**external\_exposure**

| **CDM Field** | **User Guide** | **Example #1 Senegal/Cameroon WG Use Case** | **Example #2 Senegal/Cameroon WG Use Case** |
| --- | --- | --- | --- |
| external\_exposure\_id | primary key identifier |  |  |
| external\_exposure\_era\_id | foreign key to the era in which the external\_exposure participates[[1]](#footnote-1) |  |  |
| person\_id | foreign key to person table |  |  |
| external\_exposure\_concept\_id | concept from an OMOP GIS vocabulary representing the external exposure measured property like high temperature | ENVO\_01000415 *concept\_id for “PM2.5” in the ECTO[[2]](#footnote-2) ontology* | ENVO\_01000415 *concept\_id for “PM2.5” in the ECTO ontology* |
| statistic\_concept\_id | concept for a statistic like “mean”, “count”, “95th percentile”, “exceedance probability” | STATO\_0000047 *concept\_id for a “count” in STATO* | STATO\_0000573 *concept\_id for an “arithmetic mean” in STATO* |
| interval\_concept\_id | concept for an interval over which a statistic spans like “24-hour period”, “month”, “year” | 9448  *concept\_id for “year” in ATHENA* | 9448  *concept\_id for” year” in ATHENA* |
| operator\_concept\_id | operators are <, <=, =, >=, > and these concepts belong to the ‘Meas Value Operator’ domain | 4172704 *concept\_id for “>” in ATHENA* |  |
| regulatory\_standard\_name | statistics are sometimes determined in relationship to a regulatory standard | WHO PM2.5 |  |
| regulatory\_standard\_verbatim\_text | 15 ug/m3 over a 24-hour period |  |
| external\_exposure\_start\_datetime | temporal coverage of the statistic | 1/1/2023 | 1/1/2023 |
| external\_exposure\_end\_datetime | 12/31/2023 | 12/31/2023 |
| external\_exposure\_type\_concept\_id | concept from an OMOP GIS vocabulary representing a place-based instrument (aka sensor) type including “satellite”, “weather station”, “in-home device”, “social vulnerability index”, “UN SDG (sustainable development goal) indicator”, PhenX environmental health CDE, etc. |  |  |
| external\_exposure\_source\_value | this field contains the exact value from the source data that represents the measurement that occurred |  |  |
| external\_exposure\_source\_concept\_id | this is the concept representing the external\_exposure source\_value and may not be standard |  |  |
| value\_as\_number | amount of exposure | 23 | 8.2 |
| value\_as\_concept\_id |  |  |
| unit\_concept\_id | unit of measurement like “celsius” if value\_as\_number |  | 32964 *concept\_id for “microgram per cubic meter” in ATHENA* |
| unit\_text |  | ug/m3 |
| visit\_occurrence\_id | not required |  |  |
| external\_exposure\_event\_id | foreign key to a record in an OMOP CDM table |  |  |
| external\_exp\_event\_field\_concept\_id |  |  |

1. Note that this is NOT the best practice in other era tables – for example, successive periods of drug\_exposures are combined under certain domain-specific rules to produce continuous drug\_eras. The latter dates are just inclusive of the former ones. There is no foreign key relationship between a drug exposure and its era [↑](#footnote-ref-1)
2. [Here](file:////Users/jaygreenfield/Library/CloudStorage/Dropbox/OHDSI%20GIS%20WG/Ç=https:/bioportal.bioontology.org/ontologies/ECTO/%3fp=summary) is ECTO. The contact person for ECTO is Anne Thessen. Andrew early on expressed an interest in using ECTO. Polina has captured many of the statistics created on top of the ECTO classes in the OMOP Exposome and SDOH vocabularies [↑](#footnote-ref-2)