

Data Dictionary for: **BC_CSD_MultiWiSE_Metrics_2010-2023.csv**

Variable	Unit	Description
CSD	-	The unique identifier for a given census subdivision
1_Cumulative_WFS_PM25	mg/m ³	Total sum of WFS PM _{2.5} over the multiyear period
2_WFS_Fraction	%	Fraction of cumulative total PM _{2.5} exposure from WFS
3_AverageWFS_PM25	µg/m ³	Average WFS PM _{2.5} across all WFS-impacted weeks
4_AnyWFS	# weeks	Total count of WFS-impacted weeks
5_WFS_PM2_exceeds_5	# weeks	Count of WFS-impacted weeks where weekly average WFS PM _{2.5} exceeded 5 µg/m ³
6_Total_PM2_exceeds_25	# weeks	Count of WFS-impacted weeks where weekly average total (i.e., all-source) PM _{2.5} exceeded 25 µg/m ³
7_WFS_Episodes	# episodes	Total count of WFS episodes
8_Severe_Episodes	# episodes	Count of severe WFS episodes
9_Longest_Episode	# weeks	Length of the longest WFS episode
10_Worst_Episode	µg/m ³	Average WFS PM _{2.5} during the WFS episode with the highest average WFS PM _{2.5}
11_WFS_from_Severe_Episodes	%	Fraction of cumulative WFS PM _{2.5} from severe WFS episodes
12_Average_Recovery	# weeks	Average time between episodes, including periods before the first and after the last episode
Cumulative_Total_PM25	mg/m ³	Total sum of total PM _{2.5} over the multiyear period
Average_Total_PM25	µg/m ³	Average total PM _{2.5} across all weeks
Cumulative_NonWFS_PM25	mg/m ³	Total sum of non-WFS PM _{2.5} over the multiyear period
Average_NonWFS_PM25	µg/m ³	Average non-WFS PM _{2.5} across all weeks
Counterfactual_Value	µg/m ³	The counterfactual weekly average value, calculated using the median of total PM _{2.5} during weeks with a modified Z-score between -2 and +2

Data Dictionary for: **BC_CSD_Weekly_PM25_Episode_Estimates_2010-2023.csv**

Variable	Unit	Description
csd	-	The unique identifier for a given census subdivision
epiweek	-	The week number the exposure data corresponds to. The first week in the study period is week 1. Weeks are represented as epidemiological weeks, which are standardized to start on a Sunday and end on a Saturday.
weekly_n_days	days	The number of days in the epiweek that had data available for analysis. A value of 7 indicates no missing data. Incomplete epiweeks (<7 days) that occurred at the beginning and end of the study period were dropped and not included in analysis.
start_date	-	The date on which the epiweek started (always a Sunday), shown in date format YYYY-MM-DD.
end_date	-	The date on which the epiweek ended (always a Saturday), shown in date format YYYY-MM-DD.
weekly_avg_pm25	$\mu\text{g}/\text{m}^3$	The weekly average of total (i.e., all-source) PM _{2.5}
wfs_weekly_avg_pm25	$\mu\text{g}/\text{m}^3$	The weekly average of WFS PM _{2.5}
non_wfs_weekly_avg_pm25	$\mu\text{g}/\text{m}^3$	The weekly average of non-WFS PM _{2.5}
weekly_sum_pm25	$\mu\text{g}/\text{m}^3$	The weekly sum of total PM _{2.5}
wfs_weekly_sum_pm25	$\mu\text{g}/\text{m}^3$	The weekly sum of WFS PM _{2.5}
non_wfs_weekly_sum_pm25	$\mu\text{g}/\text{m}^3$	The weekly sum of non-WFS PM _{2.5}
modified_z	-	Modified z-score of 'weekly_pm25_sum', used to identify whether the epiweek was smoke impacted
is_wildfire_season	-	A Boolean variable indicating whether any part of the epiweek occurred during wildfire season (May – October)
is_smoke_impacted	-	A binary variable (1 or 0) indicating whether the epiweek was smoke impacted ('modified_z' > 2)
episode_id	-	Unique identifier for each WFS episode. All weeks in a given WFS episode will have the same identifier. A WFS episode is defined as either (1) two or more WFS-impacted weeks separated by no more than three non-WFS-impacted weeks, or (2) a single week where the sum of WFS PM _{2.5} > 250 mg/m ³
severe_episode_id	-	Unique identifier for each severe WFS episode. All weeks in a given severe episode will have the same identifier. A severe episode is defined as any WFS episode that includes a week with a sum of WFS PM _{2.5} > 250 mg/m ³