't withstand heavy traffic patterns
- b. some surfaces are too hard and, although very durable, are not conducive to a smooth ride
- c. some surfaces can cause discomfort and could possibly cause health risks to wheelchair users
- d. most surfaces cause some discomfort and necessary accommodations must be made

ANSWER: \_\_\_\_\_

9. What is the lowest and the highest value for the PRI threshold?

- a. less than 20 mm/m and more than 200 mm/m
- b. more than 20 mm/m and less than 200 mm/m
- c. less than 10 mm/m and more than 250 mm/m
- d. more than 40 mm/m and less than 150 mm/m

ANSWER: \_\_\_\_\_

10. Concerning PRI threshold, what does 100 mm/m represent?

- a. the minimum PRI threshold proposed for any short surface segment
- b. the maximum PRI threshold proposed for any long surface segment
- c. the minimum PRI threshold proposed for any long surface segment
- d. the maximum PRI threshold proposed for any short surface segment

ANSWER: \_\_\_\_\_

11. What is the speed used for many vibration studies, which is slightly slower than average walking speed?

- a. 3 m/s
- b. 1 m/s
- c. 4 m/s
- d. 2 m/s

ANSWER: \_\_\_\_\_

12. Why do the noncompliant surfaces appear to be out of compliance?

- a. Because of the original design
- b. Because of a lack of maintenance
- c. Because of both the original design and a lack of maintenance
- d. Because of neither the original design nor a lack of maintenance

ANSWER: \_\_\_\_\_