absolute numbers of pediatric dentists are potentially at risk for sudden negative shifts in pediatric dentist availability. Such states need to be proactive in recruiting pediatric dentists to replace retiring practitioners.

The data set used for this present study is a near approximation of the pediatric dentist workforce in private practice in the United States. The data set has the following limitations regarding the enumeration of pediatric dentists. First is the potential for classification error if any AAPD member had listed his/her residence address in the AAPD *Membership Directory*. This might lead to an erroneous count if the member is working in an institution, etc. and, therefore, would not have been otherwise included in the refined data set according to the defined exclusion criteria. Also, if a member listed his/her residence address in one state but otherwise practiced in another state, this may contribute to improper state-based counts of pediatric dentists.

Another limitation of this study is that AAPD membership penetration may not be consistent across all states. Therefore, this variation in AAPD membership penetration could lead to over- or underestimation of state-by-state counts of pediatric dental practitioners in the present study.

Finally, the pediatric dentist counts are an estimate, with the assumption being made that AAPD membership is representative of US pediatric dentists. This estimation is, however, unlikely to diminish the data set's validity since AAPD membership is estimated to represent almost 95% of all US pediatric dentists.<sup>12</sup>

## Conclusions

Wide variation exists in the state-based ratio of pediatric dental practitioners to children across the United States.

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## ABSTRACT OF THE SCIENTIFIC LITERATURE

## FIXED APPLIANCE REMOVAL-INDUCED BACTEREMIA

The purpose of this prospective clinical study was to determine the prevalence of bacteremia caused by the removal of fixed orthodontic appliances. Pre- and post debanding and debracketing venous blood samples were obtained from 30 orthodontic patients. The 13% prevalence of band/bracket removal-induced bacteremia was found to be unrelated to the patients' gingival or plaque scores.

**Comments:** Guidelines for SBE prophylaxis cover the placement of orthodontic bands, but say nothing about their removal. This study's results would suggest that appliance removal represents a significant risk of bacteremia. Presumably, this occurs during band removal and not bracket removal. Unfortunately, the study design did not allow for this distinction. **ALS** 

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Burden DJ, Coulter WA, Johnston CD, Mulally B. The prevalence of bacteremia on removal of fixed orthodontic appliances. *Eur J Orthod*. 2004;6:443-447.

22 references

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