

## Supplementary files

### Supplementary material A: English translation and simplified version of the questionnaire (original French questionnaire available upon request)

#### *Individual characteristics and quota variables*

1. How many children aged below 20 do you have?
2. Precisely what is the age and sex of your child or children aged below 20?
3. Are you:
  - a. A man
  - b. A women
4. What is your age?
5. Please indicate your postal code
6. In which city do you live?
7. Currently, what is your main occupation?
  - a. Employee in the private sector
  - b. Employee in a public or national company
  - c. Employee in the public sector
  - d. Business owner
  - e. Looking for a first job
  - f. Looking for a job (you have worked before)
  - g. Retired
  - h. Stay-at-home parent
  - i. Pupil or student
  - j. In another situation
8. What is your profession, your professional situation?
  - a. Farmer
  - b. Contractor, small shop owner
  - c. Business owner of more than 10 employees
  - d. Liberal profession (except paramedical)
  - e. Professor / scientific profession
  - f. Executive, intellectual profession
  - g. Foreman, supervisor, paramedical profession, technician
  - h. Teacher
  - i. Employee
  - j. Service staff
  - k. Worker, farm worker
  - l. Retired
  - m. Pupil, student
  - n. Out of the workforce
9. Which is your household status?
  - a. You live alone
  - b. A member of the couple
  - c. The sole parent of the household
  - d. A child of the family
  - e. A friend or a family member housed by the family
  - f. Other (roommate, house staff)
10. Currently, what is the occupation of [reference person of the household]
  - a. Employee in the private sector

- b. Employee in a public or national company
  - c. Employee in the public sector
  - d. Business owner
  - e. Looking for a first job
  - f. Looking for a job (you have worked before)
  - g. Retired
  - h. Stay-at-home parent
  - i. Pupil or student
  - j. In another situation
11. What is the profession, the professional situation of [reference person of the household]?
- a. Farmer
  - b. Contractor, small shop owner
  - c. Business owner of more than 10 employees
  - d. Liberal profession (except paramedical)
  - e. Professor / scientific profession
  - f. Executive, intellectual profession
  - g. Foreman, supervisor, paramedical profession, technician
  - h. Teacher
  - i. Employee
  - j. Service staff
  - k. Worker, farm worker
  - l. Retired
  - m. Pupil, student
  - n. Out of the workforce

*Attitudes around vaccination and information*

1. Generally, are you very much, rather, rather not or not at all in favour of vaccination?
  - a. Very much in favour
  - b. Rather in favour
  - c. Rather not in favour
  - d. Not at all in favour
2. More precisely, would you say you are very much, rather, rather not or not at all in favour of the following vaccination?
  - a. Tdapc
  - b. Hepatitis B
  - c. BCG – tuberculosis
  - d. HPV – Papillomavirus
  - e. MMR
  - f. Seasonal flu
  - g. Pneumococcus
  - h. Meningitis (*Haemophilus influenza b*, meningococcus)

*We are now going to talk more precisely of vaccination against HPV-papillomavirus*

3. Today, do you feel well-informed on vaccination against HPV-papillomavirus?
  - a. Yes, very much
  - b. Yes, rather
  - c. No, rather not

- d. No, not at all
- 4. Have you ever searched for information about vaccination against HPV-papillomavirus?
  - a. Yes
  - b. No
- 5. Have you ever heard of debates or doubts about vaccination against HPV-papillomavirus?
  - a. Yes
  - b. No
- 6. If yes, what was it about? Specify
- 7. According to you, is the vaccine against HPV-papillomavirus safe (without serious side effects)?
  - a. Yes
  - b. No
  - c. I do not know
- 8. According to you, the vaccine against HPV-papillomavirus is used against (multiple choice possible)
  - a. Cervical cancer
  - b. Breast cancer
  - c. Genital cancers (vagina, penis)
  - d. Some anal cancers
  - e. Some head and neck cancers (tongue, throat)
  - f. Genital warts
  - g. AIDS
  - h. Genital herpes
  - i. Other infections or diseases
  - j. None of those infections or diseases
  - k. I do not know
- 9. And according to you, is the vaccine against HPV-papillomavirus effective against cervical cancer?
  - a. Yes
  - b. No
  - c. I do not know
  - d. One does not have enough scientific data for me to have an opinion

*For the following questions, answer for each of your children*

*For each daughter aged 11-19 years:*

- 1. Is your daughter aged [age] vaccinated against HPV-papillomavirus infections?
  - a. Yes, she is vaccinated
  - b. No, she is not vaccinated
  - c. I do not know or not entirely sure
- 2. And today, if one proposed you to update your daughter vaccination, would you accept to vaccinate her?
  - a. Yes,
  - b. No
  - c. I do not know

Information

3. Did you know that vaccination against HPV-papillomavirus could also concern boys?
  - a. Yes
  - b. No
4. For parents of unvaccinated girls or with uncertain vaccine status (for each daughter): If vaccination against HPV-papillomavirus infections was recommended in France to both boys and girls, would you have the intention to vaccinate your daughter?
  - a. Yes
  - b. No
  - c. I do not know

**Supplementary material B: Information about HPV-related diseases and vaccination including a male perspective, delivered to parents in the experiment (original French version)**

Les papillomavirus, ou HPV, sont des virus sexuellement transmissibles, qui peuvent, lorsque la maladie n'est pas suivie et traitée, occasionner certaines maladies (verrues génitales, cancers du col de l'utérus, et plus rarement cancers ORL, anaux ou cancers du pénis, de la vulve ou du vagin). Il existe un vaccin contre certaines formes d'infections HPV, recommandé aux jeunes filles avant le début de leur vie sexuelle.

Les verrues génitales touchent autant les femmes que les hommes. Les cancers liés aux papillomavirus sont quant à eux moins fréquents chez les hommes (cancer du pénis, de l'anus) que chez les femmes.

Aujourd'hui en France, la vaccination est recommandée chez les jeunes filles entre 11 et 14 ans, avant le début de leur vie sexuelle. Un rattrapage est possible jusqu'à l'âge de 20 ans (19 ans révolus).

Dans certains pays, la vaccination contre les infections à papillomavirus - HPV est proposée à l'ensemble des adolescents (garçons et filles), notamment pour les protéger directement contre ces maladies et afin de diminuer la transmission du virus.

**Supplementary material C: Descriptive analyses of the full sample of girls and the two subsamples.**

	Full sample of girls N=1,726	Unvaccinated girls or with an unknown status (n=1,147)	Unvaccinated girls or with an unknown status for whom the participating parent had no prior HPV vaccine intention (n=804)
<b>Parental characteristics</b>			
<b>Gender of responding parent</b>			
Female	1,172 (67.9%)	742 (64.7%)	539 (67.0%)
Male	554 (32.1%)	405 (35.3%)	265 (33.0%)
<b>Age category of responding parent</b>			
≤34 year old	55 ( 3.2%)	37 ( 3.2%)	23 ( 2.9%)
35-44 year old	744 (43.1%)	519 (45.2%)	349 (43.4%)
45-49 year old	528 (30.6%)	330 (28.8%)	253 (31.5%)
≥50 year old	399 (23.1%)	261 (22.8%)	179 (22.3%)
<b>Family type</b>			
Two-parent family	1,423 (82.4%)	951 (82.9%)	652 (81.1%)
Single-parent family	303 (17.6%)	196 (17.1%)	152 (18.9%)
<b>Gender of children in the household</b>			
Only girls	1,448 (83.9%)	957 (83.4%)	666 (82.8%)
Girls and boys	278 (16.1%)	190 (16.6%)	138 (17.2%)
<b>Number of children aged below 20 year old</b>			
One	401 (23.2%)	263 (22.9%)	193 (24.0%)
Two	830 (48.1%)	547 (47.7%)	380 (47.3%)
Three	368 (21.3%)	239 (20.8%)	162 (20.1%)
Four and more	127 ( 7.4%)	98 ( 8.5%)	69 ( 8.6%)
<b>Socioeconomic status of the household's reference person</b>			
High	861 (49.9%)	568 (49.5%)	388 (48.3%)
Low	754 (43.7%)	503 (43.9%)	365 (45.4%)
Inactive persons	111 ( 6.4%)	76 ( 6.6%)	51 ( 6.3%)
<b>Geographical area</b>			
Paris area	311 (18.0%)	214 (18.7%)	154 (19.2%)
North-east	377 (21.8%)	240 (20.9%)	160 (19.9%)
North-west	417 (24.2%)	273 (23.8%)	187 (23.3%)
South-west	190 (11.0%)	125 (10.9%)	90 (11.2%)
South-east	431 (25.0%)	295 (25.7%)	213 (26.5%)
<b>Size of urban area</b>			
Rural areas and small cities	732 (42.4%)	499 (43.5%)	361 (44.9%)
Medium-sized and big cities	725 (42.0%)	463 (40.4%)	308 (38.3%)

Paris area	269 (15.6%)	185 (16.1%)	135 (16.8%)
<b>Girls' characteristics</b>			
<b>Age category of the girl</b>			
11-14 year old	860 (49.8%)	629 (54.8%)	410 (51.0%)
15-19 year old	866 (50.2%)	518 (45.2%)	394 (49.0%)
<b>HPV vaccine status</b>			
She is vaccinated	579 (33.6%)	NA	NA
She is not vaccinated	997 (57.8%)	997 (86.9%)	733 (91.2%)
Parent is unsure	150 (8.7%)	150 (13.1%)	71 (8.8%)
<b>Parental attitudes and knowledge on (HPV) vaccination</b>			
<b>HPV vaccine is safe</b>			
Yes	460 (26.7%)	147 (12.8%)	47 (5.8%)
No	369 (21.4%)	325 (28.3%)	298 (37.1%)
I do not know	897 (52.0%)	675 (58.8%)	459 (57.1%)
<b>HPV vaccine is effective</b>			
Yes	718 (41.6%)	322 (28.1%)	159 (19.8%)
No	76 ( 4.4%)	73 ( 6.4%)	65 ( 8.1%)
I do not know	542 (31.4%)	452 (39.4%)	321 (39.9%)
Not enough data to conclude	390 (22.6%)	300 (26.2%)	259 (32.2%)
<b>Knowledge of debates on HPV vaccination</b>			
Yes	845 (49.0%)	515 (44.9%)	371 (46.1%)
No	881 (51.0%)	632 (55.1%)	433 (53.9%)
<b>Declared level of knowledge on HPV</b>			
Well-informed	934 (54.1%)	488 (42.5%)	316 (39.3%)
Ill-informed	792 (45.9%)	659 (57.5%)	488 (60.7%)
<b>Knowledge score on diseases caused by HPV</b>			
Score 1 (very low)	325 (18.8%)	265 (23.1%)	181 (22.5%)
Score 2 (average)	1,035 (60.0%)	652 (56.8%)	457 (56.8%)
Score 3 (good)	333 (19.3%)	212 (18.5%)	152 (18.9%)
Score 4 (very good)	33 ( 1.9%)	18 ( 1.6%)	14 ( 1.7%)
<b>Knowledge of HPV vaccine for boys</b>			
Yes	404 (23.4%)	232 (20.2%)	145 (18.0%)
No	1,322 (76.6%)	915 (79.8%)	659 (82.0%)
<b>In favour of vaccination in general</b>			
In favour	1,533 (88.8%)	968 (84.4%)	638 (79.4%)
Not in favour	193 (11.2%)	179 (15.6%)	166 (20.6%)

HPV: Human Papillomavirus.