**Dental Care Supply**

**Alaska (AK) Notes**

**by Chris Larkins**

* Because the AK data could be accessed for free at <https://www.commerce.alaska.gov/cbp/main/>, I downloaded a new AK file to obtain the BOD dentists. The file was collected on 6.9.20. The file I used is not the one currently on dropbox uploaded by Tina or Dr. Serban.
* The “IKN\_processed.csv” file and “[NP\_national\_w\_extra\_col\_2n.csv](http://localhost:8888/view/Dental%20Care%20Supply/NP_national_w_extra_col_2n%20(1).csv)” files were used
* Anything that mentioned “hygienist” was disregarded according to recent dropbox updates.
* I used the PA/IL code on dropbox to help formulate my code for AK.
* **The ADA report shows 601 dentists in AK in 2018. The final sum of dentists from the FTE of BOD + BOTH was 594 (587 unique). This is slightly less than the 601 dentists listed in 2018. When I re-ran the code to include out-of-state BOD addresses, I received a total sum of 664 (658 unique) dentists. The files in the FTE folder are the files with the 594 dentists because this number was closer to the ADA value.** 
  + This has to do with the BOD data. The “BOD\_final” files only had 588 rows of unique dentists. If I included dentists that were suspended, probation, etc, this number would only go up by four. There were only one of four dentists with a NULL state that could have been practicing in AK. Therefore, the absolute max number of dentists that could have been possibly considered for the BOD data was 593...which is still smaller than 601. Another important thing to note, the AK ADA total went down by 40 dentists from 2015 to 2016. Maybe the same happened in 2019 or 2020.
  + I later went back and ran the code to include BOD out-of-state addresses. This increased my final, total sum of dentists to 664 (an increase of 70). I thought this was an unrealistic increase in the number of dentists. 
* This BOD file from 6.9.20 includes:
  + 705 rows of dentists. These dentists are either listed as: [“Dentist” , “Dentist Moderate Sedation Permit” , “Dentist Deep Sedation and General Anesthesia Permit”]. I decided to keep all three types of dentists as the number of rows just listed as “Dentist” with an active status was 585. This is less than the 601 listed in the ADA report. The number of all three types of dentists with an active status is 685.
  + 21 rows were removed in BOD pre-processing because the dentist was listed as “Inactive”, “Suspended”, or “Probation”.
  + The Columns Headers Include:
    - 'BOD\_type', 'BOD\_lic\_no', 'BOD\_Full\_Name', 'BOD\_First', 'BOD\_Last', 'BOD\_expire\_date', 'BOD\_addr1', 'BOD\_addr2', 'BOD\_City', 'BOD\_State', 'BOD\_Zip', 'BOD\_addr', 'BOD\_names', 'BOD\_Formatted\_Name'
* The IKN-NPPES match rate was 93%
* The overall IKN match rate was 63.6%
  + I re-ran the code with less filtered BOD data to see if the issue was in the BOD or not.
  + After re-running the code, the new IKN match rate jumped to 76%. It is apparent that the IKN match rate is still not great even with far less limits on the practice state, license expiration date, and license status.
  + After exclusions, there is no significant difference between the datasets. This is assuming one excludes the out-of-state BOD addresses by the end of the exclusions stage. Thus, I chose to continue with the first BOD dataset I used.
* There were only BOTH rows, no MED, no CHIP after exclusions.
* All of the rows for the final BOD FTE sum had whole numbers for the general, specialist, and pediatric columns.