

**PRINCETON SURVEY RESEARCH ASSOCIATES for
THE GENETICS AND PUBLIC POLICY CENTER**

**Public Awareness and Attitudes About
Genetic Technology**

Final questionnaire
October 14, 2002

N=1,200 adults age 18 and older
Field Start Date: October 15, 2002
Field End Date: October 30, 2002

1. How closely do you follow news reports about developments in science and medicine? Would you say you follow this type of news very closely, somewhat closely, not too closely, or not closely at all?
 - 1 Very closely
 - 2 Somewhat closely
 - 3 Not too closely
 - 4 Not closely at all
 - 8 Don't know
 - 9 Refused

2. I'm going to describe a few of these developments that have been in the news and would like you to tell me how much you have heard or read about each of them. How much have you heard or read about this—a great deal, something but not very much, or nothing at all?
- a. Genetic testing, a technique to find out whether a person HAS or is likely to DEVELOP certain inherited diseases or characteristics.
 - b. Genetic engineering, a technique to change the DNA, or building blocks of life, in order to produce particular characteristics.
 - c. Cloning, the process of making a genetic copy of an animal from a single cell.
 - d. In vitro fertilization, a process to help people have a child by removing eggs from a woman's ovaries, fertilizing them in the laboratory with sperm, then implanting them in a woman's womb, where they grow and are born like other babies.

CATEGORIES:

- 1 A great deal
- 2 Something, not much
- 3 Nothing
- 8 Don't know
- 9 Refused

3. The next few questions will be about genetic testing. As far as you know, about how many different kinds of genetic tests are now available to identify whether or not a person has or is likely to develop a certain disease or characteristic—is it fewer than 50 tests, 50 to 200 tests, 200 to 1,000 tests, or more than 1,000 tests?

- 1 Fewer than 50
- 2 50 to 200
- 3 200 to 1,000
- 4 More than 1,000
- 8 Don't know
- 9 Refused

4. As far as you know, does the government regulate the quality and safety of genetic testing, or not?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

5a. Do you think the government SHOULD regulate the quality and safety of genetic testing, or not?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

ASK IF Q4=1 AND Q5a=1

5b. Do you think the government's genetic testing regulations should be more or less strict than they are now, or are they about right?

- 1 More strict
- 2 Less strict
- 3 About right
- 8 Don't know
- 9 Refused

6. As far as you know, is it scientifically possible today to use genetic testing to find out if a person has a greater than average chance of developing certain kinds of cancer?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

7. As far as you know, is it scientifically possible today to use genetic testing to find out if a person has a greater than average chance of developing a mental illness such as depression?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

8. In your opinion, if a genetic test shows that someone has a gene that increases the risk of disease, who else do you think has the right to know the results? Does the person's (**INSERT AND ROTATE**) have the right to know, or not?
(INTERVIEWER, USE THIS PROBE IF NECESSARY: "Do you think they have the right to know even if the person would rather keep the results private?")

- a. Employer
- b. Insurance company
- c. Husband, wife or partner
- d. Immediate family

CATEGORIES:

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

9. As far as you know, is it scientifically possible today to use genetic testing during PREGNANCY to find out whether the baby will develop a disease such as sickle cell disease or cystic fibrosis?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

10. As far as you know, is it scientifically possible today to use genetic testing during pregnancy to find out whether the baby will have a high IQ or intelligence?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

11a. In general, do you approve or disapprove of the use of genetic testing during pregnancy to find out whether the baby will develop a serious genetic disease?

- 1 Approve
- 2 Disapprove
- 8 Don't know
- 9 Refused

11b. Do you approve or disapprove of the use of genetic testing during pregnancy to find out whether the baby will have desirable characteristics such as strength or high intelligence?

- 1 Approve
- 2 Disapprove
- 8 Don't know
- 9 Refused

12. **(READ IF FEMALE:** Have you, or) Has anyone you know well ever tried to become pregnant by using the process of in vitro fertilization? **(IF NECESSARY:** In vitro fertilization is the process where eggs are removed from a woman's ovaries, fertilized in the laboratory with sperm, then implanted in a woman's womb, where they grow and are born like other babies.)

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

13. As far as you know, does the government regulate the quality and safety of in vitro fertilization, or not?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

14a. Do you think the government should regulate the quality and safety of in vitro fertilization, or not?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

ASK IF Q13=1 AND Q14a=1

14b. Do you think the government's in vitro fertilization regulations should be more or less strict than they are now, or are they about right?

- 1 More strict
- 2 Less strict
- 3 About right
- 8 Don't know
- 9 Refused

15. In general, do you approve or disapprove of the use of in vitro fertilization?

- 1 Approve
- 2 Disapprove
- 8 Don't know
- 9 Refused

16. Genetic testing can be done on fertilized eggs produced through in vitro fertilization to select and implant only certain eggs. For example, a parent may want to implant only eggs with no genetic diseases, or those of a specific sex, or that have other characteristics. This technology is called PGD. Before today, had you heard about PGD technology?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

ASK IF Q16=1

17. As far as you know, does the government regulate the quality and safety of PGD, or not?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

18a. Do you think the government should regulate the quality and safety of PGD, or not?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

ASK IF Q17=1 AND Q18a=1

18b. Do you think the government's PGD regulations should be more or less strict than they are now, or are they about right?

- 1 More strict
- 2 Less strict
- 3 About right
- 8 Don't know
- 9 Refused

19. Would you approve or disapprove if parents were offered a way to use PGD to (INSERT AND ROTATE)? (How about in order to (INSERT)—would you approve or disapprove?)
- a. Choose the sex of their child
 - b. Make sure their baby does not have a serious genetic disease
 - c. Make sure their baby has desirable characteristics such as high intelligence and strength
 - d. Make sure their baby does not have a tendency to develop a disease like cancer when he or she is an adult
 - e. Make sure their baby would be a good match to donate his or her blood or tissue to a brother or sister who is sick and needs a transplant

CATEGORIES:

- 1 Approve
- 2 Disapprove
- 8 Don't know
- 9 Refused

20. Next, I have a few questions about genetic engineering. As far as you know, is it scientifically possible today to use genetic engineering to change a baby's genetic make-up before it is born to prevent it from having a genetic disease?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

21. As far as you know, is it scientifically possible today to change a baby's genetic make-up before it is born so it is smarter, stronger, or better looking?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

22. As far as you know, does the government regulate the quality and safety of genetic engineering, or not?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

23a. Do you think the government should regulate the quality and safety of genetic engineering, or not?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

ASK IF Q22=1 AND Q23a=1

23b. Do you think the government's genetic engineering regulations should be more or less strict than they are now, or are they about right?

- 1 More strict
- 2 Less strict
- 3 About right
- 8 Don't know
- 9 Refused

24. Would you approve or disapprove if parents were offered a way to change their own genes in order to have children who would be smarter, stronger, or better looking?

- 1 Approve
- 2 Disapprove
- 8 Don't know
- 9 Refused

25. Would you approve or disapprove if parents were offered a way to change their own genes in order to prevent their children from having a genetic disease?

- 1 Approve
- 2 Disapprove
- 8 Don't know
- 9 Refused

26. Now, on the subject of cloning, as far as you know, is it scientifically possible today to create a clone, or genetic copy, of animals like cows or sheep?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

27. Do you approve or disapprove of scientists working on ways to clone animals?

- 1 Approve
- 2 Disapprove
- 8 Don't know
- 9 Refused

28. As far as you know, is it scientifically possible today to create a clone, or genetic copy, of a human being?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

ASK IF Q28=1

29. Do you believe anyone has actually cloned a human already?

- 1 Yes/Probably
- 2 No
- 8 Don't know
- 9 Refused

30. As far as you know, does the government have any regulations to limit the cloning of humans, or not?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

31a. Do you think the government should have regulations to limit the cloning of humans, or not?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

ASK IF Q30=1 AND Q31a=1

31b. Do you think the government's regulations to limit the cloning of humans should be more or less strict than they are now, or are they about right?

- 1 More strict
- 2 Less strict
- 3 About right
- 8 Don't know
- 9 Refused

32. Do you approve or disapprove of scientists working on ways to clone humans?

- 1 Approve
- 2 Disapprove
- 8 Don't know
- 9 Refused

33. You have told me how you feel about a number of different topics—genetic testing, in vitro fertilization, genetic engineering, and cloning. In general, would you say you hold your opinions on these issues very strongly, somewhat strongly, not too strongly, or not strongly at all?

- 1 Very strongly
- 2 Somewhat strongly
- 3 Not too strongly
- 4 Not strongly at all
- 5 It depends/mixed (**VOLUNTEERED**)
- 8 Don't know
- 9 Refused

34. Before today, how much had you thought about these topics—a lot, some, only a little, or not at all?

- 1 A lot
- 2 Some
- 3 Only a little
- 4 Not at all
- 5 It depends/mixed (**VOLUNTEERED**)
- 8 Don't know
- 9 Refused

35a. When you think about these topics, which of the following, if any, worries you the most?

- 1 That using these technologies is too much like playing god
- 2 That the technologies are too new to be used safely
- 3 That most people will not be able to afford these technologies
- 4 That the technologies can easily be used for the wrong purposes
- 5
- Or, don't you worry about any of these?
- 6 It depends/Mixed (**DO NOT READ**)
- 8 Don't know (**DO NOT READ**)
- 9 Refused (**DO NOT READ**)

35b. When you think about these topics, which of the following, if any, do you think is the greatest benefit? (**READ 1-5 AND ROTATE ALTERNATIVES 1-4**)

- 1 That parents can improve the chances their baby will be healthy
- 2 That parents can improve the chances their baby will have the features they want
- 3 That the overall cost of health care in America will be less
- 4 That certain genetic diseases can be wiped out forever
- 5 Or, don't you think any of these are benefits?
- 6 It depends/Mixed (**DO NOT READ**)
- 8 Don't know (**DO NOT READ**)
- 9 Refused (**DO NOT READ**)

36. When you think about these topics, do you think of them mainly in terms of health and safety or mainly in terms of religion and morality?

- 1 Mainly health and safety
- 2 Mainly religion and morality
- 3 Mixed (**VOLUNTEERED**)
- 8 Don't know
- 9 Refused

DEMOGRAPHICS

Finally, I have just a few questions so we can describe the people who took part in our survey . . .

D2. Are you married, living as married, widowed, divorced, separated, or have you never been married?

- 1 Married
- 2 Living as married
- 3 Widowed
- 4 Divorced
- 5 Separated
- 6 Never married
- 9 Refused

D5. What is your age?

ASK ALL FEMALES

D3. If you have ever been pregnant, did you have any tests done to see whether the fetus had a genetic disease?

- 1 Yes
- 2 No
- 3 Never pregnant (VOLUNTEERED)
- 8 Don't know
- 9 Refused

D4a. Do you have any children, including any step children and adoptive children?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

ASK IF NO CHILDREN AND AGE LESS THAN 50

D4b. Do you think you would like to have children sometime in the future?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

ASK IF NO CHILDREN AND AGE 50+

D4c. Do you feel you would like to have had children?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

D6. What is the last grade or class you completed in school?

D7. Are you of Hispanic or Latino background, such as Mexican, Puerto Rican, Cuban or other Spanish background?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

D8. What is your race? Are you white, black, Asian, American Indian or some other race?

- 1 White
- 2 Black or African-American
- 3 Asian or Pacific Islander
- 4 American Indian or Alaskan Native
- 5 Mixed-race
- 6 Other—**SPECIFY**
- 8 Don't know
- 9 Refused

D9. Last year, that is, in 2001, approximately what was your total household income from all sources, before taxes – just tell me when I get to the right category.

- 1 Less than \$10,000
- 2 \$10,000 to under \$20,000
- 3 \$20,000 to under \$30,000
- 4 \$30,000 to under \$40,000
- 5 \$40,000 to under \$60,000
- 6 \$60,000 to under \$100,000
- 7 \$100,000 or over
- 8 Don't know
- 9 Refused

D10. What is your religious preference – Protestant, Roman Catholic, Jewish, Muslim, or some other religion?

- 1 Protestant
- 2 Roman Catholic/Catholic
- 3 Jewish
- 4 Any Orthodox Christians (Greek, Russian, Eastern Orthodox)
- 5 Mormon (The Church of Jesus Christ of Latter-Day Saints)
- 6 Muslim/Islam
- 7 Buddhist or Hindu
- 8 Other religion
- 9 No religion/Atheist/Agnostic
- 99 Don't know/Refused

ASK IF D10=1,2,4,5,8

D11. Do you consider yourself to be a born-again, or evangelical, Christian, or not?

- 1 Yes
- 2 No
- 8 Don't know
- 9 Refused

D12. In politics today, do you consider yourself a Republican, Democrat, or Independent?

- 1 Republican
- 2 Democrat
- 3 Independent
- 4 **(VOL)** Other party
- 5 **(VOL)** No preference
- 8 Don't know
- 9 Refused

D13a. Have you, or has anyone in your immediate family, ever had a genetic disease?

D13b. Have you, or has anyone in your immediate family, ever had a genetic test?