

Data Appendix to:

**“Teenage Childbearing and Its Life Cycle Consequences:
Exploiting a Natural Experiment”**

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Creation of the Pregnancy History File

The programs used to create the pregnancy history file were as follows:

data1.sas	creates pregnancy and abortion variables
data2.sas	creates century months and start and end dates
data3.sas	merges in pregnancy and abortion end dates and resolves some errors by hand
data4.sas	removing “others” (race) from data set
data5.sas	creating extra variables... married at first pregnancy, age at First Pregnancy, etc.

The oversample of disadvantaged whites was eliminated from our analysis sample.

pregdat.code	list of all variables extracted
pregdat.ssd01	original data from extract
pregdat4.ssd01	data output from data4.sas
pregdat5.ssd01	data output from data5.sas

The goal of the fertility history construction was to construct a file where the start and end dates (month and year) of each pregnancy were recorded as well as the outcome for each pregnancy. While conceptually simple, constructing this file had several complications. First, pregnancies are recorded in several parts of the survey, one the child and maternal health section (HI), the contraceptive use section (CI) and on the self-administered questionnaire on abortions. Second, the data were recorded in 1982 and 1983 to recover the pregnancy history, but thereafter was recorded to cover pregnancies since last interview. Therefore it is necessary to process a large set of survey years to recover the pregnancy histories. In addition, pregnancies may have

started prior one survey and ended prior to the following survey and hence pregnancies need to be carefully linked across survey years. The general strategy was as follows:

1. Record the month and year each pregnancy began as well as the outcome for each pregnancy from the CI or HI data between each survey (and prior to the 1983 or 1982 survey).
2. For each pregnancy resolution, construct the length of the pregnancy at the pregnancy's termination. This comes from the CI information.
3. Compress the pregnancies between surveys into a single history numbering pregnancies from first to last (rather than from first to last between survey years).
4. Construct the abortion history separately.
5. Integrate the abortion history with the pregnancy history. Some abortions will be reported in the pregnancy but not the abortion history, some in the abortion history but not the in pregnancy history and some in both. Integration involves reconciling date discrepancies.

Constructing the start month, start year and outcome of each pregnancy

The fertility history is error ridden. We took great measures to construct a pregnancy history that carefully accounted for the multiple sources of information within the NLSY survey. Often information on pregnancy start dates was conflicting from two different sources even within the same survey year. In addition, the data were collected first as a retrospective history in 1982 and 1983 and then on events between surveys thereafter. Our goal was to construct a pregnancy history which organized the data by start and end date from the first to the last pregnancy and kept track of the outcome for each of these pregnancies. Accomplishing this goal required stringing together consecutive years of data, accounting for what occurred between survey years as accounted for in a particular year, but also keeping track of pregnancies that were in progress when the respondent was contacted to answer the previous survey (these had an end date in the current survey but no start date as the start did not occur between survey years). We developed several rules for using the various pieces of information, for dealing with "straddling" pregnancies and for dealing with data inconsistencies (such as Second Pregnancy dates between surveys that occurred without or prior to First Pregnancy dates). At the end, we used some general rules and then hand coded many exceptions that we document here.

We started by trying to resolve the pregnancy histories for 1982 and 1983. Here we kept track of up to 18 pregnancies that might have occurred prior to 1982 (or 1983). These pregnancies are dated relative to a woman's live births for women who had live births. The data allows us to recover up to seven live births and up to 3 fetal losses prior to the first birth, up to two fetal losses between the first and second and second and third births, and a fetal loss between the third and fourth births. For women who had not had a first birth, the survey allows us to recover 3 fetal losses for women who had not yet had a birth. In 1982 and 1983 the data records the end date of the pregnancy event (month and year). In the case of a stillbirth, miscarriage or abortion, the survey records the length of the pregnancy at the time of the termination. We assume that the

length of a pregnancy ending in a birth is 9 months in order to calculate the start date of pregnancy (some of these were changed as explained below).

Starting in 1984, information was collected on pregnancies that happened since the last survey. Specifically information was collected on the month and year of the start of each pregnancy between survey years as well as the outcome of each pregnancy. The survey records this information in two separate places, first in a set of questions on contraceptive use prior to pregnancy and second on the health of the mother after the pregnancy resolution. The timing of pregnancy was not always in agreement in these two reports. It was therefore necessary to develop some general rules for dealing with such conflicts.

There are two kinds of pregnancies, “straddling” and “non-straddling.” Straddling pregnancies are pregnancies that were unresolved at the date of the previous interview. Non-straddling pregnancies are pregnancies that began between interviews. The start date of straddling pregnancies (with a few exceptions noted below) comes from information on the start date of the pregnancy from the previous survey year (in later years this was also recorded on the current year survey). The resolution of that pregnancy comes from information in the current survey year. For example, a pregnancy in progress in 1984 would have its start date recorded in the 1984 survey but its resolution recorded in the 1985 survey. It is important to record the start date for the pregnancy that was in progress at the time of the last survey. The algorithm we use as follows. First find out if the respondent was pregnant at the last survey. Then working backwards from the last (typically the third) to the first potential pregnancy find the pregnancy that was in progress at the last survey. Then record the start date of that pregnancy. For example, suppose in 1990 a respondent records being pregnant at the 1988 survey. Suppose this was the respondent’s Second Pregnancy (between 1986 and 1988). Then the respondent’s Third Pregnancy will have a valid skip for the pregnancy resolution but the Second Pregnancy will have a resolution code of “5” indicating an ongoing pregnancy. The start date for this pregnancy will then be recorded and will be attached to the First Pregnancy outcome between 1988 and 1990. There are several caveats. First, at times a respondent will be recorded as having been pregnant at the last survey but in fact the pregnancy outcome from the previous survey does not record an ongoing pregnancy. In these cases the start date of the pregnancy was recorded as missing. A second caveat is at times you must look back more than one survey year to record the starting date of a “straddling” pregnancy. For example if a respondent was pregnant in 1986, not surveyed in 1988 and then surveyed in 1990, the 1990 survey will cover the pregnancy history since 1986. The start date of the straddling pregnancy will be recorded in the 1986 (not 1988) survey.

Non-straddling pregnancies have all information within a survey year. In general, we first assessed whether there was a pregnancy between interview years that had a non-missing outcome resolution. This information came from the set of questions surrounding contraceptive use prior to pregnancy. We then assessed in general for that year whether the dates recorded in this set of variables or the dates recorded in a second set of variables (on maternal and child health after the pregnancy resolution) were more accurate for the majority of cases. While this strategy covered a large number of cases, for either decision there remained many exceptions where we either used the dates from the alternative questions first or where we hand edited dates because there were obvious errors. Typical exceptions were that the year agreed for the start of the pregnancy between the two sets of questions but the question set we chose for a particular observa-

tion had a missing month for the start date where the alternative pregnancy start month was non-missing. What follows is a of list rules we followed for each pregnancy since last interview for each year as well as a list of observations by year and pregnancy number, what the recording of the original data was, and what the recording of the start month and year and the outcome was for each of the exceptions. To record the set of variables used we report “CI” if the information was from the contraceptive interview or “HI” if the information was from the health interview and record variable name for the month of the start of the pregnancy in parentheses. The outcome of the pregnancy comes from the same set of variables as the date of the pregnancy unless otherwise noted. We record any pregnancy where a pregnancy outcome is recorded (live birth, miscarriage, still birth, apportion, refusal, don’t know, or missing) in the pregnancy outcome variable of CI for that pregnancy.

Examining other pieces of data allowed hand edits. Usually hand edits were where dates of pregnancy starts were missing, but some other record (such as date of a live birth or date of an abortion and months pregnant) allowed a reasonable inference. Exceptions using dates that did not match between the CI and HI were also done examining other data.

1984

(First Pregnancy)

Default: Information from the CI on First Pregnancy (R1319200) first; if missing information from HI on First Pregnancy (R1328100); outcome remains from CI.

Exception: ID 10193, Hand edit, Set month=7, year=1984.

Exception: ID 3259, Use dates from HI (R1328100).

(Second Pregnancy)

Default: Information from the CI for the Second Pregnancy (R1320900)

No Exceptions

(Third Pregnancy)

Default: Information from the CI for the Third Pregnancy (R1322600)

No Exceptions

Data for 1984 Exceptions

	R	R	R	R	R	R	R	R	R	R
	0	1	1	1	1	1	1	1	1	1
	0	3	3	3	3	3	3	3	3	3
	0	1	1	1	2	2	2	2	2	2
	0	9	9	9	0	1	1	8	8	8
O	1	2	3	4	9	0	1	1	2	9
b	0	0	0	0	0	0	0	0	0	0
s	0	0	0	0	0	0	0	0	0	0
1	3259	-2	83	1	-4	-4	-4	2	83	-4
2	10193	-3	-3	1	-4	-4	-4	-3	-3	-4

CI Information on Pregnancy Start Dates and Pregnancy Outcomes

HI Information on Pregnancy Start Dates and Pregnancy Outcomes

1985

(First Pregnancy)

Default: Information from the HI (R1705500). Outcome from CI.

No Exceptions

(Second Pregnancy)

Default: Information from the CI for the Second Pregnancy (R1699100)

(Third Pregnancy)

Default: Information from the CI for the Third Pregnancy (R1700400)

No Exceptions

1986

(First Pregnancy)

Default: Information from the HI (R2008700)

No Exceptions

(Second Pregnancy)

Default: Information from the CI for the Second Pregnancy (R1998600)

1988

(First Pregnancy)

Default: Information from the CI on First Pregnancy (R2578700) first; if missing information from HI on First Pregnancy (R2589400).

Exceptions: ID 6107, 3041, 1083, 6055, 1210, 7825, 6534, 5809, 9344, 4537, 5873, 3408, 10366, 1858, 4657, 1974, 9916, 10484.

Use information from HI First Pregnancy(R2589400).

Exceptions: ID 1227, Hand edit, set month=1, year=1986

Exceptions: ID 10299, Hand edit, set month=1, year=1988

(Second Pregnancy)

Default: Information from the CI on Second Pregnancy (R2580800).

Exceptions: ID 5445, 7034, No Second Pregnancy.

Exceptions: ID 6239, 1844, 7235, 6409, 2052

Use information from HI Second Pregnancy (R2590200).

Exceptions: ID 6639, Use information from CI Third Pregnancy (R2582900)

(Third Pregnancy)

Default: Information from the CI for the Third Pregnancy (R2582900)

Exceptions: ID 6639, No Third Pregnancy (Third Pregnancy is actually Second Pregnancy).

Data for 1988 Exceptions:

	M	Y	M	YR	O	M	YR	M	YR	MO	YR	MO	YR					
	O	R	O1	1	1	O2	2	O2	O3	3	O3	1	1	O1	2	2	O2	
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
0	8	8	7	7	7	8	8	8	8	8	8	8	8	8	9	9	9	
0	0	0	8	8	9	0	0	1	2	3	3	9	9	9	0	0	0	
O	1	3	5	7	8	4	8	9	5	9	0	6	4	5	6	2	3	4
b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
s	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1210	-4	-4	1	87	1	-4	-4	-4	-4	-4	1	88	1	-4	-4	-4	

		M	Y	M	YR	O	M	YR	M	YR	M	YR	MO	YR	MO	YR		
		O	R	O1	1	1	O2	2	O2	O3	3	O3	1	1	O1	2	2	O2
	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	0	8	8	7	7	7	8	8	8	8	8	8	8	8	8	9	9	9
	0	0	0	8	8	9	0	0	1	2	3	3	9	9	9	0	0	0
O	1	3	5	7	8	4	8	9	5	9	0	6	4	5	6	2	3	4
b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
s	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1227	-4	-4	-4	-4	1	-4	-4	-4	-4	-4	-4	-3	-3	1	-4	-4	-4
3	1844	-4	-4	-3	85	1	-4	-4	1	-4	-4	-4	-3	85	1	4	87	1
4	1858	-4	-4	1	86	1	-4	-4	-4	-4	-4	-4	10	86	1	-4	-4	-4
5	1974	-4	-4	3	87	1	-4	-4	-4	-4	-4	-4	6	87	1	-4	-4	-4
6	2052	-4	-4	-4	-4	1	-4	-4	-4	-4	-4	-4	4	-3	1	8	86	1
7	3041	-4	-4	9	88	1	-4	-4	-4	-4	-4	-4	9	87	1	-4	-4	-4
8	3408	-4	-4	8	87	1	-4	-4	-4	-4	-4	-4	1	87	1	-4	-4	-4
9	4537	-4	-4	8	87	1	-4	-4	-4	-4	-4	-4	4	87	1	-4	-4	-4
10	4657	-4	-4	1	87	1	-4	-4	-4	-4	-4	-4	10	87	1	-4	-4	-4
11	5445	-4	-4	11	86	1	11	86	1	-4	-4	-4	11	87	1	-4	-4	-4
12	5809	-3	-3	-3	86	1	3	88	5	-4	-4	-4	10	86	1	-4	-4	-4
13	5873	-4	-4	8	86	1	-4	-4	-4	-4	-4	-4	5	86	1	-4	-4	-4
14	6055	-4	-4	1	86	1	-4	-4	-4	-4	-4	-4	1	87	1	-4	-4	-4
15	6107	-4	-4	4	84	1	-4	-4	-4	-4	-4	-4	4	87	1	-4	-4	-4
16	6239	6	87	4	87	2	10	88	1	-4	-4	-4	4	87	2	10	87	1
17	6409	-4	-4	-4	-4	1	-4	-4	-4	-4	-4	-4	8	85	1	7	87	1
18	6534	-4	-4	12	87	1	-4	-4	-4	-4	-4	-4	12	86	1	-4	-4	-4
19	6639	-4	-4	6	86	1	6	86	1	7	87	1	7	86	1	7	86	1
20	7034	-4	-4	8	87	1	8	87	1	-4	-4	-4	8	87	1	-4	-4	-4
21	7235	-4	-4	-4	-4	1	9	87	1	-4	-4	-4	8	85	1	8	86	1
22	7825	-4	-4	5	86	1	-4	-4	-4	-4	-4	-4	5	87	1	-4	-4	-4
23	9344	-4	-4	6	84	1	2	85	1	-4	-4	-4	1	84	1	2	85	1
24	9916	-4	-4	9	87	1	11	87	1	-4	-4	-4	8	86	1	12	87	1
25	10299	3	88	-3	-3	2	-4	-4	-4	-4	-4	-4	-2	-2	2	-4	-4	-4
26	10366	-4	-4	11	86	1	-4	-4	-4	-4	-4	-4	6	86	1	-4	-4	-4
27	10484	-4	-4	2	87	1	-4	-4	-4	-4	-4	-4	6	86	1	-4	-4	-4

End Date For First Pregnancy
 CI Information on Pregnancy Start Dates and Pregnancy Outcomes
 HI Information on Pregnancy Start Dates and Pregnancy Outcomes

1990

(First Pregnancy)

Default: Use information from the CI on First Pregnancy (R3188400) first. If missing, use information from HI on First Pregnancy (R3197000).

Exceptions: ID 10272, 2672, 3467, 7494, 9133, 11935

These are straddling pregnancies but the start date and outcomes are recorded in the HI questions of the 1990 survey (R3197000).

Exceptions: ID 1980

This is a straddling pregnancies but the start date and outcomes are recorded in the CI questions of the 1990 survey (R3188400).

Exceptions: ID 1167

This is a straddling pregnancy. The start date is recorded in the previous survey but the outcome is recorded in the HI data section rather than in the CI data section.

Exceptions: ID 8086, 2105, 9035, 5936, 7415, 12113, 4930, 9557, 9837, 3715, 3624, 12464, 10220, 157, 3049, 3048, 1004.

These are non-straddling pregnancies but the start date and outcomes come from the HI variables rather than from the CI variables (R3197000).

Exceptions: ID 8996, Hand edit, month=7, year=1989 (outcome from CI)

(Second Pregnancy)

Default: Information from the CI on Second Pregnancy (R3189900)

Exceptions: ID 4184, 5631, 3041, 8969

These are non-straddling pregnancies but the start date and outcomes come from the HI variables rather than the CI variables (R3221300).

Exceptions: ID 8940 Use information from CI Third Pregnancy (R3191400)

(Third Pregnancy)

Default: Information from the CI for the Third Pregnancy (R3191400)

Exceptions: ID 8940, No Third Pregnancy (Third Pregnancy is actually Second Pregnancy).

Data for 1990 Exceptions:

		M	Y	MO	YR	O	M	YR	M	YR	MO	YR	MO	YR	O2			
	R	O	R	1	1	1	O2	2	O2	O3	3	O3	1	1	O1	2	2	O2
	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	0	8	8	8	8	8	8	9	9	9	9	9	9	9	2	2	2	2
	0	9	9	8	8	9	9	0	0	1	1	2	7	7	7	1	1	1
O	1	4	6	4	5	1	9	0	6	4	5	1	0	1	2	3	4	5
b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
s	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	157	-3	89	12	86	4	-4	-4	-4	-4	-4	-4	11	88	4	-4	-4	-4
2	1004	7	90	5	89	2	-4	-4	-4	-4	-4	-4	4	90	2	-4	-4	-4
3	1167	-4	-4	-4	-4	1	10	89	1	-4	-4	-4	10	89	1	10	89	1
4	1980	-4	-4	5	89	1	-4	-4	-4	-4	-4	-4	5	89	1	-4	-4	-4
5	2105	-4	-4	-3	89	1	-4	-4	-4	-4	-4	-4	4	89	1	-4	-4	-4
6	2672	2	88	-4	-4	3	-4	-4	-4	-4	-4	-4	6	87	3	-4	-4	-4
7	3041	-3	-3	3	89	2	-3	-3	1	-4	-4	-4	3	89	2	7	89	1
8	3048	-4	-4	11	88	1	-4	-4	-4	-4	-4	-4	10	89	1	-4	-4	-4
9	3049	-4	-4	5	90	1	-4	-4	-4	-4	-4	-4	4	89	1	-4	-4	-4
10	3467	-4	-4	-4	-4	1	-4	-4	-4	-4	-4	-4	3	88	1	-4	-4	-4
11	3624	8	89	6	87	4	3	90	5	-4	-4	-4	6	89	4	-4	-4	-4
12	3715	-4	-4	3	90	1	-4	-4	-4	-4	-4	-4	3	89	1	-4	-4	-4
13	4184	-4	-4	-4	-4	1	2	89	3	-4	-4	-4	2	86	1	2	89	2
14	4930	-4	-4	6	90	1	-4	-4	-4	-4	-4	-4	6	89	1	-4	-4	-4
15	5631	-4	-4	-4	-4	1	6	90	1	-4	-4	-4	6	88	1	6	89	1
16	5936	5	90	-3	-3	4	-4	-4	-4	-4	-4	-4	-3	90	4	-4	-4	-4
17	7415	2	89	-3	-3	4	-4	-4	-4	-4	-4	-4	-3	89	4	-4	-4	-4
18	7494	-4	-4	-4	-4	1	-4	-4	-4	-4	-4	-4	7	88	1	-4	-4	-4
19	8086	-4	-4	9	89	1	-4	-4	-4	-4	-4	-4	1	89	1	-4	-4	-4
20	8940	4	88	-3	87	3	10	88	2	7	89	1	7	89	1	-4	-4	-4
21	8969	-4	-4	10	86	1	5	87	1	-4	-4	-4	8	87	1	12	88	1
22	8996	-4	-4	7	90	1	-4	-4	-4	-4	-4	-4	4	90	1	-4	-4	-4
23	9035	-4	-4	6	88	1	-4	-4	-4	-4	-4	-4	6	89	1	-4	-4	-4
24	9133	-4	-4	3	89	1	-4	-4	-4	-4	-4	-4	3	89	1	-4	-4	-4
25	9557	-4	-4	12	89	1	-4	-4	-4	-4	-4	-4	12	88	1	-4	-4	-4
26	9837	-4	-4	9	88	1	-4	-4	-4	-4	-4	-4	9	89	1	-4	-4	-4
27	10220	-4	-4	12	90	1	-4	-4	-4	-4	-4	-4	11	89	1	-4	-4	-4
28	10272	-4	-4	-4	-4	1	-4	-4	-4	-4	-4	-4	8	88	1	-4	-4	-4
29	11935	-4	-4	5	88	1	-4	-4	-4	-4	-4	-4	5	88	1	-4	-4	-4
30	12113	-4	-4	1	-3	1	-4	-4	-4	-4	-4	-4	1	89	1	-4	-4	-4
31	12464	-4	-4	6	87	1	8	87	1	-4	-4	-4	7	86	1	8	87	1

End Date For First Pregnancy

CI Information on Pregnancy Start Dates and Pregnancy Outcomes

HI Information on Pregnancy Start Dates and Pregnancy Outcomes

Constructing the end month, end year and length of each pregnancy

Beginning in 1984, the NLSY records the end month and year of each pregnancy resolution and the length of pregnancy resolutions not ending in a live birth. In general, up to three pregnancy resolutions dates were recorded between interviews. In addition up to three live births were recorded between interviews. Above we already constructed the pregnancy history between each survey year. Here we start with the First Pregnancy event, determine if it was a live birth or a pregnancy termination and then record the length of the event either as 9 months (for a live birth) or the number of months corresponding to the length of the pregnancy for the pregnancy loss number under consideration. Below is a table of variable names used to determine the length of the pregnancy at termination for each year. Note that the trick was to map pregnancy losses to pregnancies between interviews. For example, if a First Pregnancy ended in a birth and a second in an abortion, the abortion was the first pregnancy loss (even though it was the Second Pregnancy). Therefore the length of pregnancy at termination would be assigned from the “Pregnancy Loss #1” variable for the appropriate year. We also kept track of the month and year of the outcome when there was a pregnancy loss. In general, the year is the variable that directly precedes the length of pregnancy at termination variable and the month of loss is generally the variable that precedes the length of pregnancy at termination by three variables (the year, the day and then the month usually precedes the type length of loss).

Year	Pregnancy Loss #1	Pregnancy Loss #2	Pregnancy Loss #3
1984	R1320700	R1322400	R1324100
1985	R1698900	R1700200	R1701500
1986	R1998400	R2000000	.
1988	R2580600	R2582700	R2584800
2000	R3189700	R3191200	R3192700

Constructing the end month, end year for each Abortion

In 1984, the NLSY79 began collecting information on abortions using a self-reported confidential card. This method of collecting sensitive information significantly improved the reporting of abortions. The Self-Administered Questions (SAQ) records the month and year of each abortion. In 1984, up to 4 abortions were reported, in 1986 up to 3 abortions were reported and in 1988 and 1990 up to two abortions were recorded. After asking about the number of abortions (or the number between survey years), the respondent was asked to give the month and year of each abortion. To construct the abortion history we simply strung these together, from the first reported abortion in the 1984 survey through the second reported abortion in the 1990 survey. In principle up to 11 abortions could be recorded. Below is a table documenting the month of termination for each abortion (the year variable is the next variable in the data set).

Year	Mo of 1 st Abortion	Mo of 2 nd Abortion	Mo of 3 rd Abortion	Mo of 4 th Abortion
1984	R1382900	R1383100	R1383300	R1383500
1986	R2007500	R2007700	R2007900	.
1988	R2588000	R2588200	.	.
1990	R3195800	R3196000	.	.

Compressing the Data into an Event History

The challenge now is to take the up to 50 pregnancies (18 in 1982, 18 in 1983, 3 in 1984, 1988 and 1990 and 2 in 1986) and remove the missing pregnancies to get a continuous pregnancy event history. Missing pregnancies are in fact pregnancies that did not occur. This was done by simply lining up in chronological order the pregnancies of each survey and keeping any potential pregnancy that had a start month, a start year or an outcome. The result was that up to 12 pregnancies were allowed for each woman (the maximum was 10).

This same process was done for abortions. Up to 11 abortions were possible.

The file pregdat1.ssd01 was the result of merging these created pregnancy histories and abortion histories.

The program data2.sas and data3.sas take several additional steps in constructing the pregnancy history. First it converts the start dates in the pregnancy history section to century months. Specifically for each year and month of each pregnancy a date in century months is formed as follows:

$$\text{Date in Century Months} = \text{year} \times 12 + \text{month}.$$

So a pregnancy start date of January, 1980 would have a century month representation of 961 ($80 \times 12 + 1$). End dates in century months are either start dates plus 9 for live births or start dates plus the number of months at pregnancy termination for pregnancies not ending in birth. At this point the year and month recorded is the start of pregnancy year and month if the pregnancy did not end in a live birth or the end month and year if it ended in a live birth. The century months are all start dates. (That is 9 months are subtracted off from the calculation if it is a live birth). There is a small issue of twins as each birth is recorded and hence two overlapping pregnancies occur (same start and end date and both with live birth outcomes). Since we are counting pregnancies, we eliminate one of these.

Getting the pregnancy history correct was an iterative process. First we try and resolve any inconsistent dates within the pregnancy history. Then we try and resolve any inconsistencies (including chronological mis-ordering) in the abortion histories. Then we merge the abortion and pregnancy histories. Here we have to resolve discrepancies across dates reported in the two histories. An abortion can be reported in the pregnancy history, the SAQ or both. In addition, the abortion could have the same start and end dates or different start and end dates. Because inconsistencies were common across these two files, we had to develop rules as to what constituted independent abortions and what constituted the same abortion reported slightly differently in the

two parts of the survey (for example, is an abortion reported in the questionnaire with a start date of June 1980 and a length of 2 months the same abortion as an abortion with as start date of August 1980 and a length of 2 months).

Here we document the many hand edits we made at various stages as well as the rules we followed when we matched the abortion and pregnancy history files. The table below documents hand edits in the pregnancy history file. It presents the start and end dates (in century months) of our original pregnancy history and then the hand recodes. Most of the recodes were changed either because a date was not known but the outcome was a birth and the pregnancy dates could be inferred from the birth record. Some dates were affected by the assumption that all births had gestations of 9 months. The other reason is that the order of the pregnancies is not correct. This occurred if for example a survey taker reported the pregnancies between interviews in reverse chronological order. There are two observations on each observation recoded. The **red type** is the original data, and the black type is the recoded data. After the changes below were made, missing pregnancies were eliminated. The table reports all observations that had some had coding. Observation 11191 had the sixth and seventh observations swapped so the recode does not appear in this table. (Note: Codes -7 and -8 were internal processing codes for missing values).

Obs	ID	M	YR	Start1	End1	Out1	Start2	End2	Out2	Start3	End3	Out3	Start4	End4	Out4	Start5	End5	Out5
.		O																
		1																
1	228	5	78	937	941	4	974	976	2	953	962	1	1030	1039	1	1035	1044	1
2	228	5	78	937	941	4	953	962	1	974	976	2	1030	1039	1	1047	1056	1
3	229	10	82	992	994	2	983	985	2	997	1000	2	1000	1004	2	.	.	.
4	229	1	82	983	985	2	992	994	2	997	1000	2	1000	1004	2	.	.	.
5	590	1	76	911	913	2	933	935	2	931	940	1	945	954	1	973	982	1
6	590	1	76	911	913	2	933	935	2	935	940	1	945	954	1	973	982	1
7	733	9	84	1017	1026	1	1022	1031	1	1069	1078	1	.	.	.	.	.	.
8	733	9	84	1017	1026	1	.	.	1	1069	1078	1	.	.	.	.	.	.
9	845	5	78	937	941	2	910	919	1	940	949	1	1017	1021	2	1021	1030	1
10	845	7	76	910	919	1	937	941	2	941	949	1	1017	1021	2	1021	1030	1
11	1200	1	86	1033	1035	4	1034	1035	2	1040	1042	2	1051	1060	1	.	.	.
12	1200	1	86	1033	1035	4	1035	1036	2	1040	1042	2	1051	1060	1	.	.	.
13	1415	9	77	924	933	1	942	951	1	967	971	2	965	974	1	981	990	1
14	1415	9	77	924	933	1	942	951	1	-8	-8	2	965	974	1	981	990	1
15	1596	9	79	948	957	1	954	963	1	967	976	1	999	1008	1	1024	1033	1
16	1596	9	79	936	945	1	954	963	1	967	976	1	999	1008	1	1024	1033	1
17	1862	10	79	949	958	1	957	966	1	971	980	1	997	1006	1	1051	1055	2
18	1862	10	79	949	958	1	958	966	1	971	980	1	997	1006	1	1051	1055	2
19	2012	1	81	972	973	2	975	976	2	980	989	1	1019	1028	1	1022	1031	1
20	2012	1	81	972	973	2	975	976	2	980	989	1	1019	1028	1	.	.	1
21	2278	3	84	1011	1020	1	1019	1028	1	.	.	.	.	.	.	.	.	.
22	2278	3	84	1011	1019	1	1019	1028	1	.	.	.	.	.	.	.	.	.
23	2712	8	81	-3	980	2	1041	1045	2	1044	1053	1	1076	1085	1	.	.	.
24	2712	8	81	-3	980	2	1041	1045	2	1045	1053	1	1076	1085	1	.	.	.
25	3010	7	88	1063	1066	2	1062	1071	1	.	.	.	.	.	.	.	.	.
26	3010	7	88	1063	1066	2	1074	1083	1	.	.	.	.	.	.	.	.	.
27	3046	1	75	892	901	1	907	916	1	962	971	1	964	973	1	976	981	2
28	3046	1	75	892	901	1	907	916	1	938	947	1	964	973	1	976	981	2
29	3074	4	84	1012	1021	1	1061	1063	2	1060	1063	2	1064	1073	1	.	.	.

Obs	ID	M	YR	Start1	End1	Out1	Start2	End2	Out2	Start3	End3	Out3	Start4	End4	Out4	Start5	End5	Out5
.		O																
		1																
30	3074	4	84	1012	1021	1	1061	1063	2	.	.	2	1064	1073	1	.	.	.
31	3387	8	83	995	1004	1	999	1008	1	.	.	.	.	.	.	.	.	.
32	3387	8	83	995	1004	1	.	.	1	.	.	.	.	.	.	.	.	.
33	3429	4	83	991	1000	1	999	1008	1	1031	1040	1	.	.	.	.	.	.
34	3429	4	83	991	1000	1	1000	1008	1	1031	1040	1	.	.	.	.	.	.
35	3544	12	82	996	1005	1	1017	1026	1	1045	1054	1	1060	1069	1	1061	1070	1
36	3544	12	82	996	1005	1	1017	1026	1	1045	1054	1	1060	1069	1	.	.	1
37	3606	12	80	963	972	1	994	995	2	985	994	1	1011	1020	1	.	.	.
38	3606	12	80	963	972	1	985	994	1	994	995	2	1011	1020	1	.	.	.
39	3637	4	75	895	904	1	894	903	1	957	959	2	961	970	1	.	.	.
40	3637	4	75	895	904	1	906	915	1	957	959	2	961	970	1	.	.	.
41	3931	10	77	925	934	1	.	.	1	992	1001	1	998	1007	1	1054	1063	1
42	3931	10	77	925	934	1	.	.	1	992	1001	1	.	.	1	1054	1063	1
43	4049	12	80	970	972	2	971	980	1	997	1006	1	1034	-3	2	1077	1086	1
44	4049	12	80	970	972	2	972	980	1	997	1006	1	1034	-3	2	1077	1086	1
45	4445	11	79	957	959	4	993	996	2	1013	1016	2	1015	1018	2	1029	1038	1
46	4445	11	79	957	959	4	993	996	2	1013	1015	2	1015	1018	2	1029	1038	1
47	4657	5	78	932	941	1	965	968	2	967	972	2	972	981	1	1054	1063	1
48	4657	5	78	932	941	1	965	968	2	968	972	2	972	981	1	1054	1063	1
49	4974	6	77	927	930	2	929	938	1	956	965	1	996	1005	1	1029	1038	1
50	4974	6	77	927	930	2	930	938	1	956	965	1	996	1005	1	1029	1038	1
51	5041	7	87	1051	1060	1	1058	1067	1	.	.	.	.	.	.	.	.	.
52	5041	7	87	1051	1058	1	1058	1067	1	.	.	.	.	.	.	.	.	.
53	5605	7	83	1003	1012	1	1011	1020	1	1053	1062	1	.	.	.	.	.	.
54	5605	7	83	1003	1012	1	.	.	1	1053	1062	1	.	.	.	.	.	.
55	5682	12	81	982	984	4	982	986	4	1073	1082	1	.	.	.	.	.	.
56	5682	12	81	982	984	4	984	986	4	1073	1082	1	.	.	.	.	.	.
57	5829	1	78	934	937	2	957	960	2	956	965	1	.	.	.	.	.	.
58	5829	1	78	934	937	2	957	960	2	960	965	1	.	.	.	.	.	.
59	6046	3	78	930	939	1	940	949	1	974	983	1	992	995	2	996	1005	1

Obs	ID	M	YR	Start1	End1	Out1	Start2	End2	Out2	Start3	End3	Out3	Start4	End4	Out4	Start5	End5	Out5
.		O																
		1																
60	6046	3	78	930	939	1	940	949	1	974	983	1	992	995	2	996	1005	1
61	6470	2	88	1058	1061	2	1060	1063	2	1064	1073	1	.	.	.	.	.	.
62	6470	2	88	1058	1060	2	1060	1063	2	1064	1073	1	.	.	.	.	.	.
63	6920	3	80	954	963	1	970	979	1	992	993	2	992	1001	1	1043	1052	1
64	6920	3	80	954	963	1	970	979	1	992	993	2	993	1001	1	1043	1052	1
65	7022	9	80	960	969	1	958	967	1	1021	1030	1	.	.	.	.	.	.
66	7022	9	80	960	969	1	982	991	1	1021	1030	1	.	.	.	.	.	.
67	7053	7	75	898	907	1	923	932	1	929	938	1	994	995	2	1006	1007	2
68	7053	7	75	898	907	1	923	932	1	932	938	1	994	995	2	1006	1007	2
69	7163	12	79	951	960	1	956	958	2	1004	1013	1	1059	1068	1	.	.	.
70	7163	12	79	939	948	1	956	958	2	1004	1013	1	1059	1068	1	.	.	.
71	7914	5	76	908	917	1	964	966	2	954	963	1	983	992	1	1015	1024	1
72	7914	5	76	944	953	1	964	966	2	966	975	1	983	992	1	1015	1024	1
73	8017	7	75	898	907	1	939	948	1	947	950	4	972	974	2	1041	1043	2
74	8017	7	75	898	907	1	939	948	1	948	950	4	972	974	2	1041	1043	2
75	8125	10	75	901	910	1	904	913	1	935	944	1	1012	1021	1	.	.	.
76	8125	10	75	901	910	1	916	925	1	935	944	1	1012	1021	1	.	.	.
77	8195	11	78	944	947	2	946	950	2	959	968	1	974	983	1	1054	1058	2
78	8195	11	78	944	947	2	947	950	2	959	968	1	974	983	1	1054	1058	2
79	8260	12	77	927	936	3	930	939	1	1038	1047	1	1074	1083	1	.	.	.
80	8260	12	77	-8	-8	3	930	939	1	1038	1047	1	1074	1083	1	.	.	.
81	8522	9	75	900	909	1	838	847	1	984	987	4	1017	1026	1	.	.	.
82	8522	9	75	900	909	1	946	955	1	984	987	4	1017	1026	1	.	.	.
83	8583	1	76	904	913	1	959	960	2	959	968	1	.	.	.	.	.	.
84	8583	1	76	904	913	1	959	960	2	960	968	1	.	.	.	.	.	.
85	8848	9	79	948	957	1	1013	1022	1	1011	1020	1	1024	1033	1	.	.	.
86	8848	9	79	948	957	1	1013	1022	1	.	.	1	1024	1033	1	.	.	.
87	9284	2	76	905	914	1	924	933	1	925	934	1	950	952	4	979	988	1
88	9284	2	76	905	914	1	924	933	1	937	946	1	950	952	4	979	988	1
89	9337	6	78	940	942	4	952	961	1	974	977	4	1006	1008	4	1021	1025	2

Obs	ID	M	YR	Start1	End1	Out1	Start2	End2	Out2	Start3	End3	Out3	Start4	End4	Out4	Start5	End5	Out5
.		O																
		1																
90	9337	6	78	940	942	4	952	961	1	974	977	4	1006	1008	4	1021	1024	2
91	9516	9	80	960	969	1	979	988	1	987	996	1	1012	1021	1	1035	1044	1
92	9516	9	80	960	969	1	979	988	1	988	996	1	1012	1021	1	1035	1044	1
93	9521	4	77	919	928	1	897	900	4	1034	1039	2	1042	1045	2	1054	1063	1
94	9521	12	74	897	900	4	919	928	1	1034	1039	2	1042	1045	2	1054	1063	1
95	9627	9	79	955	957	4	983	992	1	1004	1007	2	1006	1009	4	1022	1031	1
96	9627	9	79	955	957	4	983	992	1	1004	1006	2	1006	1009	4	1022	1031	1
97	9750	8	75	899	908	1	953	962	1	959	968	1	.	.	.	.	.	.
98	9750	8	75	899	908	1	953	962	1	971	980	1	.	.	.	.	.	.
99	9865	12	81	975	984	1	976	978	4	985	994	1	1033	1042	1	1051	1060	1
100	9865	12	81	963	972	1	976	978	4	985	994	1	1033	1042	1	1051	1060	1
101	9945	10	77	925	934	1	969	970	4	966	975	1	1011	1020	1	.	.	.
102	9945	10	77	925	934	1	969	970	4	970	975	1	1011	1020	1	.	.	.
103	10012	2	83	989	998	1	998	1007	1	1002	1011	1	.	.	.	.	.	.
104	10012	2	83	989	998	1	.	.	1	1002	1011	1	.	.	.	.	.	.
105	10101	12	76	915	924	1	893	902	1	1036	1045	1	1067	1076	1	.	.	.
106	10101	12	76	915	924	1	929	938	1	1036	1045	1	1067	1076	1	.	.	.
107	10144	12	82	993	996	2	1004	1006	2	1011	1012	3	1011	1020	1	1060	1069	1
108	10144	12	82	993	996	2	1004	1006	2	1012	1012	3	1011	1020	1	1060	1069	1
109	10150	9	82	984	993	1	1008	1011	2	1011	1015	3	1013	1022	1	1031	1040	1
110	10150	9	82	984	993	1	1008	1011	2	1011	1013	3	1013	1022	1	1031	1040	1
111	10156	10	82	988	994	2	1019	1028	1	1024	1033	1	.	.	.	.	.	.
112	10156	10	82	988	994	2	1019	1028	1	.	.	1	.	.	.	.	.	.
113	10401	7	88	1063	1072	1	1064	1073	1	.	.	.	.	.	.	.	.	.
114	10401	7	88	1063	1072	1	.	.	1	.	.	.	.	.	.	.	.	.
115	10484	4	80	955	964	1	974	983	1	994	995	2	984	987	4	1003	1012	1
116	10484	4	80	955	964	1	974	983	1	984	987	4	994	995	2	1003	1012	1
117	10691	6	77	927	930	4	947	956	1	952	961	1	.	.	.	.	.	.
118	10691	6	77	927	930	4	947	956	1	956	961	1	.	.	.	.	.	.
119	11137	10	80	961	970	1	965	974	3	992	995	4	.	.	.	.	.	.

Obs	ID	M	YR	Start1	End1	Out1	Start2	End2	Out2	Start3	End3	Out3	Start4	End4	Out4	Start5	End5	Out5
.		O																
		1																
120	11137	10	80	961	970	1	970	974	3	992	995	4	.	.	.	.	.	.
121	11191	1	77	922	925	2	928	937	1	948	957	1	960	969	1	.	.	1
122	11191	1	77	922	925	2	928	937	1	948	957	1	960	969	1	.	.	1
123	11306	12	79	956	960	2	940	949	1	978	987	1	.	.	.	.	.	.
124	11306	1	79	940	949	1	956	960	2	978	987	1	.	.	.	.	.	.
125	11347	12	79	957	960	2	953	962	1	.	.	.	.	.	.	.	.	.
126	11347	12	79	-8	-8	2	953	962	1	.	.	.	.	.	.	.	.	.
127	12222	3	76	906	915	1	916	925	1	924	933	1	939	948	1	.	.	.
128	12222	3	76	906	915	1	916	925	1	925	933	1	939	948	1	.	.	.
129	12293	2	78	936	938	2	928	937	1	952	961	1	982	991	1	1007	1016	1
130	12293	1	78	928	937	1	937	938	2	952	961	1	982	991	1	1007	1016	1
131	12429	2	86	1034	1036	2	1035	1038	2	1038	1040	4	1055	1064	1	.	.	.
132	12429	2	86	1034	1036	2	.	.	2	1038	1040	4	1055	1064	1	.	.	.

The next step is to deal with obvious errors in the abortion histories. First we correct the set of abortions that are out of chronological order. Then we correct by had the pregnancy file to allow a smoother folding in of the abortion data. Most of the changes to the pregnancy file were shortening by a month or 2 months the length of a pregnancy ending in a birth so that the abortion and the pregnancy would both appear. We made this decision as we do not know in fact the length of pregnancies ending in live births.

Obs	R0000100	a_end1	a_end2	a_end3	a_end4	a_end5
1	363	989	928	917	905	1035
2	363	905	917	928	989	1035
3	1599	969	914	.	.	.
4	1599	914	969	.	.	.
5	1749	1006	995	987	.	.
6	1749	987	995	1006	.	.
7	1818	987	978	-7	.	.
8	1818	978	987	-7	.	.
9	3422	1061	1049	.	.	.
10	3422	1049	1061	.	.	.
11	4116	967	935	.	.	.
12	4116	935	967	.	.	.
13	4463	996	940	1031	.	.
14	4463	940	996	1031	.	.
15	4665	995	906	.	.	.
16	4665	906	995	.	.	.
17	5936	1001	990	1085	.	.
18	5936	990	1001	1085	.	.
19	6718	1032	1022	.	.	.
20	6718	1022	1032	.	.	.
21	6862	917	904	953	.	.
22	6862	904	917	953	.	.
23	6913	1006	943	.	.	.
24	6913	943	1006	.	.	.
25	6992	989	981	.	.	.
26	6992	981	989	.	.	.
27	7338	954	939	.	.	.
28	7338	939	954	.	.	.
29	9145	997	984	.	.	.
30	9145	984	997	.	.	.
31	9337	1007	991	977	1019	.
32	9337	977	991	1007	1019	.
33	9381	921	1010	978	.	.
34	9381	921	978	1010	.	.
35	10259	999	982	1014	.	.
36	10259	982	999	1014	.	.
37	10582	861	961	1006	1001	.

Obs	R0000100	a_end1	a_end2	a_end3	a_end4	a_end5
38	10582	861	961	1001	1006	.
39	11183	958	930	.	.	.
40	11183	930	958	.	.	.
41	11639	1002	994	982	947	.
42	11639	947	982	994	1002	.

We now had to make a number of hand edits in order to take care of obvious inconsistencies between the abortion history and the pregnancy history file. Many of the exceptions are because we had assumed that a live birth was a 9-month pregnancy. This made some pregnancies inconsistent with other pregnancy events. We tried to resolve these by examining birth dates, but we basically adjusted the start and end dates of a pregnancy ending in a live birth enough to accommodate the other pregnancy event as long as the pregnancy was at least 6 months in duration. The changed number is in yellow while the primary conflict where it occurs among the first to abortion events is highlighted in red. Again the vast majority are shortening of live births. The following edits were more complicated exceptions:

Observation 1720: a live birth overlaps two abortions: one can be included by shortening the pregnancy the other has to be deleted (has to be done by hand because the program cannot handle this case).

Observation 2911: delete the second of duplicated abortions in abortion history (both overlap a miscarriage), and correct miscarriage dates from loss record.

Observations 3269, 4163 and 8376: Correct miscarriage dates from loss record.

Obs	ID	start1	end1	out1	start2	end2	out2	start3	end3	out3	start4	end4	out4	start5	end5	out5	a_yr1	A_yr2	a_mon1	a_mon2	a_end1	a_end2
1	618	927	936	1	939	942	2	963	972	1	.	.	.	.	.	.	79	80	6	7	954	967
2	618	927	936	1	939	942	2	967	972	1	.	.	.	.	.	.	79	80	6	7	954	967
3	1071	943	952	1	1002	1011	1	1017	1026	1	.	.	.	.	.	.	78	80	10	8	946	968
4	1071	946	952	1	1002	1011	1	1017	1026	1	.	.	.	.	.	.	78	80	10	8	946	968
5	1221	899	908	1	969	978	1	1060	1069	1	.	.	.	.	.	.	80	.	12	.	972	.
6	1221	899	908	1	972	978	1	1060	1069	1	.	.	.	.	.	.	80	.	12	.	972	.
7	1381	987	996	1	1022	1031	1	1068	1077	1	.	.	.	.	.	.	82	.	4	.	988	.
8	1381	988	996	1	1022	1031	1	1068	1077	1	.	.	.	.	.	.	82	.	4	.	988	.
9	1548	929	938	1	941	944	2	995	1004	1	.	.	.	.	.	.	77	.	8	.	932	.
10	1548	932	938	1	941	944	2	995	1004	1	.	.	.	.	.	.	77	.	8	.	932	.
11	1581	991	1000	1	.	.	.	.	.	.	.	.	.	.	.	.	82	.	9	.	993	.
12	1581	993	1000	1	.	.	.	.	.	.	.	.	.	.	.	.	82	.	9	.	993	.
13	1720	968	977	1	.	.	.	.	.	.	.	.	.	.	.	.	80	81	12	4	972	976
14	1720	972	977	1	.	.	.	.	.	.	.	.	.	.	.	.	80	81	12	4	972	.
15	2911	955	964	1	999	1002	4	1036	1037	2	1045	1054	1	1055	-4	2	88	88	1	1	1057	1057
16	2911	955	964	1	999	1002	4	1036	1037	2	1045	1054	1	1054	1057	2	88	88	1	1	1057	.
17	3051	944	953	1	962	971	1	.	.	.	.	.	.	.	.	.	78	.	10	.	946	.
18	3051	946	953	1	962	971	1	.	.	.	.	.	.	.	.	.	78	.	10	.	946	.
19	3269	984	987	4	996	998	4	1000	1006	2	1009	1014	2	1018	1027	1	73	74	-3	-3	-7	-7
20	3269	984	987	4	996	998	4	1000	1006	2	1006	1011	2	1018	1027	1	73	74	-3	-3	-7	-7
21	4163	1051	1054	2	1057	1062	2	.	.	.	.	.	.	.	.	.	87	88	8	5	1052	1061
22	4163	1049	1052	2	1057	1062	2	.	.	.	.	.	.	.	.	.	87	88	8	5	1052	1061
23	4544	985	994	1	1012	1021	1	1075	1084	1	.	.	.	.	.	.	90	.	2	.	1082	.
24	4544	985	994	1	1012	1021	1	1063	1072	1	.	.	.	.	.	.	90	.	2	.	1082	.
25	5089	994	1003	1	.	.	.	.	.	.	.	.	.	.	.	.	82	85	11	10	995	1030
26	5089	995	1003	1	.	.	.	.	.	.	.	.	.	.	.	.	82	85	11	10	995	1030
27	6963	-7	-7	2	-7	-7	2	-7	-7	2	959	968	1	978	987	1	78	81	6	9	942	981
28	6963	-7	-7	2	-7	-7	2	-7	-7	2	959	968	1	981	987	1	78	81	6	9	942	981
29	7618	960	969	1	973	975	4	.	.	.	.	.	.	.	.	.	80	.	3	.	963	.
30	7618	963	969	1	973	975	4	.	.	.	.	.	.	.	.	.	80	.	3	.	963	.
31	8125	901	910	1	916	925	1	935	944	1	1012	1021	1	.	.	.	82	83	5	9	989	1005
32	8125	901	910	1	916	925	1	935	944	1	1013	1021	1	.	.	.	82	83	5	9	989	1005
33	8366	1024	1033	1	1055	1064	1	.	.	.	.	.	.	.	.	.	85	.	6	.	1026	.
34	8366	1026	1033	1	1055	1064	1	.	.	.	.	.	.	.	.	.	85	.	6	.	1026	.
35	8376	903	906	2	1020	1024	2	1032	1041	1	1045	1054	1	.	.	.	76	85	1	2	913	1022
36	8376	903	906	2	1018	1022	2	1032	1041	1	1045	1054	1	.	.	.	76	85	1	2	913	1022
37	8896	952	953	4	977	986	1	1062	1071	1	.	.	.	.	.	.	80	81	1	6	961	978
38	8896	952	953	4	978	986	1	1062	1071	1	.	.	.	.	.	.	80	81	1	6	961	978
39	9145	952	961	1	988	997	1	1038	1047	1	1061	1070	1	.	.	.	83	81	1	12	984	997
40	9145	952	961	1	976	985	1	1038	1047	1	1061	1070	1	.	.	.	83	81	1	12	984	997
41	9319	928	937	1	978	987	1	994	996	4	1009	1011	4	1017	1019	4	77	82	5	12	929	996
42	9319	929	937	1	978	987	1	994	996	4	1009	1011	4	1017	1019	4	77	82	5	12	929	996

The last step is to merge the pregnancy history and abortion file into one complete pregnancy history file that includes all births, miscarriages, stillbirths and abortions from the pregnancy history file and all of the abortions from the abortion history file. Here we interleave the abortions from the SAQ with the pregnancy histories (that also include reported abortions). Several things can happen when this is done. First an abortion can match between the two sources of information (that is abortion end and start dates are the same from both sources). When this occurs we of course count only one abortion. Second, an abortion can almost match. For example, either the start dates or stop dates match or neither matches but is off by a small amount of time. When abortions overlap we considered this one event and took the SAQ information as correct. But when abortions did not overlap but were close in time we were faced with a choice – were these two independent abortions or the same abortion reported at two different times. The rule adopted was if the end dates were less than or equal to two months apart we accepted the SAQ abortion as the abortion and deleted the abortion reported in the survey. If they were 3 or more months apart we accepted them both as abortion events.

Finally, abortions could overlap with other pregnancy events (occur during the interval that a woman was pregnant and reported carrying the pregnancy to term) or an event was recorded as a miscarriage in the pregnancy history but an abortion in the SAQ. We dealt with these on a case by case basis, in general accepting the SAQ as correct. We also dealt with the overlap problem by shortening a pregnancy if it was reasonable that two events occurred. Finally, in a number of cases, there were pregnancies where we have a beginning year but no beginning month (these are recorded as “-7” in the exception tables above). Here we set the start of the pregnancy to June as long as the outcome did not overlap another pregnancy. Having accepted the SAQ there were often missing pieces of information. For example the abortion end date but not the start dates. Sometimes the pregnancy information contained the information for the same pregnancy. In that case we combined the length at time of termination with the end date from the SAQ to form the pregnancy spell. Here is the list of final hand edits for the first 5 pregnancies (observations that appear unchanged were changed in pregnancy 6 or greater and are not shown. Each observation is repeated twice. Once after the merge but before the hand edits and once after the hand edits.

Obs.	ID	start1	end1	len1	out1	start2	end2	len2	out2	start3	end3	len3	out3	start4	end4	len4	out4	start5	end5	len5	out5
1	30	987	996	9	1	998	-4	-4	4	1040	1049	9	1	.	.	.	.	.	.	.	.
2	30	987	996	9	1	998	999	2	4	1040	1049	9	1	.	.	.	.	.	.	.	.
3	203	1042	1051	9	1	1061	1070	9	1	1086	-4	-4	4	.	.	.	.	.	.	.	.
4	203	1042	1051	9	1	1061	1070	9	1	1086	1087	1	4	.	.	.	.	.	.	.	.
5	294	1000	1009	9	1	-7	-7	9	1	1040	1049	9	1	.	.	.	.	.	.	.	.
6	294	1000	1009	9	1	.	.	9	1	1040	1049	9	1	.	.	.	.	.	.	.	.
7	388	1033	1042	9	1	1056	-4	-4	2	1076	1085	9	1	.	.	.	.	.	.	.	.
8	388	1033	1042	9	1	1056	1058	2	2	1076	1085	9	1	.	.	.	.	.	.	.	.
9	689	947	949	2	4	1034	1043	9	1	1044	-4	-4	4	.	.	.	.	.	.	.	.
10	689	947	949	2	4	1034	1043	9	1	1044	1045	1	4	.	.	.	.	.	.	.	.
11	836	946	955	9	1	.	961	.	4	973	975	2	4	984	986	2	4	1059	1068	9	1
12	836	946	955	9	1	.	961	.	4	973	975	2	4	984	986	2	4	1059	1068	9	1
13	1184	1020	1029	9	1	1033	-4	-4	2	1048	1057	9	1	.	.	.	.	.	.	.	.
14	1184	1020	1029	9	1	1033	1034	1	2	1048	1057	9	1	.	.	.	.	.	.	.	.
15	1241	971	980	9	1	1016	1025	9	1	1031	-4	-4	2	1048	1057	9	1	1068	1077	9	1
16	1241	971	980	9	1	1016	1025	9	1	1031	1033	2	2	1048	1057	9	1	1068	1077	9	1
17	1469	897	906	9	1	921	930	9	1	.	972	.	4	-7	-7	2	4	984	993	9	1
18	1469	897	906	9	1	921	930	9	1	.	.	.	4	970	972	2	4	984	993	9	1
19	1558	.	844	.	4	992	1001	9	1	1015	1019	4	2	.	1084	.	4	.	.	.	.
20	1558	.	960	.	4	992	1001	9	1	1015	1019	4	2	.	1084	.	4	.	.	.	.
21	1818	934	943	9	1	.	978	.	4	.	987	.	4	1030	1039	9	1	1057	-4	-4	2
22	1818	934	943	9	1	.	978	.	4	.	987	.	4	1030	1039	9	1	1057	1059	3	2
23	1831	987	996	9	1	-7	-7	9	1	.	.	.	.	.	.	.	.	.	.	.	.
24	1831	987	996	9	1	1003	1012	9	1	.	.	.	.	.	.	.	.	.	.	.	.
25	1832	-7	-7	9	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
26	1832	1016	1025	9	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
27	2212	-7	-7	9	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
28	2212	1030	1039	9	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
29	3355	.	930	.	4	.	958	.	4	.	970	.	4	970	972	2	2	981	982	1	2
30	3355	.	930	.	4	.	958	.	4	.	970	.	4	970	972	2	2	981	982	1	2
31	3424	1032	1041	9	1	1063	-4	-4	2	1066	1075	9	1	.	.	.	.	.	.	.	.
32	3424	1032	1041	9	1	1063	1064	2	2	1066	1075	9	1	.	.	.	.	.	.	.	.

Obs.	ID	start1	end1	len1	out1	start2	end2	len2	out2	start3	end3	len3	out3	start4	end4	len4	out4	start5	end5	len5	out5	
33	3438	-7	-7	9	1	1070	1079	9	1
34	3438	1014	1023	0	1	1070	1079	9	1
35	3448	959	968	9	1	973	-4	-4	2	988	997	9	1	1042	1051	9	1	1077	1086	9	1	
36	3448	959	968	9	1	979	981	2	2	988	997	9	1	1042	1051	9	1	1077	1086	9	1	
37	3511	1037	1046	9	1	1056	-4	-4	2	1073	1082	9	1	.	.	.	.	.	.	.	.
38	3511	1037	1046	9	1	1056	1058	2	2	1073	1082	9	1	.	.	.	.	.	.	.	.
39	3543	963	966	3	4	.	968	.	4	1006	1015	9	1	1017	1026	9	1	1029	-4	-4	4	
40	3543	963	966	3	4	.	968	.	4	1006	1015	9	1	1017	1026	9	1	1029	1030	1	4	
41	3558	1045	1054	9	1	1080	1089	9	1	.	.	.	.	.	.	.	.	.	.	.	.
42	3558	1045	1054	9	1	1080	1089	9	1	.	.	.	.	998	1003	5	.	.	.	.	.
43	4019	.	1005	.	4	1063	1072	9	1	1087	-4	-4	2	.	.	.	.	.	.	.	.
44	4019	.	1005	.	4	1063	1072	9	1	1087	1088	1	2	.	.	.	.	.	.	.	.
45	4133	957	966	9	1	973	982	9	1	1036	1045	9	1	1060	-4	-4	2	.	.	.	.
46	4133	957	966	9	1	973	982	9	1	1036	1045	9	1	1060	1061	2	2	.	.	.	.
47	4184	950	959	9	1	970	979	9	1	983	992	9	1	1030	1032	2	2	1034	1043	9	1	
48	4184	950	959	9	1	970	979	9	1	983	992	9	1	1030	1032	2	2	1034	1043	9	1	
49	4445	.	956	.	4	957	959	2	4	993	996	3	2	.	1013	.	4	1013	1015	3	2	
50	4445	.	956	.	4	957	959	2	4	993	996	3	2	.	1013	.	4	1013	1015	3	2	
51	4474	.	953	.	4	-7	-7	3	4	978	987	9	1	1064	1065	1	4	1076	1085	9	1	
52	4474	.	.	.	4	950	953	3	4	978	987	9	1	1064	1065	1	4	1076	1085	9	1	
53	4487	998	1007	9	1	1033	1042	9	1	1049	-4	-4	2	.	.	.	.	.	.	.	.
54	4487	998	1007	9	1	1033	1042	9	1	1049	1050	2	2	.	.	.	.	.	.	.	.
55	4622	978	987	9	1	991	1000	9	1	1025	1026	1	2	1038	-3	-3	2	1054	-3	-3	2	
56	4622	978	987	9	1	991	1000	9	1	1025	1026	1	2	1038	1038	1	2	1054	1054	1	2	
57	4953	1012	1021	9	1	1028	1037	9	1	1056	-4	-4	2	1060	1069	9	1	.	.	.	.
58	4953	1012	1021	9	1	1028	1037	9	1	1056	1057	1	2	1060	1069	9	1	.	.	.	.
59	5009	-7	-7	9	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
60	5009	1037	1046	9	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
61	5014	1028	1037	9	1	1052	-4	-4	2	.	.	.	.	.	.	.	.	.	.	.	.
62	5014	1028	1037	9	1	1052	1054	3	2	.	.	.	.	.	.	.	.	.	.	.	.
63	5317	1006	1009	3	4	1022	1031	9	1	1033	-4	-4	4	1044	1053	9	1	.	.	.	.
64	5317	1006	1009	3	4	1022	1031	9	1	1033	1035	2	4	1044	1053	9	1	.	.	.	.
65	5330	996	998	2	4	998	1000	2	4	1039	1048	9	1	1057	-4	-4	2	1069	1078	9	1	

Obs.	ID	start1	end1	len1	out1	start2	end2	len2	out2	start3	end3	len3	out3	start4	end4	len4	out4	start5	end5	len5	out5
66	5330	996	998	2	4	998	1000	2	4	1039	1048	9	1	1057	1059	2	2	1069	1078	9	1
67	5391	941	950	9	1	971	980	9	1	1006	1015	9	1	-7	-7	9	1	.	.	.	.
68	5391	941	950	9	1	971	980	9	1	1006	1015	9	1	1039	1048	9	1	.	.	.	.
69	5560	931	940	9	1	1023	1025	2	2	1038	1040	2	2	1067	1076	9	1	1087	-4	-4	2
70	5560	931	940	9	1	1023	1025	2	2	1038	1040	2	2	1067	1076	9	1	1087	1089	2	2
71	5634	980	983	3	2	1034	1043	9	1	1056	-4	-4	3	.	.	.	.	.	.	.	.
72	5634	980	983	3	2	1034	1043	9	1	1056	1064	8	3	.	.	.	.	.	.	.	.
73	5927	.	889	.	4	-7	-7	2	4	976	981	5	4	1038	1047	9	1	.	.	.	.
74	5927	.	.	.	4	887	889	2	4	976	981	5	4	1038	1047	9	1	.	.	.	.
75	5934	1005	1014	9	1	1017	-4	-4	4	.	.	.	.	.	.	.	.	.	.	.	.
76	5934	1005	1014	9	1	1017	1019	2	4	.	.	.	.	.	.	.	.	.	.	.	.
77	5936	987	990	3	4	.	1001	.	4	1001	1002	1	4	1008	1017	9	1	.	1085	.	4
78	5936	987	990	3	4	.	1001	.	4	1001	1002	1	4	1008	1017	9	1	.	.	.	4
79	5947	-7	-7	9	1	1027	1036	9	1	.	.	.	.	.	.	.	.	.	.	.	.
80	5947	941	950	9	1	1027	1036	9	1	.	.	.	.	.	.	.	.	.	.	.	.
81	5976	946	955	9	1	976	978	2	4	982	984	2	4	1008	1017	9	1	1020	-4	-4	4
82	5976	946	955	9	1	976	978	2	4	982	984	2	4	1008	1017	9	1	1020	1021	2	4
83	6053	1020	1029	9	1	1047	1056	9	1	1083	-4	-4	2	.	.	.	.	.	.	.	.
84	6053	1020	1029	9	1	1047	1056	9	1	1083	1085	2	2	.	.	.	.	.	.	.	.
85	6274	1041	1050	9	1	1056	1065	9	1	1072	-4	-4	2	.	.	.	.	.	.	.	.
86	6274	1041	1050	9	1	1056	1065	9	1	1072	1076	3	2	.	.	.	.	.	.	.	.
87	6283	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
88	6283	.	.	.	.	.	.	.	.	.	.	.	.	.	1051	1	.	.	.	.	.
89	6396	996	1005	9	1	-7	-7	9	1	.	.	.	.	.	.	.	.	.	.	.	.
90	6396	996	1005	9	1	1031	1040	9	1	.	.	.	.	.	.	.	.	.	.	.	.
91	6448	919	928	9	1	935	944	9	1	984	993	9	1	1018	1027	9	1	1035	1044	9	1
92	6448	919	928	9	1	935	944	9	1	984	993	9	1	1018	1027	9	1	1035	1044	9	1
93	6455	1007	1016	9	1	1031	1040	9	1	1066	1075	9	1	1085	-4	-4	2	.	.	.	.
94	6455	1007	1016	9	1	1031	1040	9	1	1066	1075	9	1	1085	1086	1	2	.	.	.	.
95	6521	950	959	9	1	1040	1049	9	1	1052	-4	-4	2	1064	1073	9	1	.	.	.	.
96	6521	950	959	9	1	1040	1049	9	1	1052	1054	2	2	1064	1073	9	1	.	.	.	.
97	6630	994	1003	9	1	1029	1032	3	2	-7	-7	9	1	.	.	.	.	.	.	.	.
98	6630	994	1003	9	1	1029	1032	3	2	1035	1044	9	1	.	.	.	.	.	.	.	.

Obs.	ID	start1	end1	len1	out1	start2	end2	len2	out2	start3	end3	len3	out3	start4	end4	len4	out4	start5	end5	len5	out5
99	6780	998	1001	3	2	1024	1033	9	1	1043	-4	-4	4	.	.	.	.	.	.	.	.
100	6780	998	1001	3	2	1024	1033	9	1	1043	1045	3	4	.	.	.	.	.	.	.	.
101	6937	1032	1033	1	4	1040	1049	9	1	1052	-4	-4	2	1056	1065	9	1	.	.	.	.
102	6937	1032	1033	1	4	1040	1049	9	1	1052	1054	2	2	1056	1065	9	1	.	.	.	.
103	7152	-7	-7	9	1	1025	1034	9	1	1074	1083	9	1	.	.	.	.	.	.	.	.
104	7152	994	1003	9	1	1025	1034	9	1	1074	1083	9	1	.	.	.	.	.	.	.	.
105	7259	1019	1028	9	1	-7	-7	9	1	1060	1069	9	1	.	.	.	.	.	.	.	.
106	7259	1019	1028	9	1	1041	1050	9	1	1060	1069	9	1	.	.	.	.	.	.	.	.
107	7367	950	959	9	1	995	1004	9	1	-7	-7	9	1	1043	1052	9	1	1067	1076	9	1
108	7367	950	959	9	1	995	1004	9	1	.	.	9	1	1043	1052	9	1	1067	1076	9	1
109	7415	901	910	9	1	994	1003	9	1	1055	1057	2	4	.	1070	.	4	-7	-7	-3	4
110	7415	901	910	9	1	994	1003	9	1	1055	1057	2	4	.	.	.	4	-3	1070	-3	4
111	7428	1044	-3	-3	4	1070	1079	9	1	.	.	.	.	.	.	.	.	.	.	.	.
112	7428	1044	1044	1	4	1070	1079	9	1	.	.	.	.	.	.	.	.	.	.	.	.
113	7447	894	903	9	1	905	914	9	1	959	968	9	1	1000	1003	3	2	-7	-7	9	1
114	7447	894	903	9	1	905	914	9	1	959	968	9	1	1000	1003	3	2	1008	1017	9	1
115	7529	-7	-7	9	1	1010	1014	4	2	1025	1034	9	1	1065	1074	9	1	.	.	.	.
116	7529	990	999	9	1	1010	1014	4	2	1025	1034	9	1	1065	1074	9	1	.	.	.	.
117	7605	1035	1044	9	1	1053	-4	-4	2	1060	1069	9	1	.	.	.	.	.	.	.	.
118	7605	1035	1044	9	1	1053	1056	3	2	1060	1069	9	1	.	.	.	.	.	.	.	.
119	7786	.	1086	.	4	-7	-7	-3	4	.	.	.	.	.	.	.	.	.	.	.	.
120	7786	.	.	.	4	-3	1086	-3	4	.	.	.	.	.	.	.	.	.	.	.	.
121	7851	1022	1025	3	2	1032	1041	9	1	1047	-4	-4	3	1062	1066	4	2	1070	1079	9	3
122	7851	1022	1025	3	2	1032	1041	9	1	1047	1050	4	3	1062	1066	4	2	1070	1079	9	3
123	7927	.	892	.	4	-7	-7	3	4	910	919	9	1	924	933	9	1	966	975	9	1
124	7927	.	.	.	4	879	892	3	4	910	919	9	1	924	933	9	1	966	975	9	1
125	8051	-7	-7	2	4	-7	-7	3	4	951	960	9	1	-7	-7	4	4	995	1004	9	1
126	8051	-7	-7	2	4	-7	-7	3	4	951	960	9	1	-7	-7	4	4	995	1004	9	1
127	8194	-7	-7	2	2	893	902	9	1	967	970	3	2	972	981	9	1	-7	-7	-3	.
128	8194	-7	-7	2	2	893	902	9	1	967	970	3	2	972	981	9	1	-7	.	-3	.
129	8336	1015	1024	9	1	1034	-4	-4	2	1035	1044	9	1	1078	1087	9	1	.	.	.	.
130	8336	1015	1024	9	1	1034	1036	3	2	1035	1044	9	1	1078	1087	9	1	.	.	.	.
131	8424	840	849	9	1	1023	1032	9	1	.	.	.	.	.	.	.	.	.	.	.	.

Obs.	ID	start1	end1	len1	out1	start2	end2	len2	out2	start3	end3	len3	out3	start4	end4	len4	out4	start5	end5	len5	out5	
132	8424	960	969	9	1	1023	1032	9	1
133	8528	.	953	.	4	-7	-7	2	4	1008	1017	9	1	1060	1069	9	1	.	.	.	.
134	8528	.	.	.	4	951	953	2	4	1008	1017	9	1	1060	1069	9	1	.	.	.	.
135	8562	988	997	9	1	1046	1050	4	2	-7	-7	-3	2	.	.	.	.	.	.	.	.
136	8562	988	997	9	1	1046	1050	4	2	-3	1084	-3	2	.	.	.	.	.	.	.	.
137	8590	936	945	9	1	956	965	9	1	972	975	3	4	.	980	.	4	983	985	2	4	
138	8590	936	945	9	1	956	965	9	1	972	975	3	4	.	980	.	4	983	985	2	4	
139	8648	1034	1043	9	1	1054	-4	-4	2	1064	1073	9	1	.	.	.	.	.	.	.	.
140	8648	1034	1043	9	1	1054	1056	2	2	1064	1073	9	1	.	.	.	.	.	.	.	.
141	8701	949	958	9	1	961	970	9	1	1020	1029	9	1	1032	-4	-4	2	1046	1055	9	1	
142	8701	949	958	9	1	961	970	9	1	1020	1029	9	1	1032	1033	1	2	1046	1055	9	1	
143	8707	1006	1015	9	1	1056	1065	9	1	1079	-4	-4	2	.	.	.	.	.	.	.	.
144	8707	1006	1015	9	1	1056	1065	9	1	1079	1080	2	2	.	.	.	.	.	.	.	.
145	9048	886	895	9	1	955	964	9	1	-7	-7	9	1	989	998	9	1	1022	1031	9	1	
146	9048	886	895	9	1	946	955	9	1	960	969	9	1	989	998	9	1	1022	1031	9	1	
147	9081	988	997	9	1	1015	1024	9	1	-7	-7	9	1	.	.	.	.	.	.	.	.
148	9081	988	997	9	1	1015	1024	9	1	1042	1051	9	1	.	.	.	.	.	.	.	.
149	9183	951	960	9	1	-7	-7	9	1	1021	1030	9	1	.	.	.	.	.	.	.	.
150	9183	951	960	9	1	.	.	9	1	1021	1030	9	1	.	.	.	.	.	.	.	.
151	9227	-7	-7	9	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
152	9227	1040	1049	9	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
153	9286	1029	1038	9	1	1044	-4	-4	2	1077	1079	2	2	.	.	.	.	.	.	.	.
154	9286	1029	1038	9	1	1044	1045	2	2	1077	1079	2	2	.	.	.	.	.	.	.	.
155	9349	.	930	.	4	.	973	.	4	.	980	.	4	-7	-7	9	1	-7	-7	9	1	
156	9349	919	928	9	1	.	930	.	4	950	959	9	1	.	973	.	4	.	980	.	4	
157	9434	974	976	2	2	.	1000	.	4	1038	1047	9	1	1049	-4	-4	2	1066	1075	9	1	
158	9434	974	976	2	2	.	1000	.	4	1038	1047	9	1	1049	1050	2	2	1066	1075	9	1	
159	9483	1019	1022	3	2	1034	1036	2	2	1041	1050	9	1	1059	-4	-4	2	1078	1087	9	1	
160	9483	1019	1022	3	2	1034	1036	2	2	1041	1050	9	1	1059	1062	3	2	1078	1087	9	1	
161	9523	.	916	.	4	947	956	9	1	983	992	9	1	1001	1010	9	1	-7	-7	9	1	
162	9523	.	916	.	4	947	956	9	1	983	992	9	1	1001	1010	9	1	1039	1048	9	1	
163	9655	976	985	9	1	1014	-4	-4	2	1016	1025	9	1	.	.	.	.	.	.	.	.
164	9655	976	985	9	1	1014	1015	1	2	1016	1025	9	1	.	.	.	.	.	.	.	.

Obs.	ID	start1	end1	len1	out1	start2	end2	len2	out2	start3	end3	len3	out3	start4	end4	len4	out4	start5	end5	len5	out5
165	9704	1038	1047	9	1	1060	-4	-4	2	1066	1068	2	2	1070	1079	9	1	.	.	.	.
166	9704	1038	1047	9	1	1060	1062	2	2	1066	1068	2	2	1070	1079	9	1	.	.	.	.
167	9840	989	998	9	1	-7	-7	9	1	1032	1041	9	1	.	.	.	.	.	.	.	.
168	9840	989	998	9	1	1015	1024	9	1	1032	1041	9	1	.	.	.	.	.	.	.	.
169	10026	955	964	9	1	969	978	9	1	982	991	9	1	1002	1011	9	1	1015	1024	9	1
170	10026	955	964	9	1	969	978	9	1	982	991	9	1	1002	1011	9	1	1015	1024	9	1
171	10048	1032	1041	9	1	.	1048	.	4	1056	-4	-4	2	1069	1078	9	1	.	.	.	.
172	10048	1032	1041	9	1	.	1048	.	4	1056	1060	4	2	1069	1078	9	1	.	.	.	.
173	10104	908	917	9	1	925	934	9	1	1023	1032	9	1	-7	-7	9	1	.	.	.	.
174	10104	908	917	9	1	925	934	9	1	1016	1025	9	1	1032	1041	9	1	.	.	.	.
175	10144	993	996	3	2	1004	1006	2	2	1012	1012	1	3	1011	1020	9	1	1060	1069	9	1
176	10144	993	996	3	2	1004	1006	2	2	1012	1012	1	3	1011	1020	9	1	1060	1069	9	1
177	10145	1036	1045	9	1	1057	-4	-4	2	.	.	.	.	.	.	.	.	.	.	.	.
178	10145	1036	1045	9	1	1057	1061	4	2	.	.	.	.	.	.	.	.	.	.	.	.
179	10299	972	981	9	1	1010	1019	9	1	-2	1057	-2	2	.	.	.	.	.	.	.	.
180	10299	972	981	9	1	1010	1019	9	1	1057	1059	2	2	.	.	.	.	.	.	.	.
181	10310	993	1002	9	1	1009	-4	-4	2	1016	1025	9	1	.	.	.	.	.	.	.	.
182	10310	993	1002	9	1	1009	1011	3	2	1016	1025	9	1	.	.	.	.	.	.	.	.
183	10446	970	979	9	1	1030	1039	9	1	1052	-4	-4	4	1077	1086	9	1	.	.	.	.
184	10446	970	979	9	1	1030	1039	9	1	1052	1054	2	4	1077	1086	9	1	.	.	.	.
185	10577	965	974	9	1	-7	-7	-3	.	990	999	9	1	1006	1015	9	1	.	.	.	.
186	10577	965	974	9	1	-7	.	-3	.	990	999	9	1	1006	1015	9	1	.	.	.	.
187	10582	.	861	.	4	-7	-7	2	4	904	913	9	1	.	961	.	4	971	973	2	4
188	10582	.	.	.	4	859	861	2	4	904	913	9	1	.	961	.	4	971	973	2	4
189	10710	-7	-7	-3	.	-7	-7	-3	.	-7	-7	-3	.	.	.	.	.	.	.	.	.
190	10710	-7	.	-3	.	-7	.	-3	.	-7	.	-3	.	.	.	.	.	.	.	.	.
191	10932	-3	970	-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
192	10932	-3	970	-3	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
193	11103	-7	-7	1	4	902	911	9	1	.	950	.	4	-7	-7	1	4	-7	-7	1	4
194	11103	-7	-7	1	4	902	911	9	1	.	.	.	4	949	950	1	4	-7	-7	1	4
195	11132	957	966	9	1	1028	1037	9	1	-7	-7	9	1	.	.	.	.	.	.	.	.
196	11132	957	966	9	1	1028	1037	9	1	1044	1053	9	1	.	.	.	.	.	.	.	.
197	11159	.	901	.	4	-7	-7	2	4	976	980	4	2	994	1003	9	1	.	.	.	.

Obs.	ID	start1	end1	len1	out1	start2	end2	len2	out2	start3	end3	len3	out3	start4	end4	len4	out4	start5	end5	len5	out5
198	11159	.	.	.	4	899	901	2	4	976	980	4	2	994	1003	9	1	.	.	.	.
199	11182	.	929	.	4	-7	-7	3	4	953	962	9	1	.	.	.	.	.	.	.	.
200	11182	.	.	.	4	926	929	3	4	953	962	9	1	.	.	.	.	.	.	.	.
201	11355	993	1002	9	1	1007	-4	-4	4	.	.	.	.	.	.	.	.	.	.	.	.
202	11355	993	1002	9	1	1007	1009	2	4	.	.	.	.	.	.	.	.	.	.	.	.
203	11358	943	952	9	1	.	976	.	4	-7	-7	2	4	981	983	2	4	.	985	.	4
204	11358	943	952	9	1	.	.	.	4	974	976	2	4	981	983	2	4	.	985	.	4
205	11709	.	885	.	4	-7	-7	2	4	984	993	9	1	.	.	.	.	.	.	.	.
206	11709	.	.	.	4	883	885	2	4	984	993	9	1	.	.	.	.	.	.	.	.
207	11859	887	896	9	1	902	911	9	1	915	924	9	1	934	943	9	1	997	1006	9	1
208	11859	887	896	9	1	902	911	9	1	915	924	9	1	934	943	9	1	997	1006	9	1
209	11935	993	998	5	2	-7	-7	9	1	1061	1070	9	1	.	.	.	.	.	.	.	.
210	11935	993	998	5	2	1037	1046	9	1	1061	1070	9	1	.	.	.	.	.	.	.	.
211	12018	1030	1039	9	1	1057	-4	-4	2	1063	1066	3	2	1074	1083	9	1	.	.	.	.
212	12018	1030	1039	9	1	1057	1060	3	2	1063	1066	3	2	1074	1083	9	1	.	.	.	.
213	12150	917	926	9	1	.	933	.	4	.	1013	.	4	1025	1034	9	1	1047	1056	9	1
214	12150	917	926	9	1	.	933	.	4	.	1013	.	4	1025	1034	9	1	1047	1056	9	1
215	12193	914	917	3	4	935	937	2	4	.	1026	.	4	1058	1067	9	1	.	1074	.	4
216	12193	914	917	3	4	935	937	2	4	.	1026	.	4	1058	1067	9	1	.	.	.	4
217	12265	1028	1037	9	1	1067	1068	1	2	1071	1080	9	1	1084	-4	-4	2	.	.	.	.
218	12265	1028	1037	9	1	1067	1068	1	2	1071	1080	9	1	1084	1086	2	2	.	.	.	.
219	12368	993	1002	9	1	1006	-4	-4	4	1008	1009	1	2	1012	1013	1	2	1022	1031	9	1
220	12368	993	1002	9	1	1006	1007	2	4	1008	1009	1	2	1012	1013	1	2	1022	1031	9	1
221	12486	-7	-7	9	1	1052	1061	9	1	.	.	.	.	.	.	.	.	.	.	.	.
222	12486	1041	1050	9	1	1052	1061	9	1	.	.	.	.	.	.	.	.	.	.	.	.

The following is the original information on the pregnancy and abortion histories for the 111 hand coded observations. In general we tried and use all of the information available. For example, if a pregnancy ended in an abortion that was recorded in both histories, but information was missing from one of the histories, then the information would be used from the other history. If the length of a miscarriage or abortion was unknown then the pregnancy is coded to last 2 months.

Here we discuss the first five observations as examples of the hand coding:

ID=20, Second Pregnancy ended in an abortion of unknown length. No information in abortion history. Assume lasted 2 months.

ID=203, Third Pregnancy ended in an abortion of unknown length. Started 6/90. Abortion history records ending date of 7/90. Assume lasted 2 months.

ID=294, Second Pregnancy ended in a birth but start month unknown. Look at birth record and assume length-9 months. But here there is not enough information on birth record to know start and stop dates.

ID=388, Second Pregnancy ends in miscarriage of unknown length. No evidence it was abortion. Assume length is 2 months.

ID=389, Third Pregnancy ends in abortion but length unknown. Start date 12/86. SAQ suggests abortion ends 1/87, code 1 month.

Obs	ID	mo1	mo2	mo3	mo4	mo5	yr1	yr2	yr3	yr4	yr5	len1	len2	len3	len4	len5	out1	out2	out3	out4	out5	a_mo1	a_mo2	a_mo3	a_yr1	a_yr2	a_yr3
1	30	12	2	8	.	.	82	83	86	.	.	9	-4	9	.	.	1	4	1	.	.	.	.	.	.	.	.
2	203	10	5	6	.	.	86	88	90	.	.	9	9	-4	.	.	1	1	4	.	.	7	.	.	90	.	.
3	294	4	-3	8	.	.	83	84	86	.	.	9	9	9	.	.	1	1	1	.	.	.	.	.	.	.	.
4	388	1	12	8	.	.	86	87	89	.	.	9	-4	9	.	.	1	2	1	.	.	.	.	.	.	.	.
5	689	1	2	12	.	.	79	86	86	.	.	2	9	-4	.	.	4	1	4	.	.	1	.	.	87	.	.
6	836	7	3	2	3	6	79	81	82	88	89	9	2	2	9	-4	1	4	4	1	4	1	2	7	80	82	89
7	1184	12	1	4	.	.	84	86	87	.	.	9	-4	9	.	.	1	2	1	.	.	.	.	.	.	.	.
8	1241	8	8	11	4	12	81	84	85	87	88	9	9	-4	9	9	1	1	2	1	1	.	.	.	.	.	.
9	1469	6	6	-2	9	2	75	77	-2	82	83	9	9	2	9	2	1	1	4	1	4	12	11	.	80	82	.
10	1558	5	7	.	.	.	83	84	.	.	.	9	4	.	.	.	1	2	.	.	.	-3	4	4	76	70	90
11	1818	7	10	1	.	.	78	85	88	.	.	9	9	-4	.	.	1	1	2	.	.	3	6	-2	82	81	83
12	1831	12	-3	.	.	.	82	83	.	.	.	9	9	.	.	.	1	1	.	.	.	.	.	.	.	.	.
13	1832	-3	.	.	.	.	-3	.	.	.	.	9	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
14	2212	-4	.	.	.	.	-4	.	.	.	.	9	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
15	3355	12	10	8	12	4	80	81	84	85	87	2	1	9	-4	9	2	2	1	2	1	6	10	10	77	79	80
16	3424	12	7	10	.	.	85	88	88	.	.	9	-4	9	.	.	1	2	1	.	.	.	.	.	.	.	.
17	3438	-3	2	.	.	.	84	89	.	.	.	9	9	.	.	.	1	1	.	.	.	.	.	.	.	.	.
18	3448	11	1	4	10	9	79	81	82	86	89	9	-4	9	9	9	1	2	1	1	1	.	.	.	.	.	.
19	3511	5	12	5	.	.	86	87	89	.	.	9	-4	9	.	.	1	2	1	.	.	.	.	.	.	.	.
20	3543	6	10	9	9	2	80	83	84	85	89	3	9	9	-4	9	4	1	1	4	1	8	10	.	80	85	.
21	3558	1	12	.	.	.	87	89	.	.	.	9	9	.	.	.	1	1	.	.	.	.	.	.	.	.	.
22	4019	7	7	.	.	.	88	90	.	.	.	9	-4	.	.	.	1	2	.	.	.	9	.	.	83	.	.
23	4133	6	10	4	4	.	80	81	86	88	.	9	9	9	-4	.	1	1	1	2	.	.	.	.	.	.	.
24	4184	11	7	8	10	2	79	81	82	85	86	9	9	9	2	9	1	1	1	2	1	.	.	.	.	.	.
25	4445	11	12	5	7	9	79	82	84	84	85	2	3	3	3	9	4	2	2	2	1	8	5	9	79	84	85
26	4474	-2	3	8	8	.	80	82	88	89	.	3	9	1	9	.	4	1	4	1	.	5	9	.	79	88	.
27	4487	2	1	5	.	.	83	86	87	.	.	9	9	-4	.	.	1	1	2	.	.	.	.	.	.	.	.
28	4622	3	4	5	6	10	82	83	85	86	87	9	9	1	-3	-3	1	1	2	2	2	.	.	.	.	.	.
29	4953	4	8	12	4	.	84	85	87	88	.	9	9	-4	9	.	1	1	2	1	.	.	.	.	.	.	.
30	5009	-3	.	.	.	.	-3	.	.	.	.	9	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
31	5014	8	8	.	.	.	85	87	.	.	.	9	-4	.	.	.	1	2	.	.	.	.	.	.	.	.	.
32	5317	10	2	1	12	.	83	85	86	86	.	3	9	-4	9	.	4	1	4	1	.	1	3	.	84	86	.
33	5330	2	2	7	1	1	83	83	86	88	89	2	2	9	-4	9	4	4	1	2	1	2	.	.	83	.	.
34	5391	2	8	10	-3	.	79	81	83	86	.	9	9	9	9	.	1	1	1	1	.	.	.	.	.	.	.
35	5560	4	3	6	11	7	78	85	86	88	90	9	2	2	9	-4	1	2	2	1	2	.	.	.	.	.	.
36	5634	11	2	12	.	.	81	86	87	.	.	3	9	-4	.	.	2	1	3	.	.	.	.	.	.	.	.
37	5927	-2	9	6	.	.	77	81	86	.	.	2	5	9	.	.	4	4	1	.	.	1	.	.	74	.	.
38	5934	9	9	.	.	.	83	84	.	.	.	9	-4	.	.	.	1	4	.	.	.	.	.	.	.	.	.
39	5936	6	5	12	-3	.	82	83	83	90	.	3	1	9	-3	.	2	4	1	4	.	5	6	5	83	82	90

Obs	ID	mo1	mo2	mo3	mo4	mo5	yr1	yr2	yr3	yr4	yr5	len1	len2	len3	len4	len5	out1	out2	out3	out4	out5	a_mo1	a_mo2	a_mo3	a_yr1	a_yr2	a_yr3
40	5947	-3	7	.	.	.	-3	85	.	.	.	9	9	.	.	.	1	1	.	.	.	.	.	.	.	.	.
41	5976	7	6	12	12	12	79	81	81	83	84	9	2	2	9	-4	1	4	4	1	4	1	3	.	85	89	.
42	6053	12	3	3	.	.	84	87	90	.	.	9	9	-4	.	.	1	1	2	.	.	.	.	.	.	.	.
43	6274	9	12	4	.	.	86	87	89	.	.	9	9	-4	.	.	1	1	2	.	.	.	.	.	.	.	.
44	6283	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
45	6396	12	-3	.	.	.	82	85	.	.	.	9	9	.	.	.	1	1	.	.	.	.	.	.	.	.	.
46	6448	4	8	9	10	3	77	78	82	84	86	9	9	9	9	9	1	1	1	1	1	.	.	.	.	.	.
47	6455	11	11	10	5	.	83	85	88	90	.	9	9	9	-4	.	1	1	1	2	.	.	.	.	.	.	.
48	6521	11	8	8	8	.	79	86	87	88	.	9	9	-4	9	.	1	1	2	1	.	.	.	.	.	.	.
49	6630	7	9	-3	.	.	83	85	86	.	.	9	3	9	.	.	1	2	1	.	.	.	.	.	.	.	.
50	6780	2	4	11	.	.	83	85	86	.	.	3	9	-4	.	.	2	1	4	.	.	1	.	.	87	.	.
51	6937	12	8	8	12	.	85	86	87	87	.	1	9	-4	9	.	4	1	2	1	.	.	.	.	.	.	.
52	7152	-3	5	6	.	.	83	85	89	.	.	9	9	9	.	.	1	1	1	.	.	.	.	.	.	.	.
53	7259	11	-3	4	.	.	84	86	88	.	.	9	9	9	.	.	1	1	1	.	.	.	.	.	.	.	.
54	7367	11	8	-3	11	11	79	83	-3	86	88	9	9	9	9	9	1	1	1	1	1	.	.	.	.	.	.
55	7415	10	7	11	-3	.	75	83	87	89	.	9	9	2	-3	.	1	1	4	4	.	1	2	.	88	89	.
56	7428	12	2	.	.	.	86	89	.	.	.	-3	9	.	.	.	4	1	.	.	.	1	.	.	87	.	.
57	7447	3	2	8	4	-3	75	76	80	83	-3	9	9	9	3	9	1	1	1	2	1	.	.	.	.	.	.
58	7529	-2	2	5	9	.	83	84	85	88	.	9	4	9	9	.	1	2	1	1	.	.	.	.	.	.	.
59	7605	3	9	4	.	.	86	87	88	.	.	9	-4	9	.	.	1	2	1	.	.	.	.	.	.	.	.
60	7786	-3	.	.	.	.	-3	.	.	.	.	-3	.	.	.	.	4	.	.	.	.	6	.	.	90	.	.
61	7851	2	12	3	6	2	85	85	87	88	89	3	9	-4	4	9	2	1	3	2	3	.	.	.	.	.	.
62	7927	-2	7	9	3	9	74	76	77	81	84	3	9	9	9	9	4	1	1	1	1	4	.	.	74	.	.
63	8051	-2	-2	12	-2	8	-2	-2	79	81	83	2	3	9	4	9	4	4	1	4	1	-3	-3	-3	74	76	78
64	8194	-2	2	10	9	-3	74	75	80	81	-3	2	9	3	9	-3	2	1	2	1	.	.	.	.	.	.	.
65	8336	7	2	3	10	.	84	86	86	89	.	9	-4	9	9	.	1	2	1	1	.	.	.	.	.	.	.
66	8424	9	3	.	.	.	70	85	.	.	.	9	9	.	.	.	1	1	.	.	.	.	.	.	.	.	.
67	8528	-2	12	4	.	.	-2	83	88	.	.	2	9	9	.	.	4	1	1	.	.	5	.	.	79	.	.
68	8562	1	2	-3	.	.	83	87	-3	.	.	9	4	-3	.	.	1	2	2	.	.	.	.	.	.	.	.
69	8590	9	5	3	1	3	78	80	81	82	83	9	9	3	2	9	1	1	4	4	1	3	8	.	80	81	.
70	8648	2	10	8	.	.	86	87	88	.	.	9	-4	9	.	.	1	2	1	.	.	.	.	.	.	.	.
71	8701	10	10	12	12	2	79	80	84	85	87	9	9	9	-4	9	1	1	1	2	1	.	.	.	.	.	.
72	8707	10	12	11	.	.	83	87	89	.	.	9	9	-4	.	.	1	1	2	.	.	.	.	.	.	.	.
73	9048	7	4	-3	2	2	74	80	-3	83	85	9	9	9	9	9	1	1	1	1	1	.	.	.	.	.	.
74	9081	1	7	-3	.	.	83	84	85	.	.	9	9	9	.	.	1	1	1	.	.	.	.	.	.	.	.
75	9183	12	-3	1	.	.	79	-3	85	.	.	9	9	9	.	.	1	1	1	.	.	.	.	.	.	.	.
76	9227	-3	.	.	.	.	86	.	.	.	.	9	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
77	9286	9	12	9	.	.	85	86	89	.	.	9	-4	2	.	.	1	2	2	.	.	.	.	.	.	.	.
78	9349	-1	-1	7	12	9	-1	-1	84	87	89	9	9	1	9	9	1	1	4	1	1	6	1	8	77	81	81
79	9434	4	6	5	10	.	81	86	87	88	.	2	9	-4	9	.	2	1	2	1	.	4	.	.	83	.	.
80	9483	11	2	9	3	10	84	86	86	88	89	3	2	9	-4	9	2	2	1	2	1	.	.	.	.	.	.

Obs	ID	mo1	mo2	mo3	mo4	mo5	yr1	yr2	yr3	yr4	yr5	len1	len2	len3	len4	len5	out1	out2	out3	out4	out5	a_mo1	a_mo2	a_mo3	a_yr1	a_yr2	a_yr3	
81	9523	8	8	5	-3	11	79	82	83	86	89	9	9	9	9	9	1	1	1	1	1	4	.	.	76	.	.	
82	9655	4	6	8	.	.	81	84	84	.	.	9	-4	9	.	.	1	2	1	.	.	.	.	.	.	.	.
83	9704	6	4	10	2	.	86	88	88	89	.	9	-4	2	9	.	1	2	2	1	.	.	.	.	.	.	.
84	9840	2	-4	12	.	.	83	-4	85	.	.	9	9	9	.	.	1	1	1	.	.	.	.	.	.	.	.
85	10026	4	6	7	6	7	80	81	82	83	84	9	9	9	9	9	1	1	1	1	1	.	.	.	.	.	.
86	10048	12	12	1	.	.	85	87	89	.	.	9	-4	9	.	.	1	2	1	.	.	4	.	.	87	.	.	
87	10104	5	10	3	-3	.	76	77	85	-3	.	9	9	9	9	.	1	1	1	1	1	.	.	.	.	.	.
88	10144	12	8	3	3	4	82	83	84	84	88	3	2	1	9	9	2	2	3	1	1	.	.	.	.	.	.
89	10145	4	1	.	.	.	86	88	.	.	.	9	-4	.	.	.	1	2	.	.	.	.	.	.	.	.	.
90	10299	9	2	1	.	.	81	84	88	.	.	9	9	-2	.	.	1	1	2	.	.	.	.	.	.	.	.
91	10310	6	1	8	.	.	83	84	84	.	.	9	-4	9	.	.	1	2	1	.	.	.	.	.	.	.	.
92	10446	7	10	8	9	.	81	85	87	89	.	9	9	-4	9	.	1	1	4	1	.	10	.	.	87	.	.	
93	10577	2	-3	3	10	.	81	-3	83	83	.	9	-3	9	9	.	1	.	1	1	.	.	.	.	.	.	.
94	10582	-2	1	1	9	.	72	76	81	82	.	2	9	2	9	.	4	1	4	1	.	9	1	10	71	80	83	
95	10710	-3	-3	-3	.	.	-3	-3	-3	.	.	-3	-3	-3
96	10932	10	.	.	.	.	80	.	.	.	.	-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
97	11103	-3	11	-3	-3	-4	74	75	78	78	78	1	9	1	1	1	4	1	4	4	4	-3	-3	-3	74	76	78	
98	11132	6	8	-4	.	.	80	85	-4	.	.	9	9	9	.	.	1	1	1	.	.	.	.	.	.	.	.
99	11159	-3	8	7	.	.	75	81	83	.	.	2	4	9	.	.	4	2	1	.	.	1	.	.	75	.	.	
100	11182	-2	2	.	.	.	-2	80	.	.	.	3	9	.	.	.	4	1	.	.	.	5	.	.	77	.	.	
101	11355	6	11	.	.	.	83	83	.	.	.	9	-4	.	.	.	1	4	.	.	.	1	.	.	84	.	.	
102	11358	4	-2	11	1	.	79	80	81	83	.	9	2	2	9	.	1	4	4	1	.	4	1	.	81	82	.	
103	11709	-2	9	.	.	.	74	82	.	.	.	2	9	.	.	.	4	1	.	.	.	9	.	.	73	.	.	
104	11859	8	11	12	7	1	74	75	76	78	83	9	9	9	9	9	1	1	1	1	1	.	.	.	.	.	.
105	11935	6	-3	5	.	.	83	86	88	.	.	5	9	9	.	.	2	1	1	.	.	.	.	.	.	.	.
106	12018	10	1	7	6	.	85	88	88	89	.	9	-4	3	9	.	1	2	2	1	.	.	.	.	.	.	.
107	12150	2	5	3	5	.	77	85	87	88	.	9	9	9	-4	.	1	1	1	4	.	9	5	7	77	84	88	
108	12193	5	1	2	6	.	76	78	88	89	.	3	2	9	-4	.	4	4	1	4	.	6	6	.	85	89	.	
109	12265	8	11	3	4	.	85	88	89	90	.	9	1	9	-4	.	1	2	1	2	.	.	.	.	.	.	.
110	12368	6	10	12	4	2	83	83	83	84	85	9	-4	1	1	9	1	4	2	2	1	11	.	.	83	.	.	
111	12486	-3	8	.	.	.	86	87	.	.	.	9	9	.	.	.	1	1	.	.	.	.	.	.	.	.	.