Milestone2

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```
## Loading tidyverse: ggplot2
## Loading tidyverse: tibble
## Loading tidyverse: tidyr
## Loading tidyverse: readr
## Loading tidyverse: purrr
## Loading tidyverse: dplyr
```

```
## Conflicts with tidy packages ----------------------------------------------
```

```
## filter(): dplyr, stats
## lag():    dplyr, stats
```

The CDC has allowed open access to the NSFG survey results from 1973-2015:

https://www.cdc.gov/nchs/nsfg/index.htm.

The code used to generate this report is available from my GitHub Account:

https://github.com/JulianneA/N741_Milestone1

```
## Parsed with column specification:
## cols(
##   .default = col_integer(),
##   NOWPRGDK = col_character(),
##   OTHKDRAC2 = col_character(),
##   KDBSTRAC = col_character(),
##   OKDISABL2 = col_character(),
##   OTHKDRAC7 = col_character(),
##   KDBSTRAC2 = col_character(),
##   OKDISABL6 = col_character(),
##   OTHKDSPN3 = col_character(),
##   OTHKDRAC11 = col_character(),
##   OTHKDRAC12 = col_character(),
##   KDBSTRAC3 = col_character(),
##   OKBORNUS3 = col_character(),
##   OKDISABL9 = col_character(),
##   OKDISABL10 = col_character(),
##   TRYADOPT4 = col_character(),
##   OTHKDFOS4 = col_character(),
##   OTHKDSPN4 = col_character(),
##   OTHKDRAC16 = col_character(),
##   OTHKDRAC17 = col_character(),
##   KDBSTRAC4 = col_character()
##   # ... with 459 more columns
## )
```

```
## See spec(...) for full column specifications.
```

```
## Parsed with column specification:
## cols(
##   .default = col_integer(),
##   MOSCURRP = col_double(),
##   OTHKDRAC7 = col_character(),
##   KDBSTRAC2 = col_character(),
##   OKDISABL6 = col_character(),
##   OKDISABL10 = col_character(),
##   OKDISABL14 = col_character(),
##   OKDISABL18 = col_character(),
##   OKDISABL22 = col_character(),
##   DATKDCAM_M7 = col_character(),
##   DATKDCAM_Y7 = col_character(),
##   CMOKDCAM7 = col_character(),
##   OTHKDFOS7 = col_character(),
##   OKDDOB_M7 = col_character(),
##   OKDDOB_Y7 = col_character(),
##   CMOKDDOB7 = col_character(),
##   OTHKDSPN7 = col_character(),
##   OTHKDRAC31 = col_character(),
##   OTHKDRAC32 = col_character(),
##   KDBSTRAC7 = col_character(),
##   OKBORNUS7 = col_character()
##   # ... with 386 more columns
## )

## See spec(...) for full column specifications.

## Warning: Missing column names filled in: 'X3313' [3313], 'X3314' [3314],
## 'X3315' [3315]

## Parsed with column specification:
## cols(
##   .default = col_integer(),
##   NOWPRGDK = col_character(),
##   MOSCURRP = col_double(),
##   OTHKDRAC2 = col_character(),
##   OTHKDRAC3 = col_character(),
##   KDBSTRAC = col_character(),
##   OKDISABL2 = col_character(),
##   OKDISABL3 = col_character(),
##   OTHKDSPN2 = col_character(),
##   OTHKDRAC6 = col_character(),
##   OTHKDRAC7 = col_character(),
##   OTHKDRAC8 = col_character(),
##   KDBSTRAC2 = col_character(),
##   OKBORNUS2 = col_character(),
##   OKDISABL5 = col_character(),
##   OKDISABL6 = col_character(),
##   OKDISABL7 = col_character(),
##   OTHKDSPN3 = col_character(),
##   OTHKDRAC11 = col_character(),
##   OTHKDRAC12 = col_character(),
##   OTHKDRAC13 = col_character()
##   # ... with 901 more columns
```

```
## )
## See spec(...) for full column specifications.
```

```
## Warning: 12279 parsing failures.
## row col     expected       actual
##   1  -- 3315 columns 3741 columns
##   2  -- 3315 columns 3741 columns
##   3  -- 3315 columns 3741 columns
##   4  -- 3315 columns 3741 columns
##   5  -- 3315 columns 3741 columns
## ... ... ............ ............
## See problems(...) for more details.
```

```
## Parsed with column specification:
## cols(
##   .default = col_integer(),
##   OTHKDRAC2 = col_character(),
##   KDBSTRAC = col_character(),
##   TRYADOPT4 = col_character(),
##   OTHKDFOS4 = col_character(),
##   OTHKDSPN4 = col_character(),
##   OTHKDRAC16 = col_character(),
##   OKBORNUS4 = col_character(),
##   OKDISABL13 = col_character(),
##   TRYADOPT5 = col_character(),
##   OTHKDSPN5 = col_character(),
##   OTHKDRAC21 = col_character(),
##   OKBORNUS5 = col_character(),
##   OKDISABL17 = col_character(),
##   TRYADOPT6 = col_character(),
##   OTHKDFOS6 = col_character(),
##   OTHKDSPN6 = col_character(),
##   OTHKDRAC26 = col_character(),
##   OKBORNUS6 = col_character(),
##   OKDISABL21 = col_character(),
##   TRYADOPT7 = col_character()
##   # ... with 708 more columns
## )
## See spec(...) for full column specifications.
```

```
## Warning: Missing column names filled in: 'X3716' [3716], 'X3717' [3717],
## 'X3719' [3719], 'X3720' [3720], 'X3721' [3721], 'X3722' [3722],
## 'X3723' [3723], 'X3724' [3724], 'X3725' [3725], 'X3726' [3726],
## 'X3727' [3727], 'X3728' [3728], 'X3729' [3729], 'X3730' [3730],
## 'X3731' [3731], 'X3732' [3732], 'X3733' [3733], 'X3734' [3734],
## 'X3736' [3736], 'X3737' [3737], 'X3738' [3738], 'X3739' [3739],
## 'X3740' [3740], 'X3741' [3741], 'X3742' [3742], 'X3743' [3743],
## 'X3744' [3744], 'X3745' [3745], 'X3746' [3746], 'X3747' [3747],
## 'X3748' [3748], 'X3749' [3749], 'X3750' [3750], 'X3751' [3751],
## 'X3752' [3752], 'X3753' [3753], 'X3754' [3754], 'X3755' [3755],
## 'X3756' [3756], 'X3757' [3757], 'X3758' [3758], 'X3759' [3759],
## 'X3760' [3760], 'X3761' [3761], 'X3762' [3762], 'X3763' [3763],
## 'X3764' [3764], 'X3765' [3765], 'X3766' [3766], 'X3767' [3767],
## 'X3768' [3768], 'X3769' [3769], 'X3770' [3770], 'X3771' [3771],
## 'X3772' [3772], 'X3773' [3773], 'X3774' [3774], 'X3775' [3775],
```

```
## 'X3776' [3776], 'X3777' [3777], 'X3778' [3778], 'X3779' [3779],
## 'X3780' [3780], 'X3781' [3781], 'X3782' [3782], 'X3783' [3783],
## 'X3784' [3784], 'X3785' [3785], 'X3786' [3786], 'X3787' [3787],
## 'X3788' [3788], 'X3789' [3789], 'X3790' [3790], 'X3791' [3791],
## 'X3792' [3792], 'X3793' [3793], 'X3794' [3794], 'X3795' [3795],
## 'X3796' [3796], 'X3797' [3797], 'X3798' [3798], 'X3799' [3799],
## 'X3800' [3800], 'X3801' [3801], 'X3802' [3802], 'X3803' [3803],
## 'X3804' [3804], 'X3805' [3805], 'X3806' [3806], 'X3807' [3807],
## 'X3808' [3808], 'X3809' [3809], 'X3810' [3810], 'X3811' [3811],
## 'X3812' [3812], 'X3813' [3813], 'X3814' [3814], 'X3815' [3815],
## 'X3816' [3816], 'X3817' [3817], 'X3818' [3818], 'X3819' [3819],
## 'X3820' [3820], 'X3821' [3821], 'X3822' [3822], 'X3823' [3823],
## 'X3824' [3824], 'X3825' [3825], 'X3826' [3826], 'X3827' [3827],
## 'X3828' [3828], 'X3829' [3829], 'X3830' [3830], 'X3831' [3831],
## 'X3832' [3832], 'X3833' [3833], 'X3834' [3834], 'X3835' [3835],
## 'X3836' [3836], 'X3837' [3837], 'X3838' [3838], 'X3839' [3839],
## 'X3840' [3840], 'X3841' [3841], 'X3842' [3842], 'X3843' [3843],
## 'X3844' [3844], 'X3845' [3845], 'X3846' [3846], 'X3847' [3847],
## 'X3848' [3848], 'X3849' [3849], 'X3850' [3850], 'X3851' [3851],
## 'X3852' [3852], 'X3853' [3853], 'X3854' [3854], 'X3855' [3855],
## 'X3856' [3856], 'X3857' [3857], 'X3858' [3858], 'X3859' [3859],
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## 'X3864' [3864], 'X3865' [3865], 'X3866' [3866], 'X3867' [3867],
## 'X3868' [3868], 'X3869' [3869], 'X3870' [3870], 'X3871' [3871],
## 'X3872' [3872], 'X3873' [3873], 'X3874' [3874], 'X3875' [3875],
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## 'X3884' [3884], 'X3885' [3885], 'X3886' [3886], 'X3887' [3887],
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## 'X3892' [3892], 'X3893' [3893], 'X3894' [3894], 'X3895' [3895],
## 'X3896' [3896], 'X3897' [3897], 'X3898' [3898], 'X3899' [3899],
## 'X3900' [3900], 'X3901' [3901], 'X3902' [3902], 'X3903' [3903],
## 'X3904' [3904], 'X3905' [3905], 'X3906' [3906], 'X3907' [3907],
## 'X3908' [3908], 'X3909' [3909], 'X3910' [3910], 'X3911' [3911],
## 'X3912' [3912], 'X3913' [3913], 'X3914' [3914], 'X3915' [3915],
## 'X3916' [3916], 'X3917' [3917], 'X3918' [3918], 'X3919' [3919],
## 'X3920' [3920], 'X3921' [3921], 'X3922' [3922], 'X3923' [3923],
## 'X3924' [3924], 'X3925' [3925], 'X3926' [3926], 'X3927' [3927],
## 'X3928' [3928], 'X3929' [3929], 'X3930' [3930], 'X3931' [3931],
## 'X3932' [3932], 'X3933' [3933], 'X3934' [3934], 'X3935' [3935],
## 'X3936' [3936], 'X3937' [3937], 'X3938' [3938], 'X3939' [3939],
## 'X3940' [3940], 'X3941' [3941], 'X3942' [3942], 'X3943' [3943],
## 'X3944' [3944], 'X3945' [3945], 'X3946' [3946], 'X3947' [3947],
## 'X3948' [3948], 'X3949' [3949], 'X3950' [3950], 'X3951' [3951],
## 'X3952' [3952], 'X3953' [3953], 'X3954' [3954], 'X3955' [3955],
## 'X3956' [3956], 'X3957' [3957], 'X3958' [3958], 'X3959' [3959],
## 'X3960' [3960], 'X3961' [3961], 'X3962' [3962], 'X3963' [3963],
## 'X3964' [3964], 'X3965' [3965], 'X3966' [3966], 'X3967' [3967],
## 'X3968' [3968], 'X3969' [3969], 'X3970' [3970], 'X3971' [3971],
## 'X3972' [3972], 'X3973' [3973], 'X3974' [3974], 'X3975' [3975],
## 'X3976' [3976], 'X3977' [3977], 'X3978' [3978], 'X3979' [3979],
## 'X3980' [3980], 'X3981' [3981], 'X3982' [3982], 'X3983' [3983],
## 'X3984' [3984], 'X3985' [3985], 'X3986' [3986], 'X3987' [3987],
## 'X3988' [3988], 'X3989' [3989], 'X3990' [3990], 'X3991' [3991],
```

```
## 'X3992' [3992], 'X3993' [3993], 'X3994' [3994], 'X3995' [3995],
## 'X3996' [3996], 'X3997' [3997], 'X3998' [3998], 'X3999' [3999],
## 'X4000' [4000], 'X4001' [4001], 'X4002' [4002], 'X4003' [4003],
## 'X4004' [4004], 'X4005' [4005], 'X4006' [4006], 'X4007' [4007],
## 'X4008' [4008], 'X4009' [4009], 'X4010' [4010], 'X4011' [4011],
## 'X4012' [4012], 'X4013' [4013], 'X4014' [4014], 'X4015' [4015],
## 'X4016' [4016], 'X4017' [4017], 'X4018' [4018], 'X4019' [4019],
## 'X4020' [4020], 'X4021' [4021], 'X4022' [4022], 'X4023' [4023],
## 'X4024' [4024], 'X4025' [4025], 'X4026' [4026], 'X4027' [4027],
## 'X4028' [4028], 'X4029' [4029], 'X4030' [4030], 'X4031' [4031],
## 'X4032' [4032], 'X4033' [4033], 'X4034' [4034], 'X4035' [4035],
## 'X4036' [4036], 'X4037' [4037], 'X4038' [4038], 'X4039' [4039],
## 'X4040' [4040], 'X4041' [4041], 'X4042' [4042], 'X4043' [4043],
## 'X4044' [4044], 'X4045' [4045], 'X4046' [4046], 'X4047' [4047],
## 'X4048' [4048], 'X4049' [4049], 'X4050' [4050], 'X4051' [4051],
## 'X4052' [4052], 'X4053' [4053], 'X4054' [4054], 'X4055' [4055],
## 'X4056' [4056], 'X4057' [4057], 'X4058' [4058], 'X4059' [4059],
## 'X4060' [4060], 'X4061' [4061], 'X4062' [4062], 'X4063' [4063],
## 'X4064' [4064], 'X4065' [4065], 'X4066' [4066], 'X4067' [4067],
## 'X4068' [4068], 'X4069' [4069], 'X4070' [4070], 'X4071' [4071],
## 'X4072' [4072], 'X4073' [4073], 'X4074' [4074], 'X4075' [4075],
## 'X4076' [4076], 'X4077' [4077], 'X4078' [4078], 'X4079' [4079],
## 'X4080' [4080], 'X4081' [4081], 'X4082' [4082], 'X4083' [4083],
## 'X4084' [4084], 'X4085' [4085], 'X4086' [4086], 'X4087' [4087],
## 'X4088' [4088], 'X4089' [4089], 'X4090' [4090], 'X4091' [4091],
## 'X4092' [4092], 'X4093' [4093], 'X4094' [4094], 'X4095' [4095],
## 'X4096' [4096], 'X4097' [4097], 'X4098' [4098], 'X4099' [4099],
## 'X4100' [4100], 'X4101' [4101], 'X4102' [4102], 'X4103' [4103],
## 'X4104' [4104], 'X4105' [4105], 'X4106' [4106], 'X4107' [4107],
## 'X4108' [4108], 'X4109' [4109], 'X4110' [4110], 'X4111' [4111],
## 'X4112' [4112], 'X4113' [4113], 'X4114' [4114], 'X4115' [4115],
## 'X4116' [4116], 'X4117' [4117], 'X4118' [4118], 'X4119' [4119],
## 'X4120' [4120], 'X4121' [4121], 'X4122' [4122], 'X4123' [4123],
## 'X4124' [4124], 'X4125' [4125], 'X4126' [4126], 'X4127' [4127],
## 'X4128' [4128], 'X4129' [4129], 'X4130' [4130], 'X4131' [4131],
## 'X4132' [4132], 'X4133' [4133], 'X4134' [4134], 'X4135' [4135],
## 'X4136' [4136], 'X4137' [4137], 'X4138' [4138], 'X4139' [4139],
## 'X4140' [4140], 'X4141' [4141], 'X4142' [4142], 'X4143' [4143],
## 'X4144' [4144], 'X4145' [4145], 'X4146' [4146], 'X4147' [4147],
## 'X4148' [4148], 'X4149' [4149], 'X4150' [4150], 'X4151' [4151],
## 'X4152' [4152], 'X4153' [4153], 'X4154' [4154], 'X4155' [4155],
## 'X4156' [4156], 'X4157' [4157], 'X4158' [4158], 'X4159' [4159],
## 'X4160' [4160], 'X4161' [4161], 'X4162' [4162], 'X4163' [4163],
## 'X4164' [4164], 'X4165' [4165], 'X4166' [4166], 'X4167' [4167],
## 'X4168' [4168], 'X4169' [4169], 'X4170' [4170], 'X4171' [4171],
## 'X4172' [4172], 'X4173' [4173], 'X4174' [4174], 'X4175' [4175],
## 'X4176' [4176], 'X4177' [4177], 'X4178' [4178], 'X4179' [4179],
## 'X4180' [4180], 'X4181' [4181], 'X4182' [4182], 'X4183' [4183],
## 'X4184' [4184], 'X4185' [4185], 'X4186' [4186], 'X4187' [4187],
## 'X4188' [4188], 'X4189' [4189], 'X4190' [4190], 'X4191' [4191],
## 'X4192' [4192], 'X4193' [4193], 'X4194' [4194], 'X4195' [4195],
## 'X4196' [4196], 'X4197' [4197], 'X4198' [4198], 'X4199' [4199],
## 'X4200' [4200], 'X4201' [4201], 'X4202' [4202], 'X4203' [4203],
## 'X4204' [4204], 'X4205' [4205], 'X4206' [4206], 'X4207' [4207],
```

```
## 'X4208' [4208], 'X4209' [4209], 'X4210' [4210], 'X4211' [4211],
## 'X4212' [4212], 'X4213' [4213], 'X4214' [4214], 'X4215' [4215],
## 'X4216' [4216], 'X4217' [4217], 'X4218' [4218], 'X4219' [4219],
## 'X4220' [4220], 'X4221' [4221], 'X4222' [4222], 'X4223' [4223],
## 'X4224' [4224], 'X4225' [4225], 'X4226' [4226], 'X4227' [4227]
```

```
## Parsed with column specification:
## cols(
##   .default = col_character(),
##   CASEID = col_integer(),
##   AGE = col_integer(),
##   BDAYCENM = col_integer(),
##   MYSCHOLX = col_integer(),
##   MYSCHOL = col_integer(),
##   COLSTOP6 = col_integer(),
##   COLNEXT7 = col_integer(),
##   COLSTOP7 = col_integer(),
##   COLNEXT8 = col_integer(),
##   COLSTOP8 = col_integer(),
##   COLNEXT9 = col_integer(),
##   COLSTOP9 = col_integer(),
##   WHENEAR0 = col_integer(),
##   WHENEAR1 = col_integer(),
##   WHENEAR2 = col_integer(),
##   WHENEAR3 = col_integer(),
##   WHENEAR4 = col_integer(),
##   VOCSTART = col_integer(),
##   VOCSTOP2 = col_integer(),
##   VOCNEXT3 = col_integer()
##   # ... with 344 more columns
## )
## See spec(...) for full column specifications.
```

```
## Warning: 1021 parsing failures.
##  row      col   expected                   actual
## 1041 ENDFU012 an integer (1189) Period is current
## 1052 STPAGN00 an integer (9999) Don't know
## 1052 STRAGNC1 an integer (9999) Don't know
## 1054 DIVDATH2 an integer (9999) Don't know
## 1062 STRTF014 an integer (1197) No more periods
## .... ........ .......... ......................
## See problems(...) for more details.
```

```
## Parsed with column specification:
## cols(
##   .default = col_character(),
##   caseid = col_integer(),
##   A_3 = col_integer(),
##   A_5 = col_integer(),
##   B53C1MO = col_integer(),
##   B54C1MO = col_integer(),
##   B53C2MO = col_integer(),
##   B54C2MO = col_integer(),
##   B53C3MO = col_integer(),
##   B54C3MO = col_integer(),
```

```
##   C31M4 = col_integer(),
##   C33M4 = col_integer(),
##   CMOIMO = col_integer(),
##   D30P1MO = col_integer(),
##   D30P2MO = col_integer(),
##   D30_37A = col_integer(),
##   D30_37B = col_integer(),
##   D31_38A = col_integer(),
##   D31_38B = col_integer(),
##   F15MO = col_integer(),
##   F24M1MO = col_integer()
##   # ... with 142 more columns
## )
## See spec(...) for full column specifications.
```

```
## Warning: 159 parsing failures.
##  row     col   expected                  actual
## 1316 F15MO   an integer (99999) Not ascertained
## 1316 F19M2MO an integer (99999) Not ascertained
## 1316 F27M2MO an integer (99999) Not ascertained
## 1316 F22M3MO an integer (99999) Not ascertained
## 1426 F24M1MO an integer (99999) Not ascertained
## .... ....... .......... ......................
## See problems(...) for more details.
```

```
## Parsed with column specification:
## cols(
##   .default = col_character(),
##   rec_type = col_integer(),
##   cmbirth = col_integer(),
##   B8_B9 = col_integer(),
##   B54_2 = col_integer(),
##   C36_M3 = col_integer(),
##   C36_LM = col_integer(),
##   C39_LM = col_integer(),
##   D4_2 = col_integer(),
##   F9 = col_integer(),
##   F14 = col_integer(),
##   FMAR1MO = col_integer(),
##   F16_2CM = col_integer(),
##   F19_2CM = col_integer(),
##   F20_2CM = col_integer(),
##   F21_2 = col_integer(),
##   F22_2CM = col_integer(),
##   CH_3 = col_integer(),
##   F39_4 = col_integer(),
##   R7_CM = col_integer(),
##   NONRWT = col_double()
##   # ... with 14 more columns
## )
## See spec(...) for full column specifications.
```

```
## Warning: 85 parsing failures.
##  row      col   expected                    actual
## 1077 AGEBABY1 an integer (9999) Missing
```

```
## 1078 AGEBABY1 an integer (9999) Missing
## 1084 CH_3     an integer (0) Less than one year old
## 1208 C36_M3   an integer (9898) Date unknown
## 1231 F16_2CM  an integer (9999) Date not ascertained
## .... ........ .......... ......................
## See problems(...) for more details.
```

```
## Parsed with column specification:
## cols(
##   .default = col_character(),
##   LRECL = col_integer(),
##   rec_type = col_integer(),
##   RESPID = col_integer(),
##   A7_CM = col_integer(),
##   A7_DAY = col_integer(),
##   A9_CM = col_integer(),
##   A9_DAY = col_integer(),
##   A11 = col_integer(),
##   A12A13_MNTH = col_integer(),
##   A12A13_DAY = col_integer(),
##   A15A16_MOSTREC = col_integer(),
##   A17_MOSTREC = col_integer(),
##   A13MON_1ST = col_integer(),
##   A13DAT_1ST = col_integer(),
##   A15A16_1ST = col_integer(),
##   A17_1ST = col_integer(),
##   A13MON_2ND = col_integer(),
##   A13DAT_2ND = col_integer(),
##   A15A16_2ND = col_integer(),
##   A17_2ND = col_integer()
##   # ... with 92 more columns
## )
## See spec(...) for full column specifications.
```

```
## Warning: 32 parsing failures.
##  row     col   expected                 actual
## 1257 D35     an integer (96) 96 or more months
## 1274 D34     an integer (96) 96 or more months
## 1274 D35     an integer (96) 96 or more months
## 1449 D79BOYS an integer (10) Ten or more boys
## 1671 B44     an integer (7) 7 or more children
## .... ....... .......... ......................
## See problems(...) for more details.
```

```
## Parsed with column specification:
## cols(
##   .default = col_character(),
##   INT_ID = col_integer(),
##   DOB_MMYY = col_integer(),
##   DOB_DD = col_integer(),
##   MAR_TIMES = col_integer(),
##   MAR_MDD = col_integer(),
##   MAR1_DD = col_integer(),
##   MAR2_DD = col_integer(),
##   MAR3_DD = col_integer(),
```

```
##   MAR5_ENDMMYY = col_integer(),
##   MAR5_SEPMMYY = col_integer(),
##   PREG_NUMLIVEB = col_integer(),
##   FEC_MMYYPRD = col_integer(),
##   PREG_TIMES = col_integer(),
##   PREG_NUMLIVEB1 = col_integer(),
##   PREG_LIVEMB = col_integer(),
##   H_CH_NUMRAISED = col_integer(),
##   CH_NUMADOPT = col_integer(),
##   PREG_INTNUM = col_integer(),
##   FD_NUMBER = col_integer(),
##   EXP_LGSTADDINT = col_integer()
##   # ... with 58 more columns
## )
## See spec(...) for full column specifications.
```

```
## Warning: 22 parsing failures.
##  row          col   expected                  actual
## 1133 EMP_INTBWORK an integer (0) Less than one month
## 1156 FINC_NUM     an integer (7) 7 or more
## 2185 FINC_NUM     an integer (7) 7 or more
## 2976 EMP_INTBWORK an integer (0) Less than one month
## 3317 EMP_INTBWORK an integer (0) Less than one month
## .... ............ .......... ......................
## See problems(...) for more details.
```

```
NSFG2013sub <- readRDS("NRSG2013sub.rds")
NSFG2011sub <- readRDS("NRSG2011sub.rds")
NSFG2006sub <- readRDS("NRSG2006sub.rds")
NSFG2002sub <- readRDS("NRSG2002sub.rds")
NSFG1995sub <- readRDS("NRSG1995sub.rds")
NSFG1988sub <- readRDS("NRSG1988sub.rds")
NSFG1982sub <- readRDS("NRSG1982sub.rds")
```

```
### Generate counts of CASEID to fill out table below for number of respondents
ALlYr_Resp <- sum(length(NSFG2013sub$CASEID), length(NSFG2011sub$CASEID), length(NSFG2006sub$CASEID), le

SINGLESTOO <- sum(length(NSFG2013sub$CASEID), length(NSFG2011sub$CASEID), length(NSFG2006sub$CASEID), le

Cases <- c(length(NSFG2013sub$CASEID),
           length(NSFG2011sub$CASEID),
           length(NSFG2006sub$CASEID),
           length(NSFG2002sub$CASEID),
           length(NSFG1995sub$CASEID),
           length(NSFG1988sub$RACE),
           length(NSFG1982sub$METRO),
           length(NSFG1976$LRECL),
           length(NSFG1973$INT_ID),
           ALlYr_Resp, SINGLESTOO)
```

Initial Exploration of Available Data

Year of NFGS	Number of Respondents	Variables	Notes
2013-2015	5699	3207	This was the first file imported as a CSV.
2011-2013	5601	3094	Imported as CSV.
2006-2010	12279	3315	Imported as CSV.
2002	7643	3087	Cycle 6, 3 SAS setup files.
1995	10847	5753	Cycle 5, Imported as CSV.
1988	8450	1437	Cycle 4, Imported as CSV.
1982	7969	742	Cycle 3, Imported as CSV.
1976	8611	470	Cycle 2, Imported as CSV.
1973	9797	451	Cycle 1, Imported as CSV.
All Respondents	76896		
1982-2015	58488		

Upon further inspection of code books, it became evident that the 1973 and 1976 files could not be used in analysis. Throughout these cycles, the CDC interviewed only married women or unmarried women who had borne children for the NSFG. From 1982 onward, unmarried and childless women were included in the NSFG, therefore, the initial two cycles of the NSFG were excluded here because the differences in sampling populations introduces too great a threat to data validity and generalizability.

Data Cleaning Summary

Sixty-three variables were extracted from the NSFG datasets. These variables capture information regarding respondent demographics, contraceptive utilization, sexual education history, and reproductive history. These variables were selected with special consideration for variables present in the most recent three cycles of the NSFG (2006, 2011-2013, and 2013-2015), which are most similar in their data cleaning and accessibility of resources detailing data coding methodology. Two variables were added prior to datamerge: CYCLE and YEAR which both indicate which NSFG survey dataset that respondent had been included.

Below is a summary of the sixty-three variables chosen for extraction:

- MAINTENANCE
- CASEID: Respondent's (R's) Study ID.
- CMINTVW: Century Month of Interview.
- INTVWYEAR: Year of Interview.
- DEMOGRAPHICS
  - AGE_R: Age of R
  - MARSTAT: Marital Status of R
  - HIGRADE: R's current grade in school or highest grade/year attended
  - DEGREES: R's highest college or university degree received
  - PARMARR: Whether R's biological parents married at R's birth
  - ACASILANG: Language to be used in ACASI
  - AGER: Recode of R's Age
  - HISPANIC: Whether R identifies as Hispanic
  - RACE: R's Race
  - CURR_INS: Current health insurance status
  - METRO: Metro versus Non-Metro as place of residence
  - RELIGION: R's current religions affiliation
  - LABORFOR: R's employment status

  - POVERTY: R's income as a percentage of poverty level
  - TOTINCR: R's total household income
  - PUBASSIS: Whether R currently receives public assistance

- CONTRACEPTIVE USE
  - PILL- Whether R has ever used birth control pills?
  - NORPLANT- Whether R has ever used hormonal implants?
  - CONDOM- Whether R has ever used condoms?
  - VASECTMY- Whether R has ever depended on partner's vasectomy?
  - DIAFRAGM- Whether R has ever used a diaphragm?
  - DEPOPROV- Whether R has ever used depo-provera or other injectable?
  - WIDRAWAL- Whether R has ever used withdrawal?
  - RHYTHM- Whether R has ever used rhythm method?
  - SDAYCBDS- Whether R has ever used Standard Days or CycleBeads?
  - TEMPSAFE- Whether R has ever used natural family planning (safe temperature)?
  - WOCONDOM- Whether R has ever used a women's condem?
  - FOAMALON- Whether R has ever used contraceptive foam?
  - JELCRMAL- Whether R has ever used spermicide jelly or cream?
  - CERVLCAP- Whether R has ever used a cervical cap?
  - SUPPOSIT- Whether R has ever used suppositories?
  - TODAYSPG- Whether R has ever used the Today Sponge?
  - IUD- Whether R has ever had an IUD?
  - LUNELLE- Whether R has ever used Lunelle injection?
  - PATCH- Whether R has ever used contraceptive patch?
  - RING- Whether R has ever used the contracpetive ring?
  - OTHRMETH01- Has R used another method?
  - ECTIMESX- Number of times R used emergency contraception.
  - FIRSMETH1- What was first method R used?
  - CURRMETH1- What is the current method R uses (1)?
  - CURRMETH2- What is the current method R uses (1)?
  - CURRMETH3- What is the current method R uses (1)?
  - CURRMETH4- What is the current method R uses (1)?

- REPRO HEALTH
  - MAYBPREG- Currently, does R believe she could be pregnant?
  - NPREGS_S- Total number of pregnancies
  - PARITY- Total number of live births
  - ABORTION- Total number of induced abortions
  - HYST- Has R had a hysterectomy?
  - OVAREM- Has R had an ovarectomy?
  - OTHR- Is R surgically sterile due to another operation?
  - PREGNOWQ- Is R currently pregnant?

- SEXUAL HX
  - EVERSEX- Has R ever had hetereosexual intercourse?
  - RHADSEX- Has R ever had hetereosexual intercourse (recoded)?
  - YNOSEX- Main reason R has not had hetereosexual intercourse?

- SEX ED
  - SEDBC- Did R receive formal Sex Ed Before 18: Methods of Birth Control
  - SEDBCG- R's Grade When Received Instruction on Birth Control
  - SEDBCSX- Received Sex Ed on Birth Control Methods Before/After 1st Sex
  - SEDWHBC- Did R receive formal Sex Ed Before 18: Where to Get Birth Control
  - SEDWHBCG- R's Grade When Received Instruction on Where to Get Birth Control

– SEDWBCSX- Received Sex Ed on Where to get Birth Control Before/After 1st Sex

Challenges:

This survey has been collected in large cohorts of women over the past 34 years. While providing the user with enormous amounts of data, the CDC has been consistently inconsistent in their variable collection and coding practices.

For this milestone we expect that you will have acquired, cleaned, and explored your dataset. You will document these activities in your files. You will also explain in detail the components of your final analysis. If you have deviated from your original plans, please describe what is different and the reasons that have led to this. You will explain your workflow, that is, how you went from acquiring your data to getting (close to) an answer to your question. Are there ancillary questions that have arisen as you have gone through this process? What are they?

Goal 2: Analysis

Year of NFGS	Age	Notes
2013-2015		
2011-2013		
2006-2010		
2002		
1995		
1988		
1982		
1976		
1973		
All Respondents		

Goal 3: Visualization I plan on investing a great deal of time into the visualization step, since I believe that when working with so many variables, the interesting, effective dissemination of results depends on good visualization. This step will be the final week of "processing type" work before I begin writing my manuscript. Therefore, I will have functional visualizations completed before March 1st.

MILESTONE 2: Working Prototype The next milestone is due on March 22nd, and I will spend from March 1st-15th working on this manuscript.

Manuscript Rewrites After discussing my project with a professor to get feedback, I plan to rewrite my manuscript and edit any analysis steps and implement any suggestions to improve the visualization of the data. The analysis changes will occur from March 15th-April1st. Visualization changes will take the next week, and from April 7th to the 15th, I will conduct the final manuscript edits.

MILESTONE 3: Final Manuscript Due Wednesday, April 19th.