

US EPA ARCHIVE DOCUMENT

1996 Modeled Exposure Concentrations for New Jersey

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- The exposure estimates presented below are representative of midrange estimates of population exposures. Due to a number of factors, some individuals may have substantially higher or lower exposures. It is important to note that the model, as applied on the national scale, is not designed to quantify these extreme values of individual exposures.
- Note that for certain chemicals, exposure pathways other than inhalation as well as indoor sources of air toxics may contribute substantially to total exposures of concern. This assessment does not address these other routes of exposure (i.e., ingestion or dermal) or inhalation exposure resulting from indoor sources.
- The emissions used in this assessment do not reflect potentially significant emission reductions that have taken effect since 1996, including those from: 1) mobile source regulations which are being phased in over time; 2) many of the air toxics regulations EPA has issued for major industrial sources; 3) State or industry initiatives; and 4) any facility closures.
- Methods of estimating emissions as well as simplified modeling assumptions may introduce significant uncertainties into each component of the assessment.
[For a discussion of limitations please see http://www.epa.gov/ttn/atw/nata/natsalim2.html](http://www.epa.gov/ttn/atw/nata/natsalim2.html)
- Because of these uncertainties, EPA will not use the results of this assessment to determine source-specific contributions or to set regulatory requirements. However, EPA expects to use these results to inform decisions about the priorities of the air toxics program as well as to guide the collection of additional data that could lead to regulatory decisions.

				Estimated Annual Median Exposure Concentrations (ug/m3) for New Jersey												
State	County	FIPS	Urban or Rural	1,1,2,2-TCA	1,3-Butadiene	1,3-Dichloropropene	Acetaldehyde	Acrolein	Acrylonitrile	Arsenic	Benzene	Beryllium	Cadmium	Carbon Tetrachloride	Chloroform	Chromium
National	All	99999	-	2.33E-04	4.79E-02	5.20E-02	4.82E-01	7.21E-02	5.62E-04	4.83E-05	1.19E+00	8.35E-06	3.90E-05	6.41E-01	6.90E-02	5.15E-04
National	All Urban Counties	99998	U	3.50E-04	5.93E-02	6.60E-02	6.45E-01	8.89E-02	8.39E-04	6.25E-05	1.41E+00	1.08E-05	5.90E-05	6.41E-01	6.96E-02	8.25E-04
National	All Rural Counties	99998	R	3.62E-05	1.30E-02	7.09E-03	1.15E-01	3.03E-02	7.64E-05	1.01E-05	6.01E-01	1.09E-06	4.79E-06	6.40E-01	6.80E-02	5.05E-05
New Jersey	State Total	34000	-	6.93E-04	5.05E-02	1.00E-01	9.88E-01	1.24E-01	1.48E-03	8.06E-05	1.50E+00	1.68E-05	1.25E-04	6.41E-01	7.56E-02	1.43E-03
New Jersey	State Urban Counties	34000	U	6.93E-04	5.05E-02	1.00E-01	9.88E-01	1.24E-01	1.48E-03	8.06E-05	1.50E+00	1.68E-05	1.25E-04	6.41E-01	7.56E-02	1.43E-03
New Jersey	Atlantic County	34001	U	2.27E-04	3.02E-02	4.29E-02	2.88E-01	4.50E-02	4.25E-04	3.92E-04	8.60E-01	2.31E-05	4.61E-05	6.39E-01	6.91E-02	9.14E-05
New Jersey	Bergen County	34003	U	9.09E-04	6.17E-02	1.62E-01	1.38E+00	1.78E-01	1.90E-03	8.91E-05	1.78E+00	1.93E-05	1.94E-04	6.39E-01	7.52E-02	1.69E-03
New Jersey	Burlington County	34005	U	4.63E-04	4.38E-02	8.87E-02	9.83E-01	1.21E-01	1.08E-03	9.27E-05	1.53E+00	1.41E-05	2.08E-04	6.41E-01	7.25E-02	2.66E-03
New Jersey	Camden County	34007	U	3.95E-04	7.31E-02	1.09E-01	1.26E+00	1.60E-01	1.15E-03	1.67E-04	2.03E+00	2.15E-05	4.20E-04	6.41E-01	7.68E-02	5.14E-03
New Jersey	Cape May County	34009	U	7.93E-05	2.02E-02	1.89E-02	1.41E-01	2.07E-02	1.54E-04	1.07E-04	7.13E-01	2.19E-05	2.46E-05	6.40E-01	6.83E-02	5.05E-05
New Jersey	Cumberland County	34011	U	1.27E-04	3.29E-02	4.38E-02	3.80E-01	4.98E-02	3.73E-04	4.51E-04	1.04E+00	2.34E-04	2.81E-04	6.42E-01	7.00E-02	4.92E-04
New Jersey	Essex County	34013	U	8.20E-04	9.95E-02	1.92E-01	1.56E+00	2.06E-01	1.74E-03	9.17E-05	2.09E+00	2.42E-05	1.33E-04	6.41E-01	7.67E-02	1.85E-03
New Jersey	Gloucester County	34015	U	2.24E-04	4.44E-02	7.16E-02	9.15E-01	1.17E-01	5.98E-04	2.12E-04	1.55E+00	2.18E-05	3.99E-04	6.42E-01	7.40E-02	2.00E-03
New Jersey	Hudson County	34017	U	1.20E-03	1.58E-01	2.64E-01	2.66E+00	3.53E-01	2.99E-03	2.28E-04	3.03E+00	4.06E-05	4.66E-04	6.43E-01	8.40E-02	2.62E-03
New Jersey	Hunterdon County	34019	U	3.29E-04	1.96E-02	3.73E-02	4.85E-01	5.84E-02	6.35E-04	2.60E-05	9.30E-01	4.85E-06	3.19E-05	6.40E-01	1.23E-01	4.80E-04
New Jersey	Mercer County	34021	U	9.18E-04	7.12E-02	9.92E-02	1.01E+00	1.21E-01	1.77E-03	7.12E-05	1.84E+00	1.65E-05	9.86E-05	6.40E-01	7.32E-02	1.33E-03
New Jersey	Middlesex County	34023	U	1.26E-03	4.48E-02	9.25E-02	8.92E-01	1.17E-01	2.42E-03	5.53E-05	1.36E+00	1.31E-05	8.29E-05	6.42E-01	8.45E-02	8.24E-04
New Jersey	Monmouth County	34025	U	8.19E-04	3.44E-02	7.40E-02	6.25E-01	7.90E-02	1.56E-03	3.29E-05	1.13E+00	8.27E-06	4.58E-05	6.41E-01	7.28E-02	3.69E-04
New Jersey	Morris County	34027	U	3.12E-04	3.27E-02	7.09E-02	7.42E-01	9.32E-02	6.59E-04	4.39E-05	1.18E+00	1.03E-05	6.22E-05	6.41E-01	7.34E-02	1.14E-03
New Jersey	Ocean County	34029	U	2.97E-04	2.76E-02	5.59E-02	3.51E-01	5.19E-02	5.80E-04	1.76E-05	8.94E-01	5.63E-06	1.67E-05	6.41E-01	6.98E-02	1.10E-04
New Jersey	Passaic County	34031	U	6.52E-04	6.40E-02	1.63E-01	1.21E+00	1.61E-01	1.43E-03	8.65E-05	1.72E+00	2.03E-05	1.81E-04	6.40E-01	7.44E-02	1.50E-03
New Jersey	Salem County	34033	U	2.38E-04	2.76E-02	4.54E-02	5.82E-01	6.94E-02	1.07E-03	1.80E-04	1.09E+00	2.02E-05	2.54E-04	6.40E-01	7.19E-02	1.24E-03
New Jersey	Somerset County	34035	U	5.41E-04	3.11E-02	5.71E-02	6.43E-01	8.25E-02	1.09E-03	4.18E-05	1.11E+00	9.03E-06	5.98E-05	6.41E-01	7.51E-02	8.31E-04
New Jersey	Sussex County	34037	U	1.31E-04	1.66E-02	3.29E-02	3.11E-01	4.21E-02	2.79E-04	2.04E-05	7.67E-01	3.67E-06	2.33E-05	6.39E-01	1.35E-01	1.96E-04
New Jersey	Union County	34039	U	9.60E-04	6.83E-02	1.39E-01	1.27E+00	1.59E-01	1.93E-03	7.49E-05	1.69E+00	1.77E-05	1.13E-04	6.41E-01	7.66E-02	1.76E-03
New Jersey	Warren County	34041	U	3.42E-04	2.22E-02	3.28E-02	4.23E-01	6.12E-02	6.48E-04	2.81E-05	9.61E-01	4.82E-06	3.27E-05	6.40E-01	1.98E-01	7.23E-04

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		Estimated Annual Median Exposure Concentrations (ug/m3) for New Jersey														
State	County	FIPS	Urban or Rural	Coke Oven Emissions	Diesel PM	Ethylene Dibromide	Ethylene Dichloride	Ethylene Oxide	Formaldehyde	Hexachlorobenzene	Hydrazine	Lead	Manganese	Mercury	Methylene Chloride	Nickel
National	All	99999	-	0.00E+00	1.07E+00	6.08E-03	5.27E-02	1.25E-03	6.77E-01	7.51E-05	3.71E-08	1.54E-03	1.06E-03	1.33E-03	2.72E-01	7.43E-04
National	All Urban Counties	99998	U	0.00E+00	1.30E+00	6.08E-03	5.28E-02	1.80E-03	8.22E-01	7.51E-05	6.61E-08	2.50E-03	1.32E-03	1.40E-03	3.22E-01	1.10E-03
National	All Rural Counties	99998	R	0.00E+00	4.63E-01	6.08E-03	5.26E-02	1.05E-04	3.45E-01	7.51E-05	9.29E-10	1.45E-04	2.38E-04	1.21E-03	1.40E-01	8.37E-05
New Jersey	State Total	34000	-	0.00E+00	2.46E+00	6.08E-03	5.30E-02	4.09E-03	1.24E+00	7.52E-05	9.20E-06	5.73E-03	1.74E-03	1.89E-03	4.36E-01	2.44E-03
New Jersey	State Urban Counties	34000	U	0.00E+00	2.46E+00	6.08E-03	5.30E-02	4.09E-03	1.24E+00	7.52E-05	9.20E-06	5.73E-03	1.74E-03	1.89E-03	4.36E-01	2.44E-03
New Jersey	Atlantic County	34001	U	0.00E+00	1.37E+00	6.08E-03	5.29E-02	1.04E-03	5.03E-01	7.51E-05	4.70E-09	2.96E-03	6.26E-04	1.41E-03	2.16E-01	6.37E-04
New Jersey	Bergen County	34003	U	0.00E+00	2.79E+00	6.08E-03	5.28E-02	2.96E-03	1.71E+00	7.52E-05	8.85E-06	6.71E-03	2.05E-03	2.26E-03	6.90E-01	3.57E-03
New Jersey	Burlington County	34005	U	0.00E+00	2.14E+00	6.08E-03	7.85E-02	2.92E-03	1.16E+00	7.51E-05	1.08E-07	4.52E-03	2.13E-03	1.91E-03	3.76E-01	2.30E-03
New Jersey	Camden County	34007	U	0.00E+00	2.38E+00	6.08E-03	8.57E-02	5.48E-03	1.47E+00	7.51E-05	7.83E-08	9.39E-03	2.75E-03	2.54E-03	4.22E-01	3.36E-03
New Jersey	Cape May County	34009	U	0.00E+00	1.40E+00	6.08E-03	5.28E-02	4.12E-04	3.48E-01	7.51E-05	5.38E-10	1.48E-04	3.22E-04	1.26E-03	1.59E-01	1.16E-04
New Jersey	Cumberland County	34011	U	0.00E+00	1.61E+00	6.08E-03	5.26E-02	1.27E-03	6.05E-01	7.56E-05	2.96E-08	3.09E-03	1.15E-03	1.71E-03	2.05E-01	9.56E-04
New Jersey	Essex County	34013	U	0.00E+00	2.97E+00	6.08E-03	5.31E-02	5.60E-03	1.89E+00	7.52E-05	2.32E-04	1.36E-02	3.01E-03	2.25E-03	6.60E-01	2.81E-03
New Jersey	Gloucester County	34015	U	0.00E+00	1.95E+00	6.08E-03	6.60E-02	3.42E-03	1.14E+00	7.52E-05	7.26E-08	8.26E-03	1.78E-03	2.05E-03	3.03E-01	2.68E-03
New Jersey	Hudson County	34017	U	0.00E+00	6.86E+00	6.08E-03	5.31E-02	6.18E-03	3.30E+00	7.56E-05	8.38E-05	2.69E-02	4.37E-03	3.65E-03	9.57E-01	4.28E-03
New Jersey	Hunterdon County	34019	U	0.00E+00	2.03E+00	6.08E-03	5.30E-02	1.67E-03	6.88E-01	7.50E-05	1.80E-06	8.48E-04	6.57E-04	1.43E-03	2.60E-01	6.52E-04
New Jersey	Mercer County	34021	U	0.00E+00	2.74E+00	6.08E-03	6.00E-02	3.65E-03	1.27E+00	7.52E-05	3.73E-06	1.57E-03	1.49E-03	1.75E-03	4.45E-01	1.31E-03
New Jersey	Middlesex County	34023	U	0.00E+00	2.52E+00	6.08E-03	5.30E-02	8.29E-03	1.17E+00	7.52E-05	6.36E-05	5.86E-03	1.60E-03	1.77E-03	4.28E-01	2.03E-03
New Jersey	Monmouth County	34025	U	0.00E+00	2.68E+00	6.08E-03	5.28E-02	2.14E-03	8.56E-01	7.52E-05	4.09E-06	3.72E-03	1.05E-03	1.58E-03	2.88E-01	6.01E-04
New Jersey	Morris County	34027	U	0.00E+00	2.06E+00	6.08E-03	5.27E-02	4.71E-03	9.93E-01	7.51E-05	1.18E-05	2.24E-03	1.05E-03	1.62E-03	3.67E-01	4.59E-03
New Jersey	Ocean County	34029	U	0.00E+00	1.91E+00	6.08E-03	5.26E-02	9.14E-04	5.94E-01	7.51E-05	6.06E-08	4.66E-04	6.95E-04	1.37E-03	2.18E-01	2.08E-04
New Jersey	Passaic County	34031	U	0.00E+00	2.41E+00	6.08E-03	5.29E-02	3.86E-03	1.52E+00	7.52E-05	2.69E-05	6.76E-03	2.25E-03	2.07E-03	7.04E-01	2.92E-03
New Jersey	Salem County	34033	U	0.00E+00	1.96E+00	6.08E-03	5.45E-02	3.85E-03	7.55E-01	7.52E-05	3.26E-07	2.55E-03	1.47E-03	2.03E-03	2.59E-01	3.91E-03
New Jersey	Somerset County	34035	U	0.00E+00	2.27E+00	6.08E-03	5.28E-02	3.11E-03	8.81E-01	7.51E-05	2.02E-05	3.09E-03	1.31E-03	1.58E-03	3.61E-01	1.28E-03
New Jersey	Sussex County	34037	U	0.00E+00	1.78E+00	6.08E-03	5.26E-02	1.02E-03	5.34E-01	7.50E-05	5.99E-07	5.55E-04	4.29E-04	1.33E-03	2.19E-01	5.94E-04
New Jersey	Union County	34039	U	0.00E+00	2.64E+00	6.08E-03	5.33E-02	5.34E-03	1.58E+00	7.51E-05	7.97E-05	1.12E-02	2.25E-03	2.00E-03	5.39E-01	2.44E-03
New Jersey	Warren County	34041	U	2.86E-04	1.84E+00	6.08E-03	5.27E-02	3.57E-03	6.79E-01	7.51E-05	1.48E-07	7.61E-04	8.47E-04	1.41E-03	3.33E-01	7.42E-04

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State	County	FIPS	Urban or Rural	PCBS	Perchloroethylene	POM (total)	Propylene Dichloride	Quinoline	Trichloroethylene	Vinyl Chloride					
National	All	99999	-	3.00E-04	1.84E-01	4.27E-02	3.11E-05	1.85E-07	9.86E-02	7.61E-04					
National	All Urban Counties	99998	U	3.00E-04	2.13E-01	5.26E-02	4.73E-05	3.22E-07	1.12E-01	1.16E-03					
National	All Rural Counties	99998	R	3.00E-04	1.14E-01	9.18E-03	4.85E-06	1.07E-08	7.06E-02	1.05E-04					
New Jersey	State Total	34000	-	3.00E-04	2.22E-01	7.82E-02	9.76E-05	1.09E-06	1.32E-01	2.42E-03					
New Jersey	State Urban Counties	34000	U	3.00E-04	2.22E-01	7.82E-02	9.76E-05	1.09E-06	1.32E-01	2.42E-03					
New Jersey	Atlantic County	34001	U	3.00E-04	1.47E-01	3.20E-02	2.60E-05	2.53E-08	9.11E-02	6.00E-04					
New Jersey	Bergen County	34003	U	3.00E-04	2.99E-01	1.07E-01	1.28E-04	1.52E-06	2.05E-01	2.35E-03					
New Jersey	Burlington County	34005	U	3.07E-04	2.04E-01	7.71E-02	6.37E-05	6.46E-07	1.31E-01	3.63E-03					
New Jersey	Camden County	34007	U	3.08E-04	2.50E-01	1.03E-01	6.22E-05	6.10E-07	1.77E-01	5.58E-03					
New Jersey	Cape May County	34009	U	3.00E-04	1.20E-01	1.78E-02	9.60E-06	1.11E-08	7.24E-02	1.87E-04					
New Jersey	Cumberland County	34011	U	3.00E-04	1.44E-01	6.92E-02	1.85E-05	2.26E-07	7.94E-02	3.52E-03					
New Jersey	Essex County	34013	U	3.00E-04	3.59E-01	1.43E-01	1.17E-04	2.02E-06	1.82E-01	2.17E-03					
New Jersey	Gloucester County	34015	U	3.03E-04	1.86E-01	6.88E-02	3.57E-05	5.60E-07	1.07E-01	9.45E-03					
New Jersey	Hudson County	34017	U	3.00E-04	4.38E-01	2.02E-01	1.84E-04	2.52E-06	2.49E-01	3.36E-03					
New Jersey	Hunterdon County	34019	U	3.00E-04	1.49E-01	2.82E-02	4.04E-05	2.06E-07	9.57E-02	1.40E-03					
New Jersey	Mercer County	34021	U	3.01E-04	2.14E-01	7.83E-02	1.10E-04	5.52E-07	1.47E-01	7.59E-03					
New Jersey	Middlesex County	34023	U	3.00E-04	2.15E-01	7.20E-02	1.56E-04	1.66E-06	1.18E-01	3.42E-03					
New Jersey	Monmouth County	34025	U	3.00E-04	1.76E-01	5.44E-02	9.91E-05	4.34E-07	1.04E-01	2.15E-03					
New Jersey	Morris County	34027	U	3.00E-04	2.03E-01	5.43E-02	4.44E-05	8.03E-07	1.24E-01	8.07E-04					
New Jersey	Ocean County	34029	U	3.00E-04	1.41E-01	3.92E-02	3.98E-05	2.50E-07	8.69E-02	7.28E-04					
New Jersey	Passaic County	34031	U	3.00E-04	3.08E-01	1.22E-01	1.05E-04	2.94E-06	1.61E-01	1.73E-03					
New Jersey	Salem County	34033	U	3.00E-04	1.52E-01	3.82E-02	3.87E-05	9.44E-07	8.32E-02	3.08E-02					
New Jersey	Somerset County	34035	U	3.00E-04	1.89E-01	4.80E-02	7.50E-05	1.09E-06	1.04E-01	1.68E-03					
New Jersey	Sussex County	34037	U	3.00E-04	1.38E-01	2.33E-02	1.82E-05	2.10E-07	9.49E-02	3.15E-04					
New Jersey	Union County	34039	U	3.00E-04	2.77E-01	1.07E-01	1.28E-04	1.82E-06	1.36E-01	2.49E-03					
New Jersey	Warren County	34041	U	3.00E-04	1.53E-01	2.86E-02	4.11E-05	1.73E-07	8.72E-02	8.49E-04					