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Healthy Youth Survey Quality Control Checks

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This document describes quality control check to be conducted when surveys are received and processed, once the dataset has been generated, and once reports of results have been generated. These checks are intended to be similar across survey years for consistency, but to be improved as necessary.

Receiving and Processing Checks

1. School survey return – proper school name, rate, and form type
2. District and county survey return rates

Data Cleaning Checks

3. Blank survey form
4. Bad grade (not 6, 8, 10, or 12; or not registered school/grade, or not small and 7, 9, or 11)
5. Mostly blank
6. Dishonest
7. Wrong grade – wrong form
8. Inconsistent
9. Improbable patterns

Report Results Checks

10. Local stakeholders review process

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Receiving and Processing Checks

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Report findings from each investigation and the number of unscannable surveys

QC 1: School survey return – proper school name, rate, and form type

Review each box to make sure it includes answer sheet envelopes from the same school. Flag and investigate boxes that include different schools, missing school information, or schools that did not register.

Flag and investigate each school to determine if the survey return rate is out of range:

- Return rate is greater than 120% (# surveys returned / # surveys sent).
The goal is to identify schools inadvertently bundled in with another school. Note that over-packing was set at 3% for all schools, with rounding up to 10, so an excess of 20% would be unexpected and indicative of a problem.
- Return rate is less than 20% (# surveys returned / # registered).
The goal is to identify schools that did not fully administer the survey.
- Return rate 0%.
The goal is to confirm if a school didn't participate or if their data are missing.

Flag and investigate each school that returns survey forms it did not register for:

- Registered for Form C, but returns Forms A/B
- Registered for Forms A/ B but returns Form C

Remove survey if it is unscannable. We will track the number of unscannable surveys for each school.

QC 2: District and county survey return rates

Flag and investigate each district and county to determine if the survey return rate is out of range:

- Return rate is greater than 120% (# surveys returned / # surveys sent).
- Return rate is less than 40% (# surveys returned / # registered).
- Return rate 0%.

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Data Cleaning Checks

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Report the number culled from each cleaning check

QC 3: Blank survey form (i.e., no responses) (allblank)

- Cull survey if blank

QC 4: Bad grade (i.e., not 6, 8, 10, or 12) (badgrade)

- Cull survey if grade does not equal 6, 8, 10 or 12
- OR if small district school, cull survey if grade does not equal 6, 7, 8, 9, 10, 11 or 12
- OR grades 7, 9, 11 if school is not small district school
- Or if grade not in school

QC 5: Mostly blank form (mblank)

- Cull survey if there are less than 15 responses (approximately 10% of longest form):
 - Number on Form A, = 135 (N = 145 in 2004, 154 in 2006, 151 in 2008, 148 in 2010, 142 in 2012, 139 AE in 2014, 140 in 2016)
 - Number on Form B, = 122 (N = 138 in 2004, 141 in 2006, 127 in 2008, 121 in 2010, 119 in 2012, 122 BE in 2014, 122 in 2016)
 - Number on Form C, = 91 (N = 95 in 2004, 101 in 2006, 97 in 2008, 90 in 2010, 90 in 2012, 93 in 2014, 93 in 2016)

QC6: Dishonest (dishonest)

- Cull survey if they fail any of the following three scenarios

Topic	Code	Explanation	Forms	Notes
Not honest (1 check: Form A=1, Form B=1, Form C=1)				
	((g13 = 4) or (g13 = 5))	honest once in a while or not at all	ABC	
Not honest sometimes and some Brezidox use (1 check: Form A=1, Form B=1, Form C=1)				
	(g13 = 3) and (brezi >= 3)	honest some of time and 30-day Brezidox use on 3+ days	ABC	
Frequent Brezidox use (1 check: Form A=1, Form B=1, Form C=1)				
	(brezi = 5)	30-day Brezidox use on 10+ days	ABC	

QC 7: Wrong grade – wrong form (wrngform)

Cross grade by formtype to identify any schools with 6th grade respondents who took Forms A/B, or 8th/10th/12th grade respondents who took Form C. Create *wrngform* variable = 1. If *wrngform* = 1, set *staterec*, *esdrec*, *corec* and *distrect* to missing. Flag and investigate each school that has any *wrngform*.

QC 8: Inconsistencies (incon, inconcnt)

- Cull surveys if they fail **3 or more** QC checks described under QC 8:
 - 2004 number of checks: Forms A=10 / B=14 / C=4
 - 2006 number of checks: Forms A=10 / B=14 / C=4
 - 2008 number of checks: Forms A=9 / B=16 / C=6
 - 2010 number of checks: Forms A=8 / B=12 / C=5
 - 2012 number of checks: Form A=7 / B=12 / C=5
 - 2014 number of checks: Form A=7 / B=9 / C=5
 - 2016 number of checks: Form A=7 / B=10 / C=5
 - 2018 number of checks: Form A=7 / B=10 / C=5

Topic	Code	Explanation	Forms	Notes
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No lifetime use, but 30-day use (4 checks: Form A=3, Form B=3, Form C=2)				
	if d05==0 & d20>=2 if d06_14==0 & d20>=2 if d01==0 & d14<=2 if d111==0 & d90_16>=2	no lifetime use, but... 30-day alcohol drinking 30-day marijuana use 30-day use of cigarettes, puff 30-day use of e-cigs	ABC ABC A B	
Binge drinking (2 checks: Form A=2, Form B=2, Form C=2)				
	ff d05==0 & d61>=2 if d20==0 & d61>=2	recent binge but... no lifetime alcohol 30-day alcohol drinking	ABC ABC	
Age and age of first use (2 checks: Form A=2, Form B=2, Form C=1)				
	if g01<grade + 3 g01> grade + 9 if g02<grade + 3 g02> grade + 9	age out of range	ABC	
	if g01< p19 (p17_14 p20 p22) if g01< (p17_14 p20)	age is younger than age at first use of... cig puff, marijuana, alcohol, drink regularly age is younger than age at first use of... marijuana or alcohol	A B	
Health (3 checks: Form A=0, Form B=3, Form C=0)				
	if ht_inchs==95	extreme height (7'11")	B	
	if wt_lbs==399	extreme weight (399 lbs)	B	
	if h82==0 & h83>=2	no junk drinks in past 7 days but obtained at school	B	

* For 2018, dropped inconsistency checking on use on school property but no use on school in the past 30 days, due to new school use question.

QC 9: Improbable patterns (*improb*)

Cull records if 30-day use is yes for ALL non-tobacco items (for 2018, that would mean cull if 30-day alcohol use is yes AND 30-day marijuana use is yes AND 30-day other drug (not marijuana) use is yes AND 30-day pain killer use is yes).

Topic	Code	Explanation	Forms	Notes
30-day use items = 10+ days (1 check: Form A=1, Form C=1)				
	if d20==5 & d21_16>=5 & d63==5 & d75==5 & d14=>=5	10 or more days of use... alcohol, marijuana, other drugs, pain killers, cigarettes	A	
	if d20==5 & d21_16>=5 & d75==5 & d14=>=5	alcohol, marijuana, pain killer, cigarettes	B	
	if d20==5 & d21_16>=5 & d14=>=5	alcohol, marijuana, and cigarettes	C	

QC 10: Tear-off verification (*tearoff*)

Review the response rate for the first question on the tear-off page for each form to determine if the school asked the optional tear-off questions. If response rate is greater than 10%, the create *tearoff* variable = 1, if less than 10% = 0. Use the following variables per formtype:

- Form A: g20_18
- Form B: h97_18

Follow up with schools if the percent tear-off is more than 10%. If the tearoff variable is 0 then the results for all questions on the tear-off form will be set to missing.

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Report Results Checks

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Report findings from stakeholder review

QC 11: Local stakeholders review process

Recruit a small group of ESD/county/district report users to review their own reports prior to public release. The goal is to engage real data users to review their reports and identify issues with response rates and results.

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Summary of Variables Used in QC Protocol

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VarName	Form A	Form B	Form C	Variable Description
d14	A054a	B020a	C045a	30-day use: cigarettes
d15	X	B020b	C045b	30-day use: chewing tobacco
d16	X	B020c	X	30-day use: cigars
d90_16		B020d	C045c	30-day use: e-cigs
d20	A054b	B022a	C045d	30-day use: alcohol
d21_16	A054c	B022b	C045f	30-day use: marijuana
d63	A054d	X	C045e	30-day use: other drugs, not marijuana
d75	A053f	B024e	X	30-day use: Pain killer
brezi	A054e	B022c	C045g	30-day use: Brexidox
d61	A057	B024	C047	Binge drinking
g13	A099	B100	C072	Honesty
h82	X	B030	X	Junk food: 7-day sweet drinks at school
h83	X	B031	X	Junk food: 7-day where get sweet drinks
p17_14	A059a	B025	X	Early initiation of drug use-marijuana
p19	A059b	X	X	Early initiation of drug use-cigarettes
p20	A059c	B023	X	Early initiation of drug use-alcohol sip
p22	A059d	X	X	Early initiation of drug use-alcohol reg
g01	A001	B001	x	Age (secondary)
g02	x	x	C001	Age (elementary)
ht_inchs	x	B026	X	height
wt_lbs	x	B027	X	Weight