Composite Variable Definitions

For All Testing and HERR forms implemented 07/12

What Are Composite Variables?

Definition
Composite variables are variables that are constructed from more than one response option on an encounter form.

Explanation
In some cases it's obvious how questions on an encounter form correspond to values for a variable. For example, the values from a variable we might call "TestedBefore" are "Yes," "No," "Client doesn't know," or "Declined to answer." Since these values map precisely onto the response options for a single question on the encounter form, little additional explanation is needed regarding how they were derived or what they mean.

In other cases it is less obvious. For instance, although many reports provide data on men who have sex with men (MSM) there is no single question or response item on the form to indicate whether a record should be categorized as MSM. Instead, LEO uses responses from multiple questions, including gender, partner type, and sexual behavior to determine whether the client is MSM or not.

LEO has been programmed to store composite variables which have been carefully standardized across forms, and to use them for consistent reporting. To fully understand reports, you must first understand how the various composite variables are constructed. This document explains each composite variable in detail.

Gender

This composite is constructed from "Current Gender Identity" and "Sex Assigned at Birth."

	Gender Identity		**Birth Gender**	
	Male	*Female*	*Intersex*	*Missing or D/R*
Male	Male	Trans FTM	Male	Male
Female	Trans MTF	Female	Female	Female
Trans MTF	Trans MTF	Trans MTF	Trans MTF	Trans MTF
Trans FTM	Trans FTM	Trans FTM	Trans FTM	Trans FTM
Other	Other	Other	Other	Other
Missing or D/R	Male	Female	Other	Unknown

Race

This composite assigns a mutually exclusive category for race even when multiple races are reported. It prioritizes non-white races in that if a client reports being both white and non-white, they are assigned to the non-white category. This is designed to ensure we do not undercount priority populations served, such as African-American or Latino clients.

Variable	Definition
Latino	The client reports they are Latino (even if other races are checked, the client's race/ethnicity shows up as Latino in the race composite)
Black/African American	Black/African American is the only race selected OR Black/African American is selected along with one of the following races: White, Other*, or Unknown
American Indian/Alaskan Native	American Indian/Alaskan Native is the only race selected OR American Indian/Alaskan Native is selected along with one of the following races: White, Other*, or Unknown
Asian	Asian is the only race selected OR Asian is selected along with one of the following races: White, Other*, or Unknown
Native Hawaiian/Pacific Islander	Native Hawaiian/Pacific Islander is the only race selected OR Native Hawaiian/Pacific Islander is selected along with one of the following races: White, Other*, or Unknown
White	White is the only race selected OR White is selected along with one of the following race options: Other*, Unknown, or Declined/Refused
Other	Only Other* race is selected
Unknown	No race is selected OR Only Unknown race is selected OR Only Declined/Refused is selected
Multi-race	Two or more of the following races are selected: Black/African American, American Indian/Alaskan Native, Asian, Native Hawaiian/Pacific Islander

Risk Group (hierarchy)

The table below represents the composite variables that ultimately make up the hierarchical mutually-exclusive variable for Risk Group. With the exception of No Risk (NIR) and No Reported Risk (NRR) [which exclude the categories above them], each composite variable is initially calculated independently, and records may fall into multiple categories. These categories are then used *in the order listed below* to create the hierarchical/mutually exclusive version of the risk group variable that is used in reports.

Variable/Value	Definition		
	CIF	HE/RR	GSAQ
HIV+ self-report	Defined same as HE/RR, but do not use in highest risk code for C&T reports	Most recent result (self-reported) = positive or preliminary positive	
Transgender	Gender composite = Trans MTF OR Trans FTM		
MSM	Gender composite = Male or Transgender MTF AND: Had vaginal or anal sex with a male = Yes OR Had vaginal or anal sex with a transgender = Yes OR Had oral sex with a male = Yes OR Had oral sex with a transgender = Yes		
MSM/IDU	MSM composite = Yes AND IDU = Yes		
IDU	Used a needle to inject drugs in past 12 months = Yes		
HIV+ Partner	…who is HIV + = Yes for Male Partner, Female Partner, OR TG Partner		
Sex Worker	Received money, drugs, or other items for sex = Yes		
IDU Partner	…who injects drugs = Yes for Male Partner, Female Partner, OR TG Partner		
MSM Partner	Gender composite ≠ Male AND "known to have had sex with a male" = Yes		
Sex Worker Partner	Has had sex with someone who exchanges sex for drugs or money = Yes		
Syphilis/Gonorrhea	STD Diagnosis = syphilis OR gonorrhea (or syphilis/gonorrhea/ chlamydia for category B)		
Non-IDU Stimulant User	IDU composite = No AND Used these drugs = Stimulants AND (MSM = Yes OR Heterosexual composite = Yes)		
Heterosexual Multiple Partner	Heterosexual composite = Yes AND Number of vaginal or anal sex partners > 1 [see below for Heterosexual composite definition]		
Heterosexual Single Partner	Heterosexual composite = Yes AND Number of vaginal or anal sex partners ≤ 1 (including missing). [see below for Heterosexual composite definition]		
Other Risk	Other HIV behavior/exposure risk = Yes		
No Risk (NIR)	Did not fall into any of the risk categories above AND Vaginal or anal sex with Male partner = No AND Vaginal or anal sex with Female partner = No AND		

	Vaginal or anal sex with TG partner = No AND Used a needle to inject drugs (12 months) = No
No Reported Risk (Missing Data)	Did not fall into any of the risk categories above AND Client asked about risk factors = (2) not asked OR (3) declined -- OR – Did not fall into any of the risk categories above AND Vaginal / anal sex with Male partner = Declined/missing OR Vaginal / anal sex with Female partner = Declined/missing OR Vaginal or anal sex with TG partner = Declined/missing OR Used a needle to inject drugs (12 months) = Declined/missing

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Risk Group (non-hierarchy)

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The table below represents risk variables that may be used: 1) to support definitions in the hierarchical variable above (e.g., heterosexual); 2) to report on target populations (e.g., secondary co-factors, etc.).

Variable	Definition		
	CIF	HE/RR	GSAQ
Heterosexual	Gender composite = Male AND MSM composite = No AND Vaginal, anal, OR oral sex with a female = Yes -- OR – Gender composite = Female AND Vaginal, anal, OR oral sex with a male = Yes		
Non-IDU Substance User	IDU ≠ Yes AND Number of alcoholic drinks ≥ 4 OR Stimulants OR Heroin OR Prescription Opioids OR Poppers = Yes AND MSM = Yes OR Heterosexual composite = Yes		
Non-Gay Identified	MSM = Yes AND Sexual Orientation = Heterosexual or Straight		
Homeless*	[Are you currently] homeless = Yes		
Incarcerated*	Have you been in jail/prison [incarcerated] more than 24 hours = Yes		
Migrant Worker*	[Are you currently a] migrant = Yes		
Female with Unknown Risk (was 'non-identified risk')	Gender composite = Female AND Heterosexual Single Partner = Yes		

Risk Level

This variable stores 'groupings' of the hierarchical Risk Group variable, as defined below.

Variable	Definition		
	CIF	HE/RR	GSAQ
High Risk	Transgender, MSM, MSM/IDU, IDU, HIV+ Partner, OR Sex Worker = Yes		
Moderate Risk	IDU Partner, MSM Partner, Sex Worker Partner, Syphilis/Gonorrhea Diagnosis, OR Stimulant User = Yes		
Low Risk	Het Multiple Partner, Het Single Partner, Other Risk, OR NIR (No Risk) = Yes		
Unknown Risk	NRR (No Reported Risk) = Yes		

Positive Type

This variable is used to distinguish between newly-identified confirmed positives, confirmed positives who report a previous confirmed positive result, and preliminary positives. This variable relies on current testing outcome, so is not relevant for non-testing forms.

Variable/Value	Definition
	CIF
Newly-Identified Confirmed Positive	Final HIV status = Positive AND "most recent result received" does not = Positive
Previous Confirmed Positive	Final HIV status = Positive AND "most recent result received" = Positive
Preliminary Positive	Final HIV status = Preliminary Positive

Age Group

This variable is used to categorize clients into groups according to their age at the initial encounter based on reported birthdate. If birthdate is missing, age is 'unknown.' Age groupings are designed to match population targeting co-factors (accessed in intervention set-up screens).

Age Groups
0 – 12
13 – 18
19 – 24
25 – 34
35 – 44
45+
Unknown