



WELCOME
TO THE 2024
NDACAN
SUMMER
TRAINING
SERIES!

- The session will begin at 12pm EST.
- Please submit questions to the Q&A box.
- This session is being recorded.

NDACAN SUMMER TRAINING SERIES: BEST PRACTICES IN THE USE OF NDACAN DATA

National Data Archive on Child Abuse and Neglect

Cornell University & Duke University

NCANDS:
STRENGTHS &
LIMITATIONS

JULY 10, 2024



Children's Bureau

An Office of the Administration for Children & Families

NDACAN SUMMER TRAINING SERIES SCHEDULE

July 10 — NCANDS: Strengths & Limitations

July 17 — Assessing Reporting Issues in NCANDS & AFCARS

July 24 — AFCARS: Strengths & Limitations

July 31 — Survey Design & Using Weights

August 7 — NSCAW III for Experienced & New Users

August 14 — NYTD: Strengths & Limitations

SESSION AGENDA

- NCANDS background
- Strengths
- Limitations

NCANDS BACKGROUND

BACKGROUND

- National Child Abuse and Neglect Data System (NCANDS) was designed in 1988 in response to the Child Abuse Prevention and Treatment Act (CAPTA) and required a national data collection and analysis program on child maltreatment
- NCANDS has become the primary source of national information on abused and neglected children reported to State child protective service agencies
- Funded by the Children's Bureau (CB), Administration on Children, Youth and Families, Administration for Children and Families, U.S. Department of Health and Human Services

NCANDS

- Federally-sponsored annual national data collection, tracking the volume and nature of child maltreatment reporting
- States participate on a voluntary basis and submit data from their system which is mapped to the NCANDS data structure
- Submitted data consist of all investigations or assessments of alleged child maltreatment that received a disposition in the reporting year
- Findings from the NCANDS data are published by the Children's Bureau each year in its Child Maltreatment report series

DATA COLLECTION

- States collect data using different concepts and category definitions based on differing policies and laws, which affects variables collected, variable names, and valid values thus, it is necessary for each state to map (convert) data, including codes, from the state's computer system into the standard record layout of NCANDS
- States work with CB to ensure data conform to the quality standards; this may be an iterative process as CB validates and reviews the submissions
- CB reviews and validates the final submission and the completed the state files are sent as a package to the NDACAN for further processing (e.g. suppression, creating new variables) and distribution

NCANDS CHILD AND STATE LEVEL FILES

- Child File (2000-2022)
 - Most comprehensive, child-specific data of all investigated reports of maltreatment to State child protective service agencies
 - Case level data by fiscal year, observations are unique by Child X Report pair
- Agency File (2009-2022)
 - State level data by fiscal year, observations are aggregated/summarized by state
 - The Agency File collects aggregated, state-level, data on items that have been requested by the CAPTA legislation that are not able to be collected at the case level.
 - Preceded by Combined Aggregate File 2000-2008 and Summary Data Component 1990-1999

AGENCY FILE

- Records are provided at the state level
- Data submissions are organized by federal fiscal year (FY) and state
 - e.g. FY2022: Oct 1, 2021 - Sept 30, 2022
 - “States” include fifty states plus District of Columbia and Puerto Rico
- Supplemental to the child file – consists of measures not found in the child file
- Includes information such as number of children/families receiving services, number of staff who screen-in or investigate reports, and full count of number of fatalities

CHILD FILE

- Records are provided at the level of each child on a report, e.g. the report-child pair.
- Data submissions are organized by federal fiscal year (FY) and state
 - e.g. FY2022: Oct 1, 2021- Sept 30, 2022
 - “States” include fifty states plus District of Columbia and Puerto Rico
 - Exception: 2000-2002 are organized by calendar year (therefore some overlap with CY2002 & FY2003)
- Data files are organized by submission year, which relates to the date of disposition of the report, *not the data of the incident or the date the incident was reported*
- Information includes demographics of children and their perpetrators, types of maltreatment, investigation dispositions, risk factors, and services provided as a result of the investigation or assessment

CHILD FILE DISPOSITION

- All NCANDS reports are disposed as either substantiated, unsubstantiated, or alternative response
- Substantiated or indicated/reason to suspect – maltreatment was confirmed, child may be removed, child/family may receive services
- Alternative response – family and/or children at risk and would benefit from support services to avoid family separation and try to prevent any future maltreatment
- Unsubstantiated – investigation yielded no confirmed determination of maltreatment

CHILD FILE: UNIT OF OBSERVATION

- The unit of observation in the Child File is the report-child combination (R/C pair).
- A child identifier (ChID) may appear on more than one record because the child could be included on more than one report.
- A report identifier (RptID) may repeat, because there will be a separate record for each child on the report.
- No two records will have the same ReportID/ChildID pair within the same submission year.

STRENGTHS

STRENGTHS (PT. I)

- Best available data on the subject:
 - NCANDS has become the primary source of national information on abused and neglected children reported to State child protective service agencies.
- Lots of data support and resources through NDACAN and others
 - Findings from the NCANDS data are published by the Children's Bureau each year in its Child Maltreatment Report
- Linkable with AFCARS (with caveats listed below)

STRENGTHS (PT. 2)

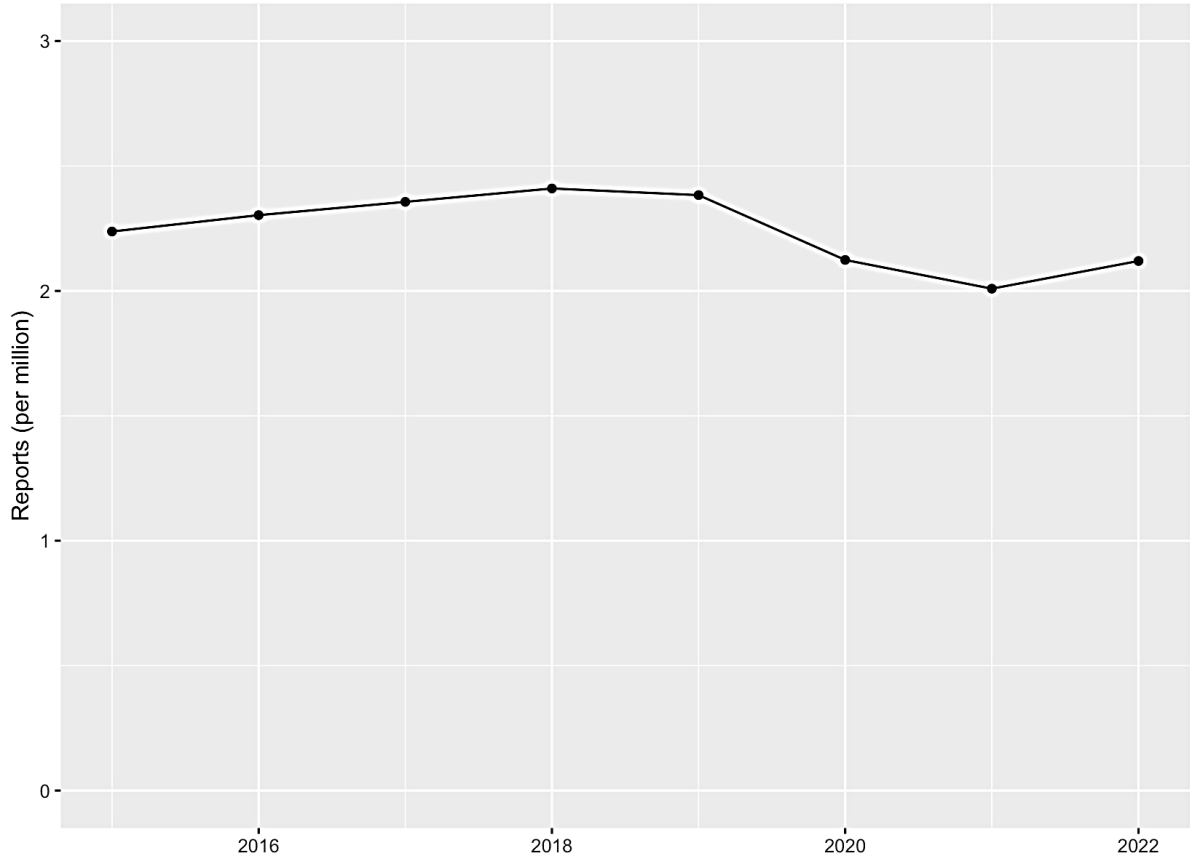
- Many years of data for long term tracking of changes over time or longitudinal analysis
 - Detect the effects or impact of policy or statutes
 - Observe impact of historic events, e.g. Covid-19
- Can compare information between states (with some caveats)
 - Can even observe county level (for large counties)

STRENGTHS (PT. 3)

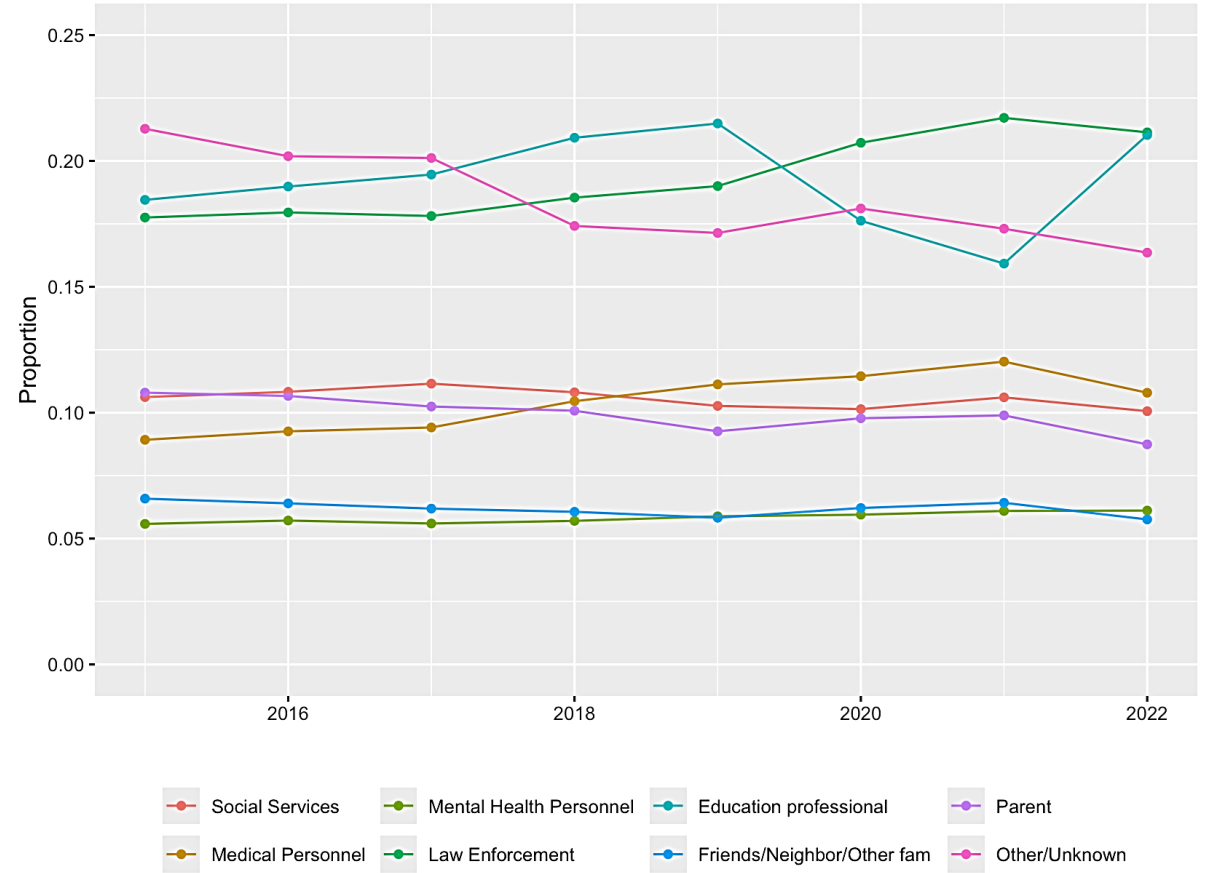
- Not just information about child, but also perpetrator
- Information about services received after investigation
- Information about risk factors for child and caretakers (e.g. substance abuse, disability)

PATTERN OF INVESTIGATIONS OVER TIME

Rate of maltreatment investigations (per million)



Proportion of all investigated reports from report sources



LIMITATIONS

QUESTIONABLE OBSERVATIONS

- Child ID with unlikely number of reports within a submission year
 - Some Child IDs seem to have an inordinate number of appearances in the data that could be due to data record keeping problems or when the identity of a child can't be determined
- Multiple reports on the same day
 - There are cases with multiple reports on the same day for the same child, often with the same report source, report disposition, maltreatment type, etc. Most are duplicates that haven't been deleted

VARIATION OVER STATES AND TIME

- Breakage in linking years
 - States sometimes change ID encryption algorithm thereby creating new IDs for children that are not directly linkable to previous years – interrupts longitudinal analysis
- Reporting states in each year differs in early years
- Differences in state definitions, etc.
 - Confer Child maltreatment report, SCAN, dataset contact state directly
 - E.g., poor report source from MD, No perp info at all GA, no race info PA for many years
- State-to-state variation in child maltreatment laws and information systems may affect the interpretation of the data.
 - Refer to the state mapping documents included in the data

LINKAGE ACROSS YEARS

Successful Links of Child IDs Across Annual Child Files																					
	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
AL						1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
AK						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
AZ			0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
AR	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CA			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CO			0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CT			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
DE	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
DC		0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
FL	0	0	1	1	1	1	0	1	1	0	1	0	0	1	1	1	1	1	1	1	1
GA						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
HI			0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ID			0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
IL			0	1	1	0	0	0	0	1	1	0	0	1	1	1	1	1	1	1	1

- A subset of states' linkage patterns between years
- Grey indicates no data submitted, pink means linkage not possible between years, green means linkage possible between years

SUBMITTING STATES BY YEAR

FY	# States submitting	# States not submitting	States submitting	States not submitting
2000	20	32	AR, DE, FL, KS, KY, LA, MA, ME, MN, MO, NC, NE, OK, PA, RI, TX, UT, VT, WA, WY	States not listed in adjacent column
2001	24	28	AR, CT, DC, DE, FL, KS, KY, LA, MA, ME, MN, MO, MT, NC, NE, OH, OK, PA, RI, TX, UT, VT, WA, WY	States not listed in adjacent column
2002	42	10	States not listed in adjacent column	AL, AK, GA, NV, ND, OR, SD, TN, WI, PR
2003	45	7	States not listed in adjacent column	AL, AK, GA, ND, OR, WI, PR
2004	45	7	States not listed in adjacent column	AL, AK, GA, ND, OR, WI, PR
2005	49	3	States not listed in adjacent column	ND, OR, PR
2006	49	3	States not listed in adjacent column	MD, ND, OR
2007	49	3	States not listed in adjacent column	MI, ND, OR
2008-2009	50	2	States not listed in adjacent column	ND, OR
2010-2011	51	1	States not listed in adjacent column	OR
2012-2015	52	0	All states	-
2016	51	1	States not listed in adjacent column	PR
2017-2020	52	0	All states	-
2021	51	1	States not listed in adjacent column	AZ
2022	52	0	All states	-

(Columns were filled in based on which list had fewer)

SUPPRESSED OR MISSING DATA

- Some masked variables
 - County masking – unable to compare or analyze small counties, rural populations (e.g. in 2021 there are 740 identifiable counties)
 - Date masking – the report date is rounded to the 8th or 23rd of the month and all other dates are shifted consistently to maintain timespans. Date of births are omitted.
 - Some info relating to maltreatment deaths – no geographic info (state/county), child/perp IDs suppressed, couldn't link to previous records
- If there is only 1 individual of a certain race within a county, their race is suppressed
- Missing data in general (e.g. PA didn't report race for a while)
- 5 variables not included in public use files: date of birth, county of residence, worker ID, supervisor ID, and the incident date

OTHER

- Linking with AFCARS – dates don't exactly line up, not all states provide AFCARS ID
- Some variables more reliable than others
- Lacking some information or granularity - type of injury, hospitalization, sibling identification
- Imperfect measures – e.g. a child may have a disability but not officially diagnosed
- When linking across years, demographic information may change – decide what to consistently use, e.g. use most up to date
- Administrative data developed as an ongoing data collection system and does not conform to rigorous criteria for scientific research design.
- AFCARS ID's use UTF-8 characters (which is more extensive than standard ASCII) therefore some “weird” characters may cause problems in certain programming languages, which can interfere with linking

SUBMITTING STATES WHO LACK LINKABLE AFCARS ID

FY	# States with data	# States with over 50% missing AFCARS ID	Submitting States without AFCARSID
2022	52	3	IL, PA, VT
2021	51	3	IL, PA, VT
2017-2020	52	3	IL, PA, VT
2016	51	3	IL, PA, VT
2015	52	3	IL, PA, VT
2014	52	4	IL, PA, PR, VT
2013	52	6	GA, IL, NY, PA, PR, VT
2012	52	6	GA, IL, NY, PA, PR, VT
2011	51	6	GA, IL, NY, PA, PR, VT
2010	51	7	GA, IL, MD, NY, PA, PR, VT
2009	50	6	GA, IL, NY, PA, PR, VT
2008	50	8	AL, GA, IL, NY, PA, PR, TN, VT
2007	49	8	AL, GA, NC, NY, PA, PR, TN, VT
2006	49	7	AL, GA, IN, NC, NY, PA, VT
2005	49	12	AL, DC, GA, IN, MO, NC, NY, PA, SC, TN, TX, VT
2004	45	10	DC, IN, MO, NC, NY, PA, SC, TN, TX, VT
2003	45	11	DC, FL, IN, MO, NC, NY, PA, SC, TN, TX, VT
2002	42	41	All except CT
2001	24	23	All except CT
2000	20	20	All

PROPORTION OF MISSING RACE/ETHNICITY



ADDITIONAL CONSIDERATIONS

ADDITIONAL KEY CONSIDERATIONS

- Covid affected data
- Data are aligned with disposition data, may want to reorganize data by *report date* which can sometimes be in the fiscal year(s) previous to the disposition date
 - Need to bring in multiple years if so
- Data submitted by FY, may want to realign to CY
- Differences in coding - missing values, e.g. NA, 99 , 98,
- AFCARS ID's use UTF-8 characters (which is more extensive than standard ASCII) therefore some “weird” characters may cause problems in certain programming languages, which can interfere with linking

SUGGESTIONS

- Always do state X yr exploration of any variables used for research – understand missingness, reporting, etc – frequencies, crosstabs, visualizations
- Consider multi-level modeling if using all states and years to account for differences at state level
- Refer to CM Report Appendices for additional information on each state's reporting
- Seek assistance! – NDACAN, CM report contacts, CB reports, other published literature

QUESTIONS?

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NEXT WEEK...

**July 17, 2024
at 12pm (Eastern)**

Presenter:

Dr. Alexander F. Roehrkasse

Topic:

Assessing Reporting Issues in NCANDS & AFCARS