



RÉPUBLIQUE
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IRSN

INSTITUT DE RADIOPROTECTION
ET DE SÛRETÉ NUCLÉAIRE

BAROMETER 2022

THE PERCEPTION OF RISKS AND SECURITY
IN FRANCE

<https://barometre.irsn.fr/>



For more than 30 years, the IRSN Barometer has been following annually the perception of risks and security by the French people. This continuous study provides precious insight to better understand risk perception, which in turn helps IRSN better handle risk assessment.

The Barometer focuses on four major topics:

- 1) the current concerns of the French,
- 2) their views on science and expertise,
- 3) their perception of various risk situations,
- 4) their opinions on nuclear matters and safety.

In the 2022 edition as well as in the previous ones since 1997, the surveys were conducted during the preceding fall (from Nov 15th until Nov 22nd) on a representative sample of the French population. The questionnaire remained with marginal add-ons and removals to guarantee stability among the data. The two changes implemented last year were maintained: the sample size has been increased to 2000 instead of 1000 the previous years. The survey will now be permanently conducted online instead of in person since 2020. Both changes improve the statistical accuracy and relevance of the data collected. **All results are available on <https://barometre.irs-n.fr>**

In 2021, **climate change and health were equally the main concerns of the French** with 22 % of answers each. Health loses 4 points while climate change gains 7 and reaches an all-time high. Terrorism (10 %), second last year declines in favor of crime (15 %). Terrorisms is now also preceded by poverty and disenfranchisement (13 %) and global geopolitical instability (11 %). Unemployment is at an all-time low of 6 %. Social and economic concerns are lower this year than usual, although half of the health concerns are of that nature (the cost and accessibility, the economic consequences of the pandemic).

Among the **main environmental concerns, climate change** remains the front runner (40 %, +1 point). The gap keeps widening with other subjects, the disappearance of animal species (12 %) and the damage caused by natural disasters (11 %).

Regarding the perception of disasters, nuclear power plants remain in 2021 (27 %) the facilities most liable to provoke an accident but with an all-time low of answers. They are followed by radioactive waste storage facilities (20 %) and chemical plants (18 %). In the aftermath of the Covid-19 pandemic, virus research laboratories

reached a peak of 14 % (+ 1 point). **The Chernobyl and Fukushima accidents are still the disasters perceived as the most frightening**, with 50 % and 20 % of answers, in front of the December 26th 2004 tsunami in the Indian Ocean.

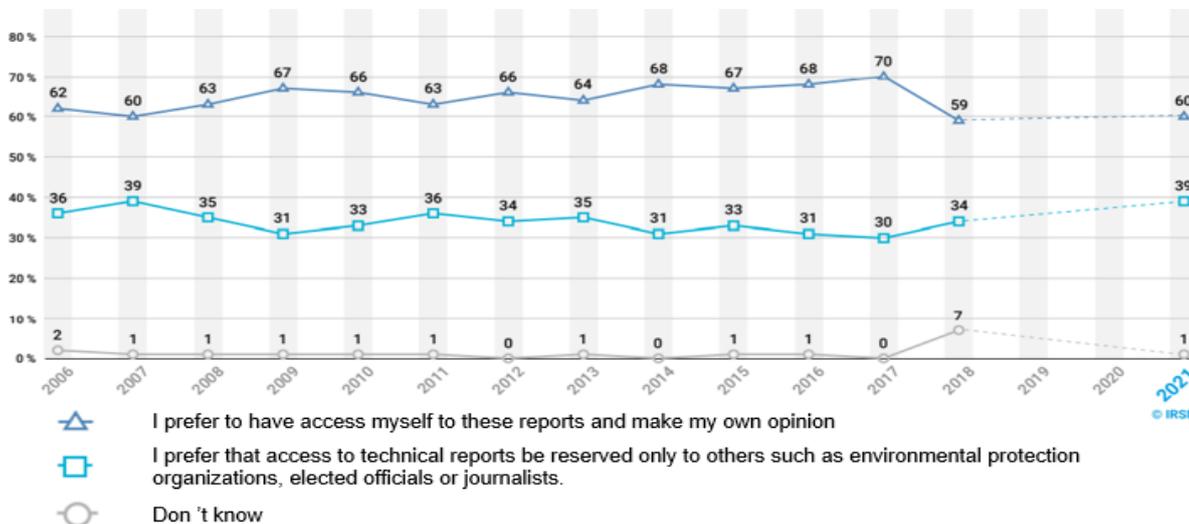
The image of science and experts tarnished by the 2020 health crisis continues to improve. In 2021, 64 % of the French trust scientific institutions (+3 points) and 54 % have a positive opinion on scientific experts (+10 points since May 2020), 8 % have a bad opinion (-3 points). The most expected quality for a scientific expert is still **competency** (31 %) before honesty in their scientific approach (26 %) and independence (22 %).

The French re-affirm **their inclination towards having officials consult experts**. They consider that the existence of the scientific Council is a good thing (84 %, + 2 points) and 61 % of them consider that officials do not take enough into account the opinions of scientific experts (+ 4 points).

The demand for a **wide access to quality information** is reinstated in 2021. The French remain 91 % to consider that it is necessary to make available to all comprehensible information on installation's risks. They are 74 % to consider that **making the reports of expert bodies public** is a priority (+3 points).

Nevertheless, 50 % don't wish to participate themselves to public meetings about at risk facilities and 39 % rather have community representatives or members of the civil society (NGO's, journalists...) have access to these reports. Thus, there is an increased demand for information access but also an **increased demand for mediation** in order for it to be understandable. For instance, among the people who do not wish to participate in public meeting, the lack of competency is the most affirmed reason (52 %).

Part 2-Question 7: **Expertise on technological risks is translated into reports to the competent authorities, who can decide to authorize or not an industrial operation. About these expertise reports, which of these two options do you prefer?**



Among the **32 areas** featured in the Barometer, **air pollution** (71 % of « high risk ») joins the top three for the first time since 2015. It is behind cancer (78 %) but in front of terrorism (70 %), last year's front runner. **Climate risks** sustain an above average level in comparison to their historic levels. Regarding **nuclear risks**, radioactive waste (48 %) and nuclear power plants (39 %) remain at the observed historic low for three years.

A new question was introduced this year to put in perspective **risks perceived « for the French » with risks perceived « for oneself and their surroundings »**. The latter is systematically lower. For oneself and their surroundings, cancer is the highest risk (51 % of « high risk »). The largest gap between risks « for the French »

and « for oneself and their surroundings » is with drugs, 69 % for the French and 25 % for oneself.

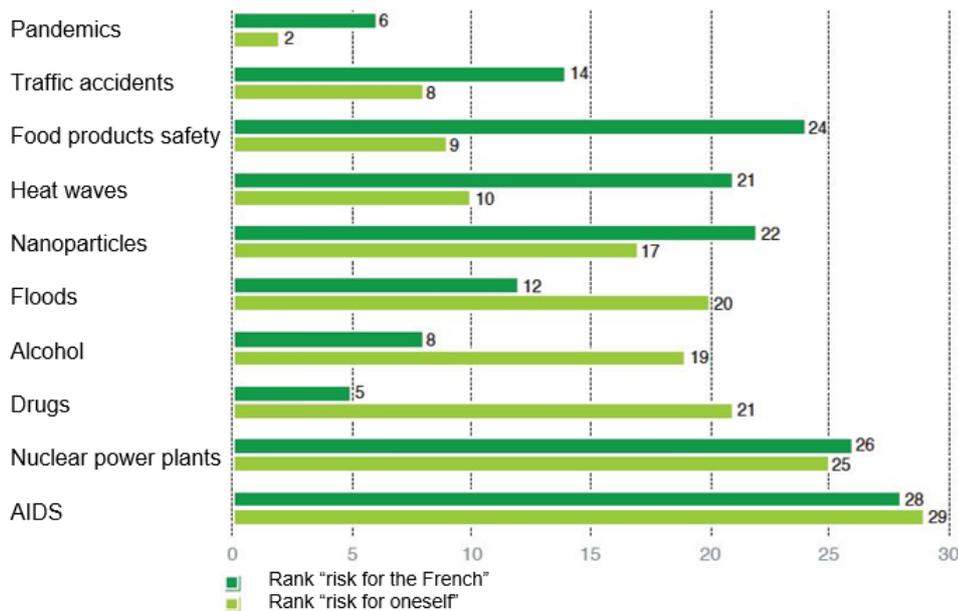
The introduction of this new question redefines the **hierarchy of risks** when asked for oneself or for society

All results of the annual survey are available on <https://barometre.irsn.fr> with more than two hundred figures.

in general. Addictive behaviors (drugs, alcohol, tobacco...) are downplayed on the individual level. The pandemic and diffuse pollutions are relatively downplayed on the social level in comparison to the individual. Nuclear power plants are at the bottom of the hierarchy on both levels while nuclear waste is five ranks higher "for the French" (18th), than "for oneself" (23rd).

Part 3-Question 1: In each of the following areas, do you consider that the risks for the French population in general are... & Question 2: how about for yourself and the ones close to you, do you consider that the risks are...?

November 2021 – Ranking of the « high » ("high" and "very high") answers for 10 of the 32 items.



The French's **trust** in authorities to protect them from at risk situations is the highest for **AIDS** (41 %), terrorism and traffic accidents (both 38 %). It remains the lowest for diffuse pollutions. For the third time, respondents have been asked an open question.

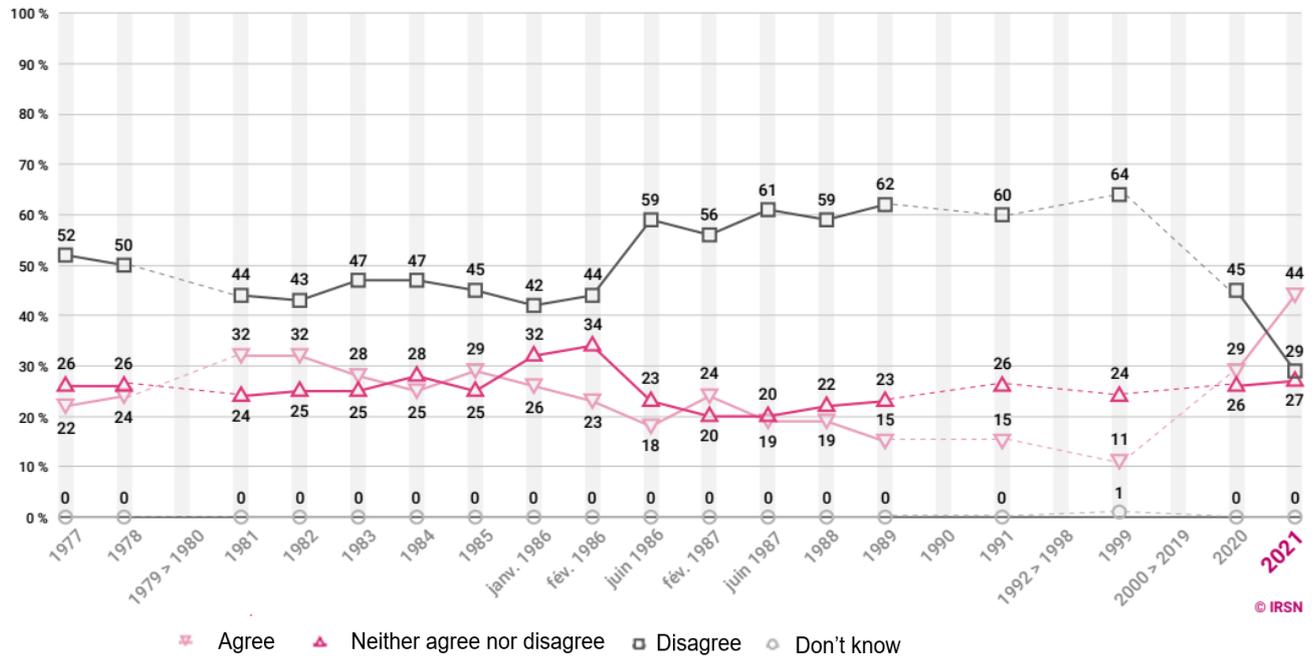
This year, they expressed the five words that they associate with « **vaccine** ». The goal was to determine what kind of ideas are associated with it. The results presented in the word cloud form can be reused by researchers. At first, we see that the **vaccine is mainly associated with positive terms** such as « security » or « prevention ». Then the results are more descriptive (Covid, illness, virus...) and afterwards optimistic (hope, solution, freedom). Feelings of fear, doubt or reject also appear on a more minor level (dictatorship, hoax, cash for the pharmaceutical industry...), about 10 % of entries.

This year's Barometer summarizes the French's opinion on **nuclear energy**. Their **opinion has sensibly improved** since last year. In hindsight, their outlook is much more positive about the development of the nuclear program. The French are 60 % to affirm that building nuclear power plants was a good thing, 16% disagree. The significant change is that the French used to have a "realistic" point of view about the long term energy policy of France. Beyond a good or bad choice, the nuclear program was "realistic". The share of the French choosing the "realistic option" was of 54 % between 1988 and 2000 and has fallen to 41 % today which nearly equals "a good choice" (39 %). They are more favorable to a long term continuation of the nuclear program, 44% are in favor of **building new power plants**, and 29 % are opposed. At last, 46 % oppose shutting down nuclear power plants while 26 % are in favor (- 8 points since last

year). As more of the French are favorable to a continuation of the nuclear program, **less are favorable to wind powered electricity** which's production has

tripled since 2010. They are 31 % to accept living near a wind farm, a significant decrease since the years 2008-2017 when the average was 50 %.

Part 4- Question 5-1 : **We need to build nuclear power plants.**



The French's favorable outlook on nuclear energy seems to influence their perception of the risks induced by facilities. The **impact on health and the environment** is perceived like last year as relatively low. The French are 42 % to answer that "around nuclear facilities, the population is as healthy as elsewhere". On average, this affirmation received 23 % of positive answers between 2007 and 2018.

The two main arguments in favor of nuclear energy are **energy independence** (36 %) and its reduced cost (22 %). As environmental concerns increase, the main arguments in favor of nuclear energy remain economic and not the possibility of reducing greenhouse gas emissions (17 %). The main arguments against it is **nuclear waste production** (35 %) for the second time only and the risk of an accident (26 %). The inversion of the ranking of these two arguments seen last year is confirmed as we move further away in time from the Fukushima accident.

Regarding the management of **nuclear waste**, a vast majority of the French (68 %) affirm that the most reasonable solution is to "**make a decision as soon as possible and apply it right away**". Only 6 % would prefer to "leave the choice up to the next generations". The results for this question are remarkably stable since 2005. Also, 35 % (- 7 points since 1992) consider that it

isn't possible to store nuclear waste safely while 30 % consider the opposite. Thus 35 % remain undecided. As the French are generally more in favor of building nuclear power plants than in the past, the results about nuclear waste are more stable.

The expectation of a **high level of safety** is confirmed by 87 % of the French who affirm that "the managers of nuclear facilities must protect their installations against all risks, even the very unlikely". The French are 77 % to consider that it is a priority to **develop research on safety** for existing reactors. As for the perceived outcomes of security measures, 60 % of the French on average since 2019 consider that "all precautions are taken to assure the highest level of safety in nuclear power plants", up from an average of 42 % between 2007 and 2018.

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At last, the **CNRS, ASN and IRSN** are once again perceived as the most **competent and trustworthy** bodies in the field of nuclear energy. Scientific bodies, experts and operators are perceived as competent and trustworthy. Labor union, journalist and politicians are considered less competent and trustworthy.

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