Codebook For CFR Dataset

This codebook contains information on each of the variables listed in the "CFR_replication_data.csv" file. All data was entered manually from the referenced sources.

pesticide	Name of the active ingredient to which the tolerance applies
tox_grouping	Records whether the pesticide falls into one of five toxicity groupings that EPA considers for cumulative risk assessment. If pesticide falls into one of those groups, variable lists the name of the group. If the pesticide does not fall into one of the five groups, the variable just lists the name of the pesticide.
aquatic_acute	Lists whether the pesticide is considered to be of acute aquatic risk. Data on aquatic risk comes from: European Chemicals Agency. 2019. "C&L Inventory," available at: https://echa.europa.eu/information-on-chemicals/cl-inventory-database. Data was entered manually
aquatic_chronic	Lists the chronic aquatic potential of the pesticide on a 5 point scale from "no chronic aquatic risk recorded" (0) to ." very toxic to aquatic life with long lasting effects" (4). Like for acute aquatic risk, data comes from the C&L Inventory.
cancer_echa	A dichotomous measure indicating whether the pesticide is considered carcinogenic by the European Union. Data again comes from the C&L Inventory
cancer_epa	Ordered measure on a 5 point scale indicating how carcinogenic the U.S. EPA considers the pesticide. This ranges from "carcinogenic to humans" (5) to "not likely to be carcinogenic to humans" (1). Data was pulled from: Environmental Protection Agency. 2018. "Chemicals Evaluated for Carcinogenic Potential Annual Cancer Report 2018," available at: http://npic.orst.edu/chemicals_evaluated.pdf.
toxicity	This is a measure of the pesticide's toxicity according to the World Health Organization, as of 2009. The WHO uses a five-point scale from "extremely hazardous" (5) to "unlikely to present acute hazard in normal use" (1). It comes from: World Health Organization. 2009. "The WHO Recommended Classification of Pesticides by Hazard."
toxicity_worse	This indicates whether the toxicity classification for the pesticide became worse between 1997 and 2009. This was

	based on a comparison of the 2009 and 1997 WHO classification publication.
year_registered	This is the year that the pesticide was first registered in the United States. This information was frequently available through EPA re-evaluation reports on the pesticide. If it was not available through re-evaluation reports, I engaged in a broader internet search.
cfr_commodity	This is the commodity to which the tolerance applied, as listed in the U.S. Code of Federal Regulation (CFR)
fruit_veg	Indicates whether the CFR commodity was a fruit or vegetable
Type	Groups commodities into different groups
one_of_3_primary_acreage_crops_US	Coded 1 if the commodity was corn, wheat, or soy, the largest acreage crops in the U.S.
EPA_1996	This is the 1996 tolerance for the pesticide-commodity combination, as listed in the 1996 40 CFR 180 and coded manually.
EPA_2015	This is the 2015 tolerance for the pesticide-commodity combination, as listed in the 2015 40 CFR 180 and coded manually.