## How To Use the RadNet Near-Real-Time Air Data Dashboard

The RadNet Nationwide Environmental Radiation Monitoring Dashboard allows users to see radiation levels at different locations in the United States. The data presented meet EPA's rigorous quality assurance criteria and are collected at regular intervals so you can see data in near-real-time.





A timestamp in the left -hand corner of the dashboard shows the last time the dataset was updated.

On the dashboard, you'll be able to look at two types of radiation data: Gamma Exposure Rate and Gamma Gross Count Rate. To use this dashboard, users must select a monitoring station.

Once selected, the dashboard will update itself with various scatterplots and a data table for the selected monitoring station.



## SELECT A MONITORING STATION BY ...



To get started, use the quick filters at the top of the dashboard.

You can select a monitoring station by using the quick filter at the top of the dashboard, or by clicking a dot on the map. Each dot represents a monitoring station.

You can only select one monitoring location at a time. If no monitoring station or more than one is chosen, the data will not display. All monitoring stations may have Gamma Gross Count data. Most may also have Gamma Exposure Rate data. Stations that may have both are shown in navy blue, while the monitoring locations with only Gamma Gross Count data are shown in lighter blue.

Gamma Exposure Rate indicates the level of radiation in an area, and it can be interpreted as an estimate of a person's radiation dose rate if they were standing in the vicinity of the monitor.

Gamma Gross Count Rate is a measurement of the gamma radiation emitted from the particulates collected on each monitor's air filter. Scientists can use gamma gross count data to detect anomalies and track trends.



There is no direct relationship between Gamma Exposure Rate and Gamma Gross Count rate. You can learn more by referencing our <u>Frequent Questions about RadNet page</u>.

If you would like to filter by monitor type before selecting a location, you can do that with the quick filters.

RadNet Dashboard				FILTERING B	SY
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m s Repo	elect a contract of the second	ate range ast Updated: 10/16/23 al-Time Air Data	Monitor Location	Monitor Capabilities Monitor Capa (i) X V Q. Search in listbox Camma Gross Court Rate Gam ons Count Rate & Gamma.	Distinct Monitors 40 Gamma Gross Count Rate & Gamma Exposure Rate Gamma Gross Count Rate Gamma Gross Count Rate
м	onitor	Locations			RadNet Monitor Locations Map
	Results	Monitor Location	Monitoring Capabilities		Con Selling
	1	AR: FT SMITH	Gamma Gross Count Rate	10/15/23 - 07:57:00 PM	
	2	CA: RIVERSIDE	Gamma Gross Count Rate	10/15/23 - 06:51:00 PM	
	3	CO: DENVER	Gamma Gross Count Rate	10/15/23 - 07:10:00 PM	
		CO: GRAND JUNCTION	Camma Gross Count Rate	10/15/23 - 07-20.00 PM	
	6	CT: HARTFORD	Gamma Gross Count Rate	10/15/23 - 07:59:00 PM	
	7	FL: MIAMI	Gamma Gross Count Rate	-	
	8	IA: DES MOINES	Gamma Gross Count Rate	10/15/23 - 07:49:00 PM	
	9	IA: FORT MADISON	Gamma Gross Count Rate	-	
	10	ID: BOISE	Gamma Gross Count Rate	10/15/23 - 07:20:00 PM	
	11	IN: FORT WAYNE	Gamma Gross Count Rate	10/15/23 - 07:40:00 PM	North Pacific Count
	12	IN: INDIANAPOLIS	Gamma Gross Count Rate	10/15/23 - 07:06:00 PM	

Next, you have the option of selecting a date range for the monitoring data that will appear on the dashboard. Only the data from the last 3 months are available to be selected. If you do not select a date range, the data will automatically be pulled from the past three months.



Once you're done customizing the dashboard, the table and map will update to show just the location you selected; and the scatterplot and data table at the bottom of the page will populate with data specific to the monitoring location selected.

When you scroll down to the scatterplot section, you'll notice there are three tabs.

If you selected a location with both Gamma Gross Count and Gamma Exposure Rate, you'll be able to see scatterplots in each of the tabbed windows.

The left scatterplot shows Gamma Exposure Rate in milliroentgen per hour. It indicates the level of radiation in the area of the monitor. 
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The middle tab shows dose equivalent rate in nanosieverts per hour. It is derived from the Gamma Exposure Rate on the left and is an estimate of a person's dose rate if they were standing in the vicinity of the monitor. The right scatterplot shows Gamma Gross Count Rate.

If you selected a location that does not yet have gamma exposure rate capability, only the right Gamma Gross Count tab will display data.

## DATA TABLE

Monitor	Details (Gamma & Exposure Rate	)			
Results	Monitor Location	Measurement Start Date/Time (EST)	Measurement End Date/Time (EST)	Exposure Rate (mR/h)	bi
2,141					
1	AK: FAIRBANKS	07/17/23 - 07:38:17 PM	07/17/23-08:38:26 PM	0.0037	
2	AK: FAIRBANKS	07/17/23 - 08:38:30 PM	07/17/23-09:38:38 PM	0.0036	
3	AK: FAIRBANKS	07/17/23-09:38:42 PM	07/17/23-10:38:51 PM	0.0035	
4	AK: FAIRBANKS	07/17/23 - 10:38:55 PM	07/17/23-11:39:03 PM	0.0035	
5	AK: FAIRBANKS	07/17/23 - 11:39:07 PM	07/18/23 - 12:39:15 AM	0.0036	
6	AK: FAIRBANKS	07/18/23 - 12:39:19 AM	07/18/23 - 01:39:27 AM	0.0034	
7	AK: FAIRBANKS	07/18/23 - 01:39:31 AM	07/18/23 - 02:39:40 AM	0.0035	
8	AK: FAIRBANKS	07/18/23 - 02:39:44 AM	07/18/23 - 03:39:52 AM	0.0033	
9	AK: FAIRBANKS	07/18/23 - 03:39:56 AM	07/18/23 - 04:40:05 AM	0.0036	
10	AK: FAIRBANKS	07/18/23 - 04:40:09 AM	07/18/23 - 05:40:17 AM	0.0036	
11	AK: FAIRBANKS	07/18/23 - 05:40:21 AM	07/18/23 - 00:40:29 AM	0.0035	
12	AK: FAIRBANKS	07/18/23 - 06:40:34 AM	07/18/23 - 07:40:42 AM	0.0034	

Under the scatterplots, there is a data table which provides a downloadable version of all the data displayed in the scatterplot above. You can save or export the data if you choose.

To clear the selection, you can click on the "X" near the quick filters.



This dashboard was built for viewing and interacting with RadNet data in near-realtime. Other radiation monitoring data such as air monitoring results from air filters, deployable monitors, or historical monitoring can be found elsewhere on EPA's website. For more information go to our <u>RadNet Databases and Reports webpage</u>.