format_data

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5/25/2021

INSTRUCTIONS TO GET SURVEY DATA

1. Go to Yale qualtrics site
2. Navigate to Intake questionaire.
3. Download data as .xlsx
4. Repeat for fortnightly survey

ID 6.1 Saliva was very low under 100 ul.

ID 5.6 qpcr LytA -piaB was ran in plate A155_scope_2021_06_02 .The issue was the label: FIXED 5.5 to 5.6

ID 62.2,63.2 samples were picked up 1 month after .We didn't see any growth after incubation 37 degree over night

ID 20.5 - 21.5 to verify

```
## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T8 / R8C20: got a date
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## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T17 / R17C20: got a date
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## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T20 / R20C20: got a date
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## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T38 / R38C20: got a date
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## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T50 / R50C20: got a date
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## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T168 / R168C20: got a date
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## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U168 / R168C21: got a date
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## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T174 / R174C20: got a date
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## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U174 / R174C21: got a date
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## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T210 / R210C20: got a date
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## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U210 / R210C21: got a date
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## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U223 / R223C21: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T224 / R224C20: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T237 / R237C20: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U243 / R243C21: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T246 / R246C20: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U246 / R246C21: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T248 / R248C20: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U255 / R255C21: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T260 / R260C20: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T266 / R266C20: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T296 / R296C20: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U297 / R297C21: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T330 / R330C20: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U330 / R330C21: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T360 / R360C20: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U360 / R360C21: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T362 / R362C20: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U363 / R363C21: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T366 / R366C20: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U366 / R366C21: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T372 / R372C20: got a date
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## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U372 / R372C21: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T380 / R380C20: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U381 / R381C21: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U417 / R417C21: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in T428 / R428C20: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U429 / R429C21: got a date

## Warning in read_fun(path = enc2native(normalizePath(path)), sheet_i = sheet, :
## Expecting numeric in U431 / R431C21: got a date

## New names:
## * `` -> ...38

## [1] "A143_scope_2021_05_11.xlsx"
## [1] "A144_scope_2021_05_12_DC.xlsx"
## [1] "A145_scope_2021_05_04.xlsx"
## [1] "A146_scope_2021_05_17.xlsx"
## [1] "A146_scope_2021_06_03 lyta_DC.xlsx"
## [1] "A147_scope_2021_05_17 piaB.xlsx"
## [1] "A147_scope_2021_05_26_repeatnewlytaprobe_DC.xlsx"
## [1] "A148_SCOPE 1_2021_11_30_lyta_repeat AT,SD.xlsx"
## [1] "A148_scope_2021_05_19 piaB.xlsx"
## [1] "A148_scope_2021_05_27_repeatedwithnewlytaprobe_DC.xlsx"
## [1] "A149_scope_2021_05_19_piaB_DC.xlsx"
## [1] "A149_scope_2021_06_09_lytarepeat_DC.pltd.xlsx"
## [1] "A150_scope_2021_05_24_DC.xlsx"
## [1] "A151_scope _2021-06-17_piab_DC_repeat.xlsx"
## [1] "A151_scope_2021_05_29 repeat lyta_DC.xlsx"
## [1] "A153_scope_2021_05_29_DC.xlsx"
## [1] "A154_2021_-06_02_DC.xlsx"
## [1] "A155_2021_06_02_DC.xlsx"
## [1] "A156_scope_2021_06_03_DC.xlsx"
## [1] "A157_scope_2021_06_08 lyta-piaB repeat_DC.xlsx"

## New names:
## * `` -> ...3

## [1] "A161-lyta_piab_scope_2021-06-23 pcrd DC.xlsx"
## [1] "A162_SCOPE_2021_12_01_rerun (1).xlsx"
## [1] "A163_SCOPE_2021_09_15_lyta_piab_sso_DC.xlsx"
## [1] "A164_SCOPE_2021_10_01_ext_lyta_piab_validate.xlsx"
## [1] "A165_SCOPE_2021_12_03 (3).xlsx"
## [1] "A197_scope1_2021-12-09 biorad sm.xlsx"
## [1] "A198_SCOPE 1_2022 (1).xls"
## [1] "A199_scope1_2022-11-23 _xlytA_piaB (1).xlsx"
## [1] "S01_SCOPE II_2022.xls"
## [1] "S15_scope_2022-11-23 _xlytA_piaB.xlsx"
```
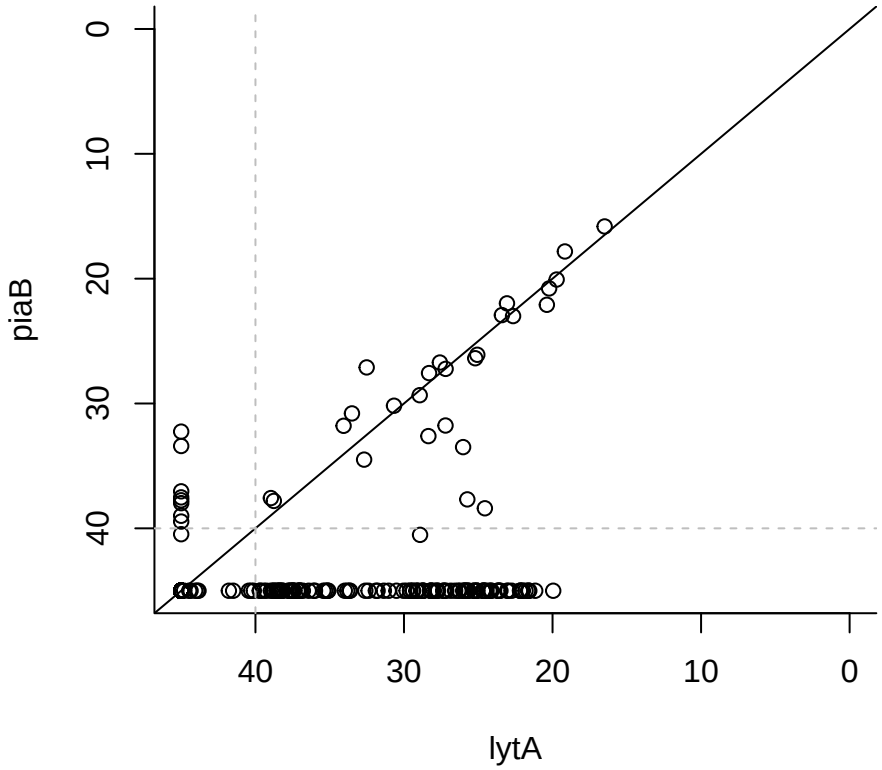
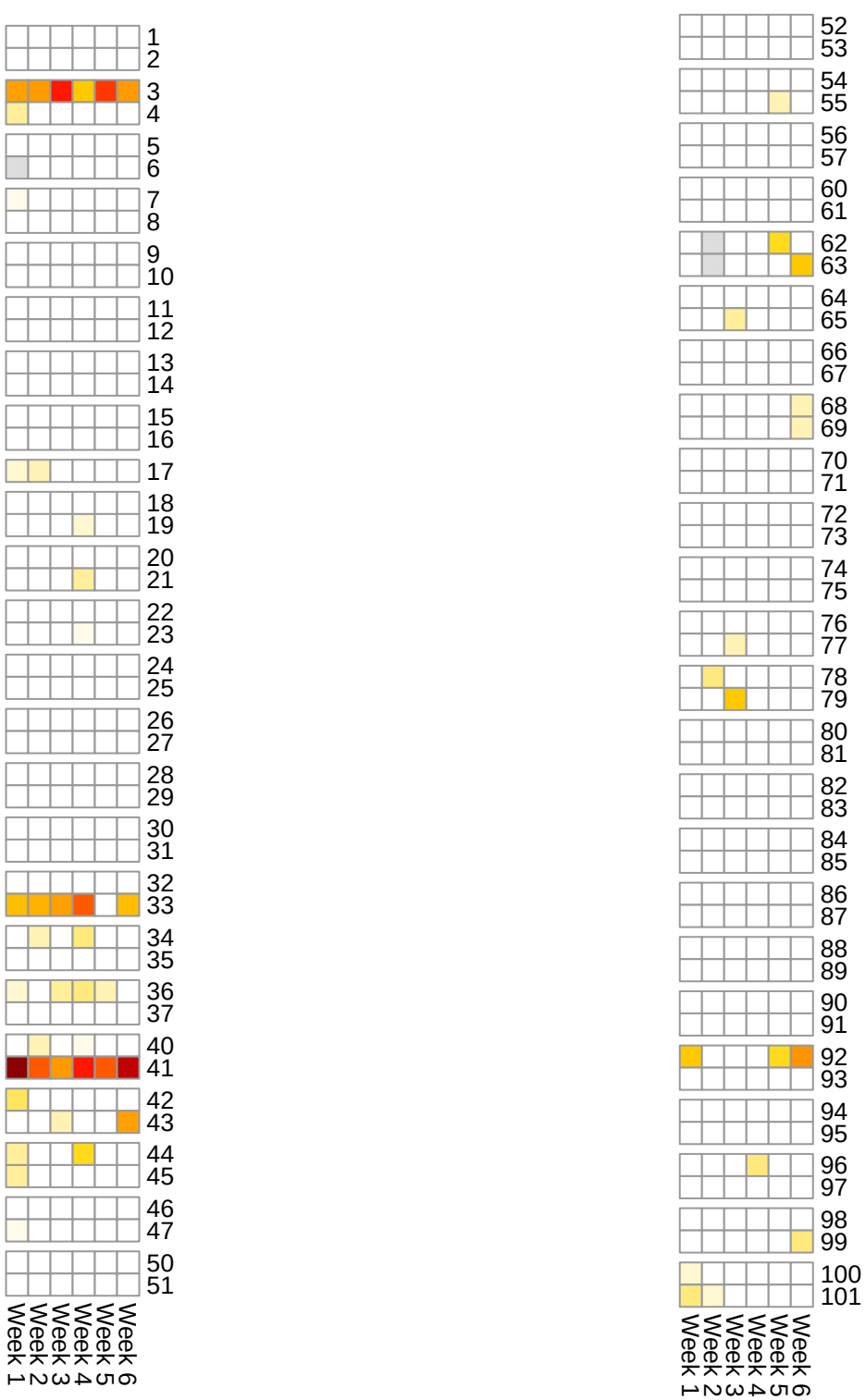

```
## Warning: NAs introduced by coercion
```



Heatmaps

piaB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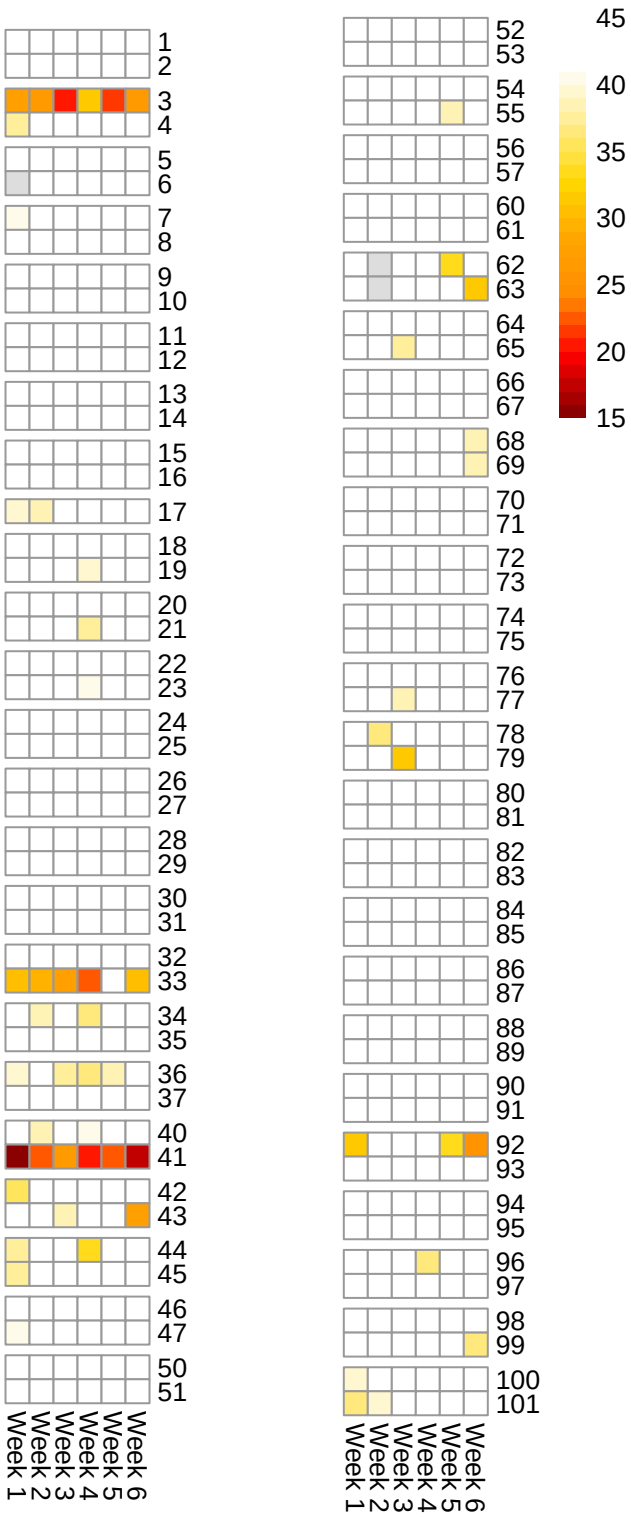
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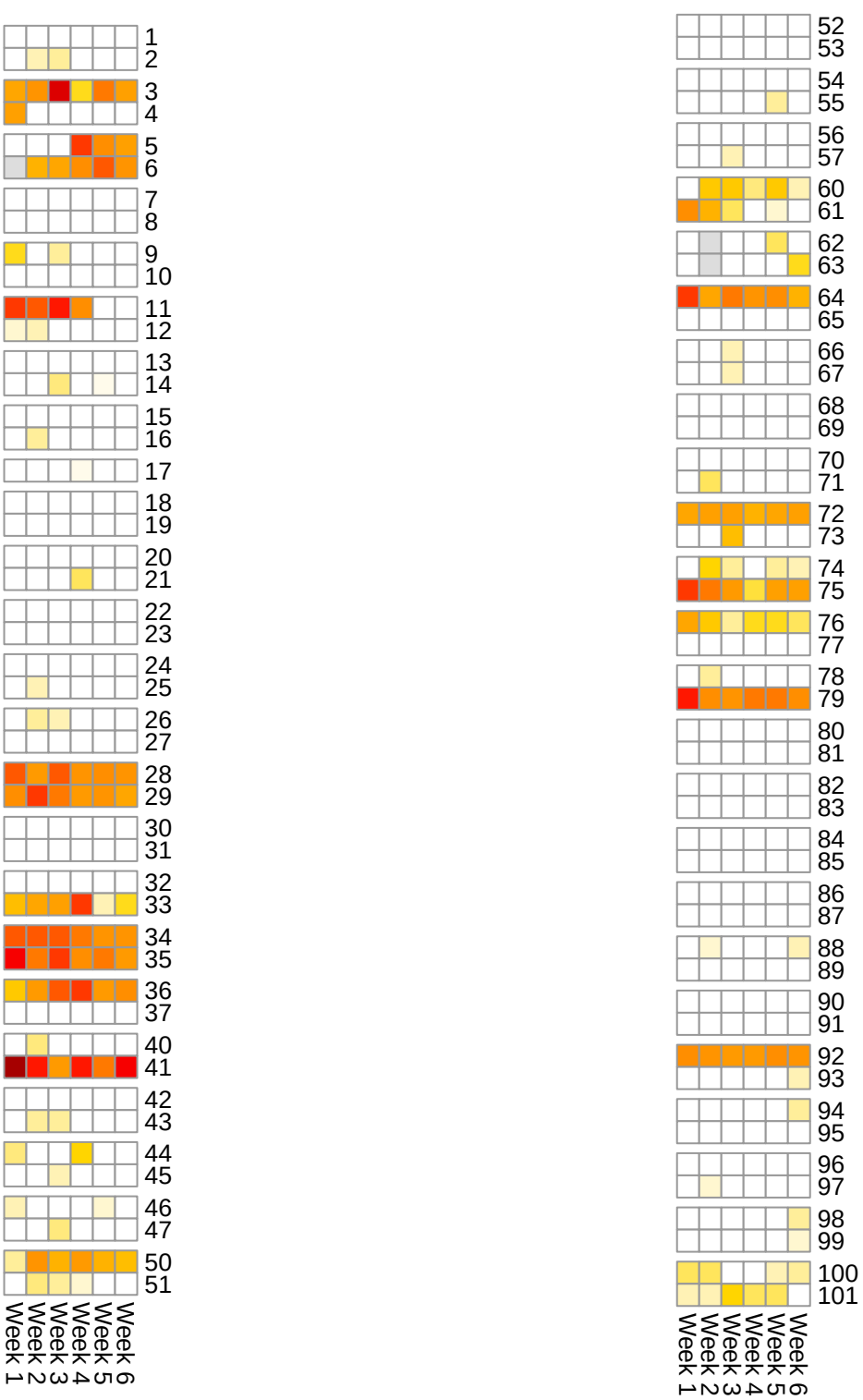
lytA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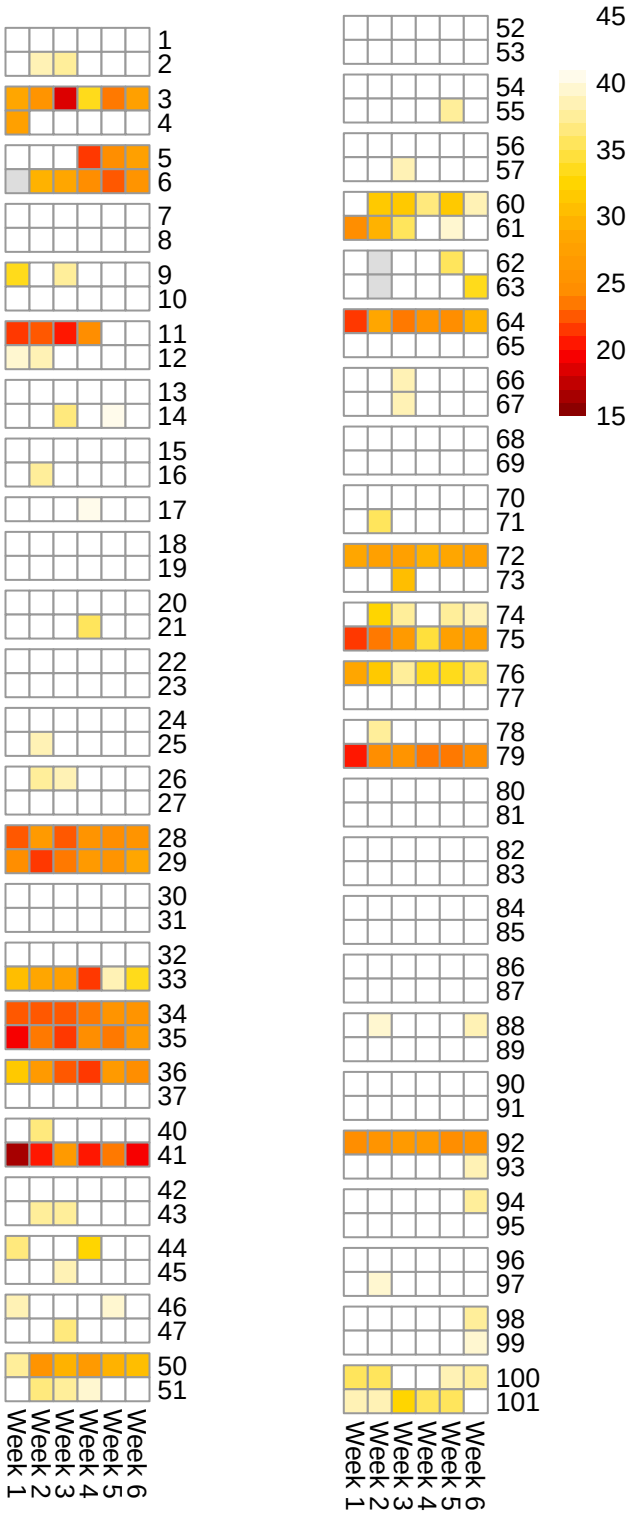
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Contacts

Summary stats

```
## [1] 95
```

```
## [1] 48
```

```
## [1] 567
```

```
## [1] 52
```

```
## [1] 11
```

```
## [1] 41
```

```
## [1] 0.09171076
```

```
## [1] 165
```

```
## [1] 0.2910053
```

```
## [1] 28
```

```
## [1] 20
```

```
## New names:
## * `` -> ...1
## * `` -> ...13
## * `` -> ...14
## * `` -> ...15
```

```
## [1] 71.02105
```

```
## [1] 60 86
```

Merge in results with master file

–To do: -harmonize column names between fortnightly and initial questionaire so we can merge -Fix dates -Check missing visitNs

Intake questionaire

```
## New names:
## * `Where did you receive this vaccine? - Selected Choice` -> `Where did you receive this vaccine? - S
## * `Where did you receive this vaccine? - Doctor's Office (Name of Provider) - Text` -> `Where did you
## * `Where did you receive this vaccine? - Other - Text` -> `Where did you receive this vaccine? - Othe
## * `Where did you receive this vaccine? - Selected Choice` -> `Where did you receive this vaccine? - S
## * `Where did you receive this vaccine? - Doctor's Office (Name of Provider) - Text` -> `Where did you
## * ...
## New names:
## * `Where did you receive this vaccine? - Selected Choice` -> `Where did you receive this vaccine? - S
## * `Where did you receive this vaccine? - Doctor's Office (Name of Provider) - Text` -> `Where did you
## * `Where did you receive this vaccine? - Other - Text` -> `Where did you receive this vaccine? - Othe
## * `Where did you receive this vaccine? - Selected Choice` -> `Where did you receive this vaccine? - S
## * `Where did you receive this vaccine? - Doctor's Office (Name of Provider) - Text` -> `Where did you
## * ...
```

Fortnightly questionnaire and intake cleaning... do not run each time

read in newly entered surveys

```
## Warning: NAs introduced by coercion
```

```
## Warning in as.Date(as.numeric(q2$visit_date), origin = "1900-01-01"): NAs
## introduced by coercion
```

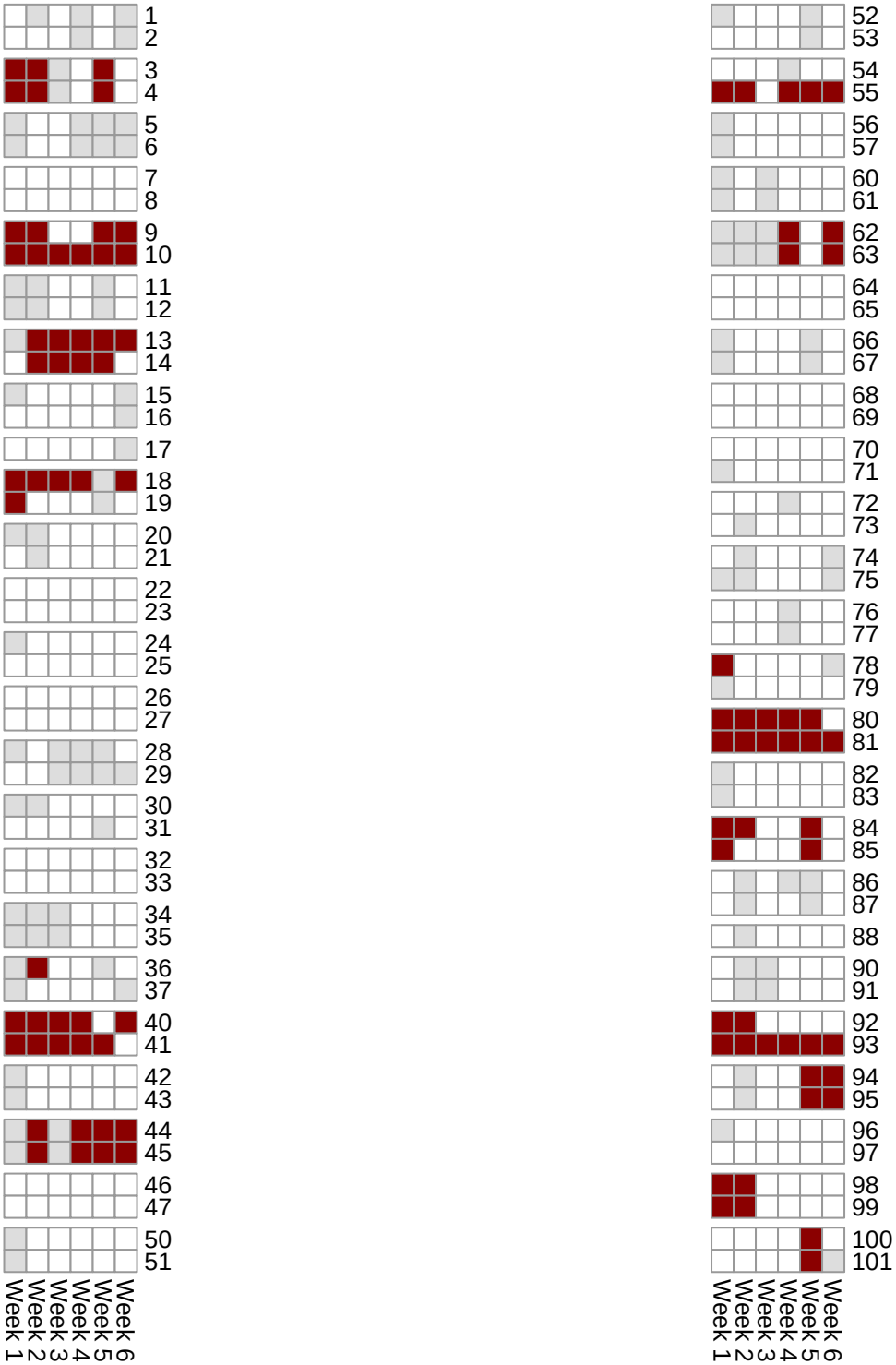
```
## Warning in as.Date(as.numeric(q2$visit_date_cleaned), origin = "1900-01-01"):
## NAs introduced by coercion
```

```
## Using visitN as value column: use value.var to override.
```

```
## Warning: 20 failed to parse.
```

```
## New names:
## * `` -> ...1
## * `` -> ...13
## * `` -> ...14
## * `` -> ...15
```

heat map of contacts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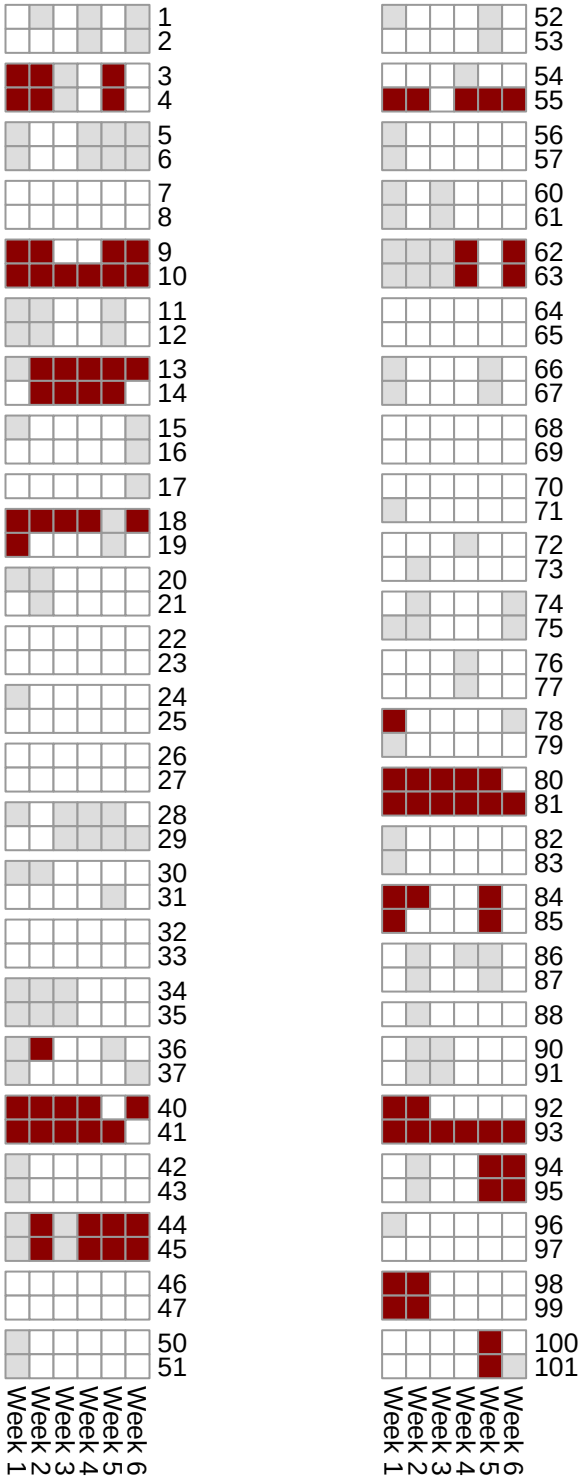
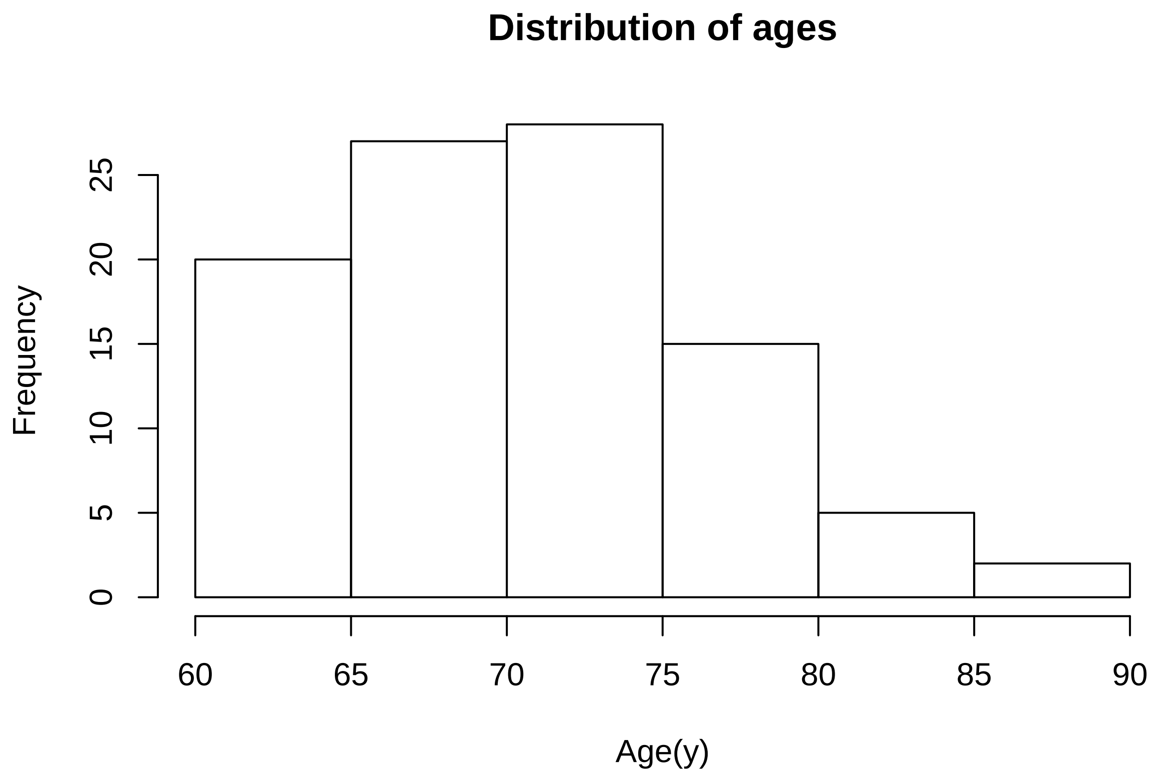



```
## TableGrob (1 x 2) "arrange": 2 grobs
##   z     cells    name           grob
## 1 1 (1-1,1-1) arrange gtable[layout]
## 2 2 (1-1,2-2) arrange gtable[layout]
```




```
## Warning in max(smoke_dic, na.rm = T): no non-missing arguments to max; returning
## -Inf

## Warning in max(smoke_dic, na.rm = T): no non-missing arguments to max; returning
## -Inf

## Warning in max(smoke_dic, na.rm = T): no non-missing arguments to max; returning
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## Warning in max(smoke_dic, na.rm = T): no non-missing arguments to max; returning
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## -Inf
```

Do you usually have contact with children?

	missing	No	Yes	Overall
	(N=77)	(N=307)	(N=193)	(N=577)
piab_pos				
0	67 (87.0%)	286 (93.2%)	162 (83.9%)	515 (89.3%)
1	6 (7.8%)	19 (6.2%)	27 (14.0%)	52 (9.0%)
Missing	4 (5.2%)	2 (0.7%)	4 (2.1%)	10 (1.7%)

Contact <5 y olds

	No	Not answered	Yes	Overall
	(N=431)	(N=66)	(N=80)	(N=577)
piab_pos				
0	392 (91.0%)	57 (86.4%)	66 (82.5%)	515 (89.3%)
1	34 (7.9%)	5 (7.6%)	13 (16.3%)	52 (9.0%)
Missing	5 (1.2%)	4 (6.1%)	1 (1.3%)	10 (1.7%)

How often do you have contact with children?

	Daily	Every few days	NA	No contact	Once or twice a month	Overall
	(N=23)	(N=101)	(N=22)	(N=307)	(N=55)	(N=577)
piab_pos						
0	20 (87.0%)	83 (82.2%)	20 (90.9%)	286 (93.2%)	47 (85.5%)	515 (89.3%)
1	3 (13.0%)	17 (16.8%)	2 (9.1%)	19 (6.2%)	5 (9.1%)	52 (9.0%)
Missing	0 (0%)	1 (1.0%)	0 (0%)	2 (0.7%)	3 (5.5%)	10 (1.7%)

How much contact per day do you have?

	<4 hours (morning or afternoon or evening)	4-8 hours (full day)	8+ hours (longer day care/overnight)	N
	(N=129)	(N=48)	(N=16)	(
piab_pos				
0	107 (82.9%)	41 (85.4%)	13 (81.3%)	2
1	18 (14.0%)	7 (14.6%)	3 (18.8%)	1
Missing	4 (3.1%)	0 (0%)	0 (0%)	1

What ages do you have contact with?

<12m?

	No	Not answered	Yes	Overall
	(N=469)	(N=66)	(N=42)	(N=577)
piab_pos				
0	422 (90.0%)	57 (86.4%)	36 (85.7%)	515 (89.3%)
1	42 (9.0%)	5 (7.6%)	5 (11.9%)	52 (9.0%)
Missing	5 (1.1%)	4 (6.1%)	1 (2.4%)	10 (1.7%)

12-23m?

	No	Not answered	Yes	Overall
	(N=496)	(N=66)	(N=15)	(N=577)
piab_pos				
0	446 (89.9%)	57 (86.4%)	12 (80.0%)	515 (89.3%)
1	45 (9.1%)	5 (7.6%)	2 (13.3%)	52 (9.0%)
Missing	5 (1.0%)	4 (6.1%)	1 (6.7%)	10 (1.7%)

2-5y

	No	Not answered	Yes	Overall
	(N=472)	(N=66)	(N=39)	(N=577)
piab_pos				
0	426 (90.3%)	57 (86.4%)	32 (82.1%)	515 (89.3%)
1	40 (8.5%)	5 (7.6%)	7 (17.9%)	52 (9.0%)
Missing	6 (1.3%)	4 (6.1%)	0 (0%)	10 (1.7%)

5-10y

	No	Not answered	Yes	Overall
	(N=429)	(N=66)	(N=82)	(N=577)
piab_pos				
0	390 (90.9%)	57 (86.4%)	68 (82.9%)	515 (89.3%)
1	33 (7.7%)	5 (7.6%)	14 (17.1%)	52 (9.0%)
Missing	6 (1.4%)	4 (6.1%)	0 (0%)	10 (1.7%)

more than 10y

	No	Not answered	Yes	Overall
	(N=444)	(N=66)	(N=67)	(N=577)
piab_pos				
0	401 (90.3%)	57 (86.4%)	57 (85.1%)	515 (89.3%)
1	39 (8.8%)	5 (7.6%)	8 (11.9%)	52 (9.0%)
Missing	4 (0.9%)	4 (6.1%)	2 (3.0%)	10 (1.7%)

Have you taken part in any social activities or outings during the past two weeks?

	NA	No	Yes	Overall
	(N=34)	(N=184)	(N=243)	(N=577)
piab_pos				
0	31 (91.2%)	164 (89.1%)	219 (90.1%)	515 (89.3%)
1	3 (8.8%)	18 (9.8%)	20 (8.2%)	52 (9.0%)
Missing	0 (0%)	2 (1.1%)	4 (1.6%)	10 (1.7%)

What sorts of activities have you participated in? - Selected Choice

	Activities at community centers	Activities with family	Activities with friends	Fitness activities	NA
	(N=8)	(N=74)	(N=36)	(N=10)	(N=38
piab_pos					
0	8 (100%)	60 (81.1%)	35 (97.2%)	10 (100%)	35 (92.
1	0 (0%)	11 (14.9%)	1 (2.8%)	0 (0%)	3 (7.9%
Missing	0 (0%)	3 (4.1%)	0 (0%)	0 (0%)	0 (0%)

Current Symptoms

Cough?

	NA	No	Yes	Overall
	(N=2)	(N=497)	(N=13)	(N=577)
piab_pos				
0	2 (100%)	447 (89.9%)	10 (76.9%)	515 (89.3%)
1	0 (0%)	44 (8.9%)	3 (23.1%)	52 (9.0%)
Missing	0 (0%)	6 (1.2%)	0 (0%)	10 (1.7%)

Runny Nose?

	NA	No	Yes	Overall
	(N=1)	(N=492)	(N=19)	(N=577)
piab_pos				
0	1 (100%)	442 (89.8%)	16 (84.2%)	515 (89.3%)
1	0 (0%)	44 (8.9%)	3 (15.8%)	52 (9.0%)
Missing	0 (0%)	6 (1.2%)	0 (0%)	10 (1.7%)

Fever?

	NA	No	Overall
	(N=3)	(N=509)	(N=577)
piab_pos			
0	3 (100%)	456 (89.6%)	515 (89.3%)
1	0 (0%)	47 (9.2%)	52 (9.0%)
Missing	0 (0%)	6 (1.2%)	10 (1.7%)

Sore throat?

	NA	No	Yes	Overall
	(N=1)	(N=510)	(N=1)	(N=577)
piab_pos				
0	1 (100%)	457 (89.6%)	1 (100%)	515 (89.3%)
1	0 (0%)	47 (9.2%)	0 (0%)	52 (9.0%)
Missing	0 (0%)	6 (1.2%)	0 (0%)	10 (1.7%)

Nasal?

	NA	No	Yes	Overall
	(N=1)	(N=493)	(N=18)	(N=577)
piab_pos				
0	1 (100%)	442 (89.7%)	16 (88.9%)	515 (89.3%)
1	0 (0%)	45 (9.1%)	2 (11.1%)	52 (9.0%)
Missing	0 (0%)	6 (1.2%)	0 (0%)	10 (1.7%)

Pneumooccal vaccination

	No	Yes	Overall
	(N=126)	(N=315)	(N=577)
piab_pos			
0	117 (92.9%)	283 (89.8%)	515 (89.3%)
1	8 (6.3%)	28 (8.9%)	52 (9.0%)
Missing	1 (0.8%)	4 (1.3%)	10 (1.7%)

##COVID History

	No, it was negative	Not tested	Yes, it was positive	Overall
	(N=300)	(N=100)	(N=45)	(N=577)
piab_pos				
0	275 (91.7%)	93 (93.0%)	38 (84.4%)	515 (89.3%)
1	21 (7.0%)	7 (7.0%)	6 (13.3%)	52 (9.0%)
Missing	4 (1.3%)	0 (0%)	1 (2.2%)	10 (1.7%)

Ethnicity

	Asian	Asian,Unknown/Other	Black or African American	Unknown/Other	White	White,Ur
	(N=6)	(N=12)	(N=19)	(N=12)	(N=396)	(N=6)
piab_pos						
0	6 (100%)	12 (100%)	18 (94.7%)	10 (83.3%)	359 (90.7%)	5 (83.3%)
1	0 (0%)	0 (0%)	0 (0%)	2 (16.7%)	33 (8.3%)	1 (16.7%)
Missing	0 (0%)	0 (0%)	1 (5.3%)	0 (0%)	4 (1.0%)	0 (0%)

Education level

#Medications Immune meds

	Don't know	No	Yes	Overall
	(N=20)	(N=390)	(N=41)	(N=577)
piab_pos				
0	20 (100%)	352 (90.3%)	38 (92.7%)	515 (89.3%)
1	0 (0%)	33 (8.5%)	3 (7.3%)	52 (9.0%)
Missing	0 (0%)	5 (1.3%)	0 (0%)	10 (1.7%)

Asthma meds

	Don't know	No	Yes	Overall
	(N=9)	(N=408)	(N=12)	(N=577)
piab_pos				
0	8 (88.9%)	369 (90.4%)	11 (91.7%)	515 (89.3%)
1	1 (11.1%)	34 (8.3%)	1 (8.3%)	52 (9.0%)
Missing	0 (0%)	5 (1.2%)	0 (0%)	10 (1.7%)

Recent Antibiotics

	NA	No	Yes	Overall
	(N=4)	(N=481)	(N=26)	(N=577)
piab_pos				
0	4 (100%)	429 (89.2%)	25 (96.2%)	515 (89.3%)
1	0 (0%)	46 (9.6%)	1 (3.8%)	52 (9.0%)
Missing	0 (0%)	6 (1.2%)	0 (0%)	10 (1.7%)

Seasonality

```
## Warning in table1.formula(~piab_pos | month, data = e3): Terms to the right
## of '|' in formula 'x' define table columns and are expected to be factors with
## meaningful labels.
```

	1	2	3	4	5	6	7	8	10
	(N=100)	(N=115)	(N=118)	(N=47)	(N=25)	(N=31)	(N=8)	(N=6)	(N
piab_pos									
0	88 (88.0%)	108 (93.9%)	106 (89.8%)	44 (93.6%)	22 (88.0%)	24 (77.4%)	7 (87.5%)	6 (100%)	6 (
1	12 (12.0%)	7 (6.1%)	10 (8.5%)	3 (6.4%)	1 (4.0%)	5 (16.1%)	1 (12.5%)	0 (0%)	0 (
Missing	0 (0%)	0 (0%)	2 (1.7%)	0 (0%)	2 (8.0%)	2 (6.5%)	0 (0%)	0 (0%)	0 (

Recent Vaccine receipt (note many missing)

	Flu vaccine	NA	Other vaccine, describe:	Pneumonia vaccine	Overall
	(N=1)	(N=300)	(N=131)	(N=1)	(N=577)
piab_pos					
0	1 (100%)	268 (89.3%)	119 (90.8%)	1 (100%)	515 (89.3%)
1	0 (0%)	28 (9.3%)	11 (8.4%)	0 (0%)	52 (9.0%)
Missing	0 (0%)	4 (1.3%)	1 (0.8%)	0 (0%)	10 (1.7%)

Simple model

```
##
## Call:
## glm(formula = piab_pos ~ child_contact_u12m + child_contact_13_23m +
##     child_contact_24_59m + child_contact_5_10y + child_contact_over10y,
##     family = binomial(link = "log"), data = e3[e3$child_contact_13_23m !=
##         "Not answered", ])
##
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
## -0.8127  -0.4462  -0.3904  -0.3904   2.2877
##
## Coefficients:
##                            Estimate Std. Error z value Pr(>|z|)
## (Intercept)               -2.612098   0.180483 -14.473   <2e-16 ***
## child_contact_u12mYes     -0.004604   0.456736  -0.010   0.9920
## child_contact_13_23mYes    0.329057   0.639631   0.514   0.6069
## child_contact_24_59mYes    0.349261   0.425265   0.821   0.4115
## child_contact_5_10yYes     0.665195   0.338563   1.965   0.0494 *
## child_contact_over10yYes   0.260395   0.361795   0.720   0.4717
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 312.68  on 504  degrees of freedom
## Residual deviance: 305.21  on 499  degrees of freedom
##   (6 observations deleted due to missingness)
## AIC: 317.21
##
## Number of Fisher Scoring iterations: 7
```

```
##
## Call:
## glm(formula = piab_pos ~ child_contact_24_59m, family = binomial(link = "log"),
##     data = e3[e3$child_contact_13_23m != "Not answered", ])
##
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
## -0.6290  -0.4237  -0.4237  -0.4237   2.2160
##
## Coefficients:
##                         Estimate Std. Error z value Pr(>|z|)
```

```
## (Intercept)              -2.4553     0.1512 -16.242   <2e-16 ***
## child_contact_24_59mYes   0.7377     0.3743   1.971   0.0487 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 312.68  on 504  degrees of freedom
## Residual deviance: 309.60  on 503  degrees of freedom
##   (6 observations deleted due to missingness)
## AIC: 313.6
##
## Number of Fisher Scoring iterations: 6
```

There are some survey results missing. We lose information for these people. But we know their child contacts at other time points so can infer

```
##
## Call:
## glm(formula = piab_pos ~ any_contact_u12m + any_contact_13_23m +
##     any_contact_24_59m + any_contact_5_10y + any_contact_over_10y,
##     family = binomial(link = "logit"), data = e3_filled)
##
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
## -0.8501  -0.4348  -0.3146  -0.3146   2.4620
##
## Coefficients:
##                      Estimate Std. Error z value Pr(>|z|)
## (Intercept)          -2.98128    0.24779 -12.032  < 2e-16 ***
## any_contact_u12m      0.38731    0.39454   0.982  0.32626
## any_contact_13_23m   -0.09069    0.48724  -0.186  0.85234
## any_contact_24_59m    0.39925    0.41441   0.963  0.33535
## any_contact_5_10y     1.08035    0.33576   3.218  0.00129 **
## any_contact_over_10y  0.37318    0.33718   1.107  0.26839
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 347.55  on 566  degrees of freedom
## Residual deviance: 323.93  on 561  degrees of freedom
##   (10 observations deleted due to missingness)
## AIC: 335.93
##
## Number of Fisher Scoring iterations: 5
```