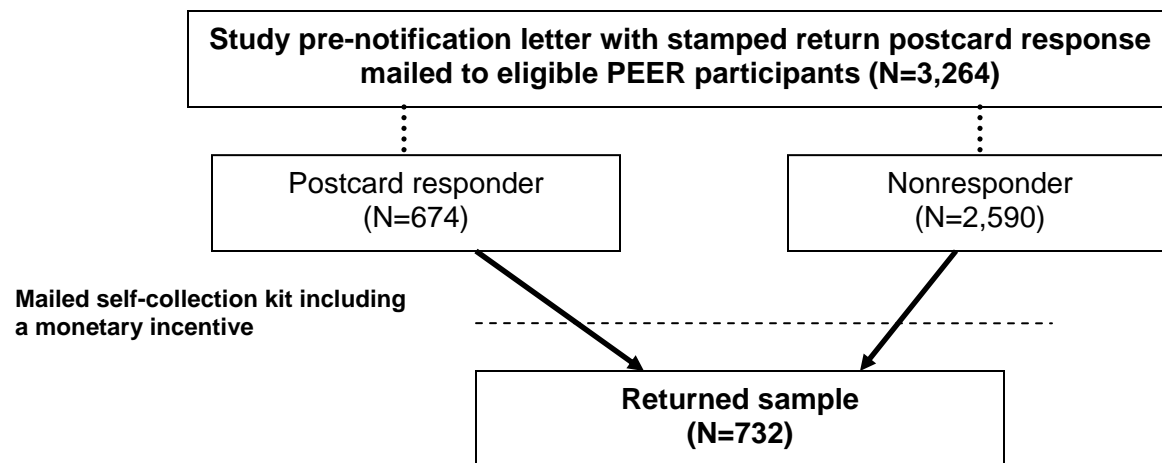


Supplement Figure 1 with text:

Obtaining a saliva (buccal cell) specimen

In order to test the advantage of a pre-notification letter, all eligible subjects were given and anonymized study identification number and contacted using a modification of the Dillman Tailored Design Method (TDM) (Dillman, 2000). Contact included an initial mailing (i.e., the pre-notification letter and a return-addressed “opt in” postcard) describing our new study. Subjects were told to return the postcard only if they were interested in providing a biosample (DNA). Those who did not respond then received an additional mailed reminder to return the original postcard if they were interested in participating in the study. As per the goals of our study, we did not initiate person-to-person contact with potential study subjects; however, the participation package and pre-notification letter included a phone number and email address so potential study subjects could contact the study team (Figure 1).

Excluding those who declined participation in response to the pre-notification letter, all other eligible subjects (whether they returned a pre-notification postcard or not) were sent a study participation package. It included an Oragene DNA Self-Collection Kit, to obtain saliva for buccal DNA; an incentive; return postage; and consent and assent forms. The consent form explained the purpose of the study and was to be signed by parents. Assent forms were supplied for children 7 years of age or older. All materials were labeled by barcode using the subject’s PEER identification number. A second mailing, a postcard reminder, was sent approximately 2 weeks after posting the participation packet.



Supplement Figure 1: Schematic of the process used to procure the biosamples.

Supplement Table 1: Basic demographics of the study population, those that agreed to participate via a postcard response, those who did not respond, and those who ultimately provided a sample of saliva.

Variable	Initial study population	Responder	Nonresponder	Returned Sample
Male	1513/3264 (46.4%)	302/674 (44.8%)	1211/2590 (46.8%)	340/732 (46.4%)
African American	1590/3264 (48.7%)	293/674 (43.5%)	1297/2590 (50.1%)	311/732 (42.5%)
Asthma	1578/3259 (48.4%)	371/674 (55.0%)	1207/2585 (46.7%)	388/732 (53.0%)
Seasonal allergy	2018/3259 (61.9%)	446/674 (66.2%)	1572/2585 (60.8%)	473/731 (64.7%)
Control				
Controlled	139/3255 (4.3%)	25/673 (3.7%)	114/2582 (4.4%)	21/732 (2.9%)
Good	1544/3255 (47.4%)	284/673 (42.2%)	1260/2582 (48.8%)	327/732 (47.5%)
Limited	1230/3255 (37.8%)	291/673 (43.2%)	939/2582 (36.4%)	305/732 (41.7%)
Uncontrolled	342/3255 (10.5%)	73/673 (10.8%)	269/2582 (10.4%)	79/732 (10.8%)
Dollar				
1	1087/3264 (33.3%)	225/674 (33.4%)	862/2590 (33.3%)	229/732 (31.3%)
2	1130/3264 (34.6%)	246/674 (36.5%)	884/2590 (34.1%)	240/732 (32.8%)
5	1047/3264 (32.1%)	203/674 (30.1%)	844/2590 (32.6%)	263/732 (35.9%)
Region				
New England	58/3264 (1.8%)	19/674 (2.8%)	39/2590 (1.5%)	21/732 (2.9%)
Middle Atlantic	274/3264 (8.4%)	73/674 (10.8%)	201/2590 (7.8%)	71/732 (9.7%)
East North Central	621/3264 (19.0%)	115/674 (17.1%)	506/2590 (19.5%)	136/732 (18.6%)
West North Central	187/3264 (5.7%)	51/674 (7.5%)	136/2590 (5.2%)	56/732 (7.6%)
South Atlantic	869/3264 (26.6%)	178/674 (26.4%)	691/2590 (26.7%)	184/732 (25.1%)
East South Central	626/3264 (19.2%)	115/674 (17.1%)	511/2590 (19.7%)	120/732 (16.4%)
West South Central	424/3264 (13.0%)	78/674 (11.6%)	346/2590 (13.4%)	89/732 (12.2%)
Mountain	80/3264 (2.4%)	16/674 (2.4%)	64/2590 (2.5%)	19/732 (2.6%)
Pacific	125/3264 (3.8%)	29/674 (4.3%)	96/2590 (3.8%)	36/732 (4.9%)
Age enrollment				
<3	513/3264 (15.7%)	93/674 (13.8%)	420/2590 (16.2%)	93/732 (12.7%)
3 to 6	1063/3264 (32.6%)	219/674 (32.5%)	844/2590 (32.6%)	234/732 (32.0%)
>6 to 9	713/3264 (21.8%)	162/674 (24.0%)	551/2590 (21.3%)	184/732 (25.1%)
>9	975/3264 (29.9%)	200/674 (29.7%)	775/2590 (29.9%)	221/732 (30.2%)
Income (\$)				
0 to 24,999	1117/3260 (34.3%)	197/672 (29.3%)	920/2588 (35.6%)	204/730 (28.0%)
25,000 to 49,999	624/3260 (19.1%)	139/672 (20.7%)	485/2588 (18.4%)	141/730 (19.3%)
50,000 to 74,999	382/3260 (11.7%)	93/672 (13.8%)	289/2588 (11.2%)	100/730 (13.7%)
75,000 to 99,999	231/3260 (7.1%)	66/672 (9.8%)	165/2588 (6.4%)	79/730 (10.8%)
> 100,000	269/3260 (8.2%)	78/672 (11.6%)	191/2588 (7.4%)	93/730 (12.7%)
Unknown	637/3260 (19.5%)	99/672 (14.7%)	538/2588 (20.8%)	113/730 (15.5%)