US ERA ARCHIVE DOCUMENT

This is intended to help clarify the data/units provided under the 1999 national-scale assessment website: http://www.epa.gov/ttn/atw/nata1999/tables.html

1999 National-Scale Air Toxics Assessment: 1999 Data Tables

County-Level Risk Summaries (Excel spreadsheets)

- County-Level Cancer Risk results are presented as total cancer risk representing the sum of all carcinogens in assessment (e.g. 1.60E-05 represents a risk of 16 in a million; 1.17E-06 represents a risk of 1.17 in a million)
- County-Level Respiratory Risk results are presented as noncancer hazard index (HI) representing the sum of hazard quotients for substances that affect the same target organ (respiratory) (e.g. 1.63E+00 represents a HI of 1.63; 1.17E+01 represents a HI of 11.7)
- County-Level Neurological Risk results are presented as noncancer hazard index (HI) representing the sum of hazard quotients for substances that affect the same target organ (neurological) (e.g. 1.63E+00 represents a HI of 1.63; 1.17E+01 represents a HI of 11.7)
- County-Level Pollutant-Specific Cancer and Noncancer (Respiratory and Neurological) Risk (pollutants.xls) File contains 3 workbooks (cancer; noncancer-respiratory, noncancer-neurological):
 - Cancer workbook "in a million" column is the average county cancer risk representing the sum of all carcinogens in assessment (e.g. 4.78E+01 represents a risk of 47.8 in a million; 2.99E+00 represents a risk of 2.99 in a million); "individual pollutant" columns represent that pollutants cancer risk in a million contribution to the total. The sum of the individual pollutants equals the total risk.
 - Noncancer Workbooks (Respiratory and Neurological) "HI" column is the average county noncancer risk representing the sum of hazard quotients for substances that affect the same target organ (e.g. 1.63E+00 represents a HI of 1.63; 1.17E+01 represents a HI of 11.7); "individual pollutant" columns represent that pollutants hazard quotients. The sum of the individual pollutants equals the HI.

County-Level Emission Summaries (Microsoft Access 2003

• Individual Pollutant Access Files (e.g. benzene.mdb) – All emissions are in Tons per year

County-Level Ambient Concentration Summaries (Microsoft Access 2003)

• **Individual Pollutant Access Files** (e.g. benzene.mdb) – All concentrations are in ug/m³. Files also contain readme table defining each column.

Pollutant-Specific Database (Microsoft Access 2003)

• Individual Pollutant Access Files (e.g. benzene_nata99.mdb) - ASPEN and HAPEM columns represent ambient and exposure concentrations, respectively in ug/m³. "Risk" columns depict the pollutants cancer risk (e.g. 1.60E-05 represents a risk of 16 in a million; 1.17E-06 represents a risk of 1.17 in a million). "HQ" columns depict that pollutants noncancer (the maximum of respiratory or neurological) risk. (e.g. 1.63 represents a HQ of 1.63)

Census Tract-Level State Summary Database of Risk Results (Microsoft Access 2003)

• Individual State Access Files (e.g. ar_risks_nata99.mdb) - File contains 3 data tables (cancer; noncancer-respiratory, noncancer-neurological):

Cancer Table (Risk_totals) - . "Risk" columns depict the total cancer risk per million (e.g. 9.768 represents a risk of 9.768 in a million); "individual pollutant" columns represent the percentage of that pollutants cancer risk towards the total risk. The sum of the individual pollutants equals 100%.

Noncancer Table (Respiratory_totals and Neurological_totals) - "HQ" (NOTE: these columns are actually mislabels and represent the HI or Hazard Index) columns depict noncancer risk representing the sum of hazard quotients for substances that affect that target organ (e.g. 1.63 represents a HQ [actually a HI] of 1.63); "individual pollutant" columns represent the percentage of that pollutants cancer risk towards the total risk. The sum of the individual pollutants equals 100%.

State Summary Databases (Microsoft Access 2003)

• Zip file containing 10 files for each state (e.g. me.zip) -

- o **1999 Cancer Risk County HAPEM5.mdb** these are the total cancer risks (e.g. 0.0000232 represents a risk of 23.2 in a million)
- o 1999 NATA County Risk HAPs.mdb
 - Cancer Table "Risk" columns depict the total cancer risk per million (e.g. 9.768 represents a risk of 9.768 in a million);); "individual pollutant" columns represent that pollutants cancer risk in a million. The sum of the individual pollutants equals the total risk.
 - Noncancer Table "HI" column is the noncancer risk representing the sum of hazard quotients for substances that affect the same target organ (e.g. 1.63 represents a HI of 1.63); "individual pollutant" columns represent that pollutants hazard quotients. The sum of the individual pollutants equals the HI.

o 1999 NATA Tract Level Risks-[state].mdb

- Cancer Table (Risk_totals) . "Risk" columns depict the total cancer risk per million (e.g. 9.768 represents a risk of 9.768 in a million); "individual pollutant" columns represent the percentage of that pollutants cancer risk towards the total risk. The sum of the individual pollutants equals 100%.
- Noncancer Table (Respiratory_totals and Neurological_totals) "HQ" (NOTE: these columns are actually mislabels and represent the HI or Hazard Index) columns depict noncancer risk representing the sum of hazard quotients for substances that affect that target organ (e.g. 1.63 represents a HQ [actually a HI] of 1.63); "individual pollutant" columns represent the percentage of that pollutants cancer risk towards the total risk. The sum of the individual pollutants equals 100%.
- o 1999 NonCancer (Neuro) Risk County HAPEM5.mdb
- o 1999 NonCancer (Respiratory) Risk County HAPEM5.mdb
- o All HAPs tract Models NATA99 [state].mdb
- CAA NUM XREF NATA99 mod13JAN05.mdb
- o EMSHAP-[state].mdb
- o [state]-NEI HAP files.mdb
- NEI_99_LOOKUP_072803.mdb