



Harmonisation des enquêtes avec le projet européen European Health Examination Survey (EHES)

Illustration via l'Étude de santé sur l'environnement, la biosurveillance,
l'activité physique et la nutrition (Esteban)

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▪ Une motivation scientifique... mais aussi politique

⇒ Les Etats Membres (EM) et la Commission européenne (CE) souhaitent depuis longtemps disposer de données comparables :

- entre les EM
- Et dans le temps entre les EM (ainsi qu'au niveau régional)

sur :

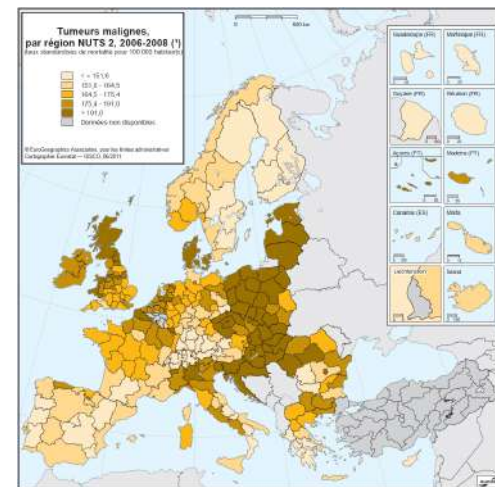
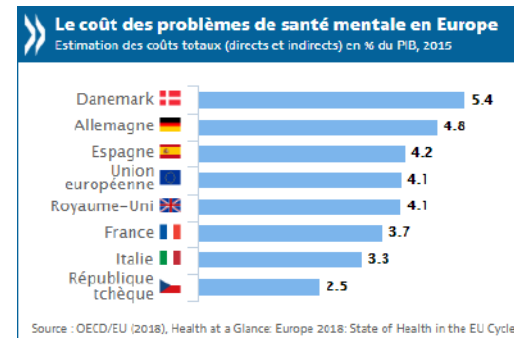
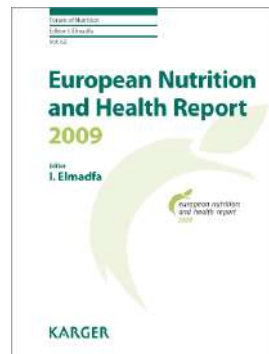
- L'état de santé
- Les déterminants de santé

Pour mieux définir, piloter et évaluer les politiques de santé publique, mieux dimensionner l'offre de soins et de prévention, garantir le bien être, la bonne prise en charge et le vieillissement en bonne santé.

⇒ Les enquêtes avec examen de santé font partie du périmètre concerné car ce sont les seules sources pour certaines dimensions de la santé : surpoids et obésité mesurés et fraction non diagnostiquée de l'hypertension artérielle, des dyslipidémies, du diabète...

Une enquête européenne avec examen de santé Pourquoi et comment ?

- De multiples expériences plus ou moins pérennes, plus ou moins standardisées :



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Pourquoi et comment ?

■ Un cadre réglementaire plus ou moins contraint

Données de mortalité :

L 354/70	FR	Journal officiel de l'Union européenne	31.12.2008
<p>RÈGLEMENT (CE) N° 1338/2008 DU PARLEMENT EUROPÉEN ET DU CONSEIL du 16 décembre 2008 relatif aux statistiques communautaires de la santé publique et de la santé et de la sécurité au travail (Texte présentant de l'intérêt pour l'EEE)</p>			

Enquête européenne de santé par interview :

L 47/20	FR	Journal officiel de l'Union européenne	20.2.2013
<p>RÈGLEMENT (UE) N° 141/2013 DE LA COMMISSION du 19 février 2013 portant application du règlement (CE) n° 1338/2008 du Parlement européen et du Conseil relatif aux statistiques communautaires de la santé publique et de la santé et de la sécurité au travail, en ce qui concerne les statistiques fondées sur l'enquête européenne par interview sur la santé (EHIS) (Texte présentant de l'intérêt pour l'EEE)</p>			

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Pourquoi et comment ?

- **Des expériences et des compétences inégales entre EM**

15 pays ont réalisé des enquêtes avec examen de santé... pour la plupart récemment...
et généralement une seule fois

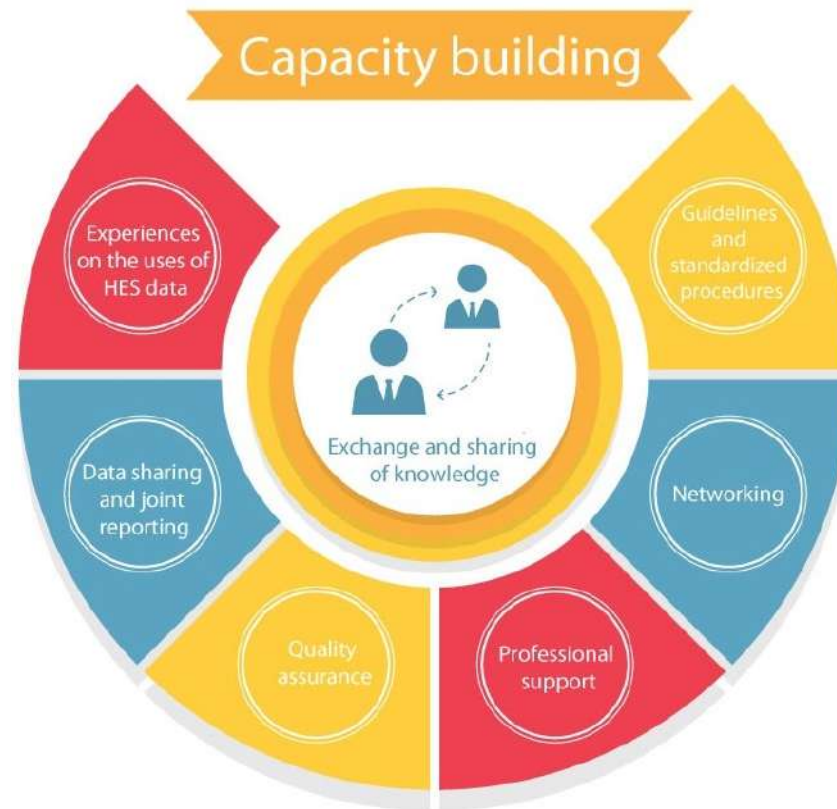


Logistique
complexe \Rightarrow coût
élevé

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Pourquoi et comment ?

- **Mise en place d'un centre de ressources coordonné par le THL finlandais...**



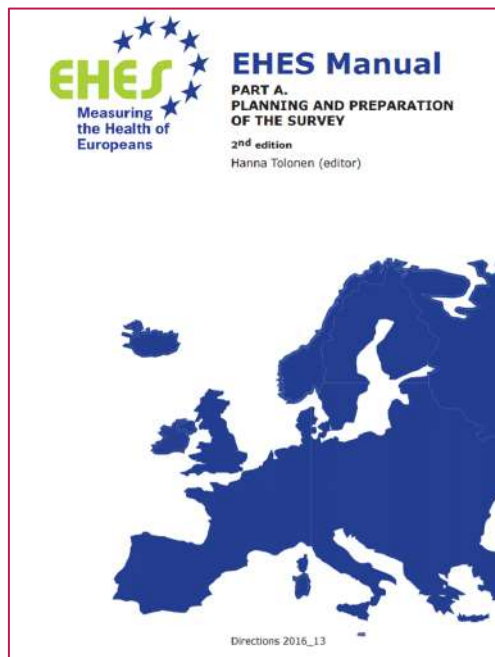
- **... mais pas de financement pérenne...**

- **Recherche d'un « dénominateur commun »**
 - Indicateurs de base (Core measurements) :
 - Mesures anthropométriques: poids, taille et tour de taille
 - Pression artérielle
 - Prélèvements sanguins : cholestérolémie (total et HDL-c), glycémie à jeun et hémoglobine glyquée (HbA1c)
 - Questionnaires : position socio-économique, santé perçue et conditions chroniques, consommations de médicaments (aujourd'hui accès aux bases de remboursement de l'Assurance maladie), poids et taille déclarés, statut tabagique
 - Indicateurs additionnels :
 - Tour de hanche, handgrip test, recueil d'urine....
 - Autres mesures :
 - Biosurveillance, marqueurs de l'état nutritionnel, spirométrie...

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Pourquoi et comment ?

- Des procédures standardisées, des outils d'entraînement, des boîtes à outils...



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Pourquoi et comment ?

EHES Manual

http://www.ehes.info/manuals/EHES_manual/EHES_manual.htm

Version: 2nd edition 2016

2. Target population and sample size

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Population ciblée : au moins 25-65 ans

Au moins 4 000 participants
(avec au moins 500 par
classe d'âge : 25-34, 35-44,
45-54, 55-64 ans)

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Pourquoi et comment ?

EHES Manual

http://www.ehes.info/manuals/EHES_manual/EHES_manual.htm

Version: 2nd edition 2016

6. Timing of the fieldwork and order of measurements

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Tous les 5-6 ans
(alternative ⇒ construire
un système de recueil
en continu : Nhanes ou
HSE)

Nécessité de reconduire
l'étude à la même période de
l'année, idéalement recueil
sur une année pour tenir
compte de la saisonnalité

Factor	Possible effects on participation rate
Pre-notification	Pre-notification either by mail or SMS prior to invitation to participate in the survey usually raises the participation rate (Phillips 2002, Spry 1989, Tolonen 2014).
Phone call	Phone contact is an effective way of increasing participation rate (Heistaro 2008, Lundqvist 2016).
Multiple contacts	Multiple contacts significantly increase participation rates (Porter 2004).
Flexibility in scheduling appointment	Offering evening and weekend times, drop in visits and different locations for measurements increases participation especially among busy people (Heistaro 2008).
Relevance and importance	Survey relevance and importance to the survey recipient is an important factor when designing surveys and key messages. Highly relevant surveys raise the participation rates. (Porter 2004, Phillips 2002)
Personal fulfilment	Feeling valued and appreciated increases the willingness to participate (Phillips 2002). Signature or introduction in the invitation letter written by a respected person may increase the feeling of being valued.
Statements of confidentiality	Loss of privacy when providing biologic specimens can be a major concern affecting participation rate. This is why it is important to explain confidentiality issues to the participants (Samanic 2003).
Requests for help	People with personal tendency to altruism tend to follow a norm of social responsibility and may be more willing to take part in the survey, if a phrase "it would really help us..." is used in the invitation (Porter 2004, Sinicrope 2009).
Sponsorship	Surveys sponsored by academics or governmental organizations have higher participation rates in general than surveys sponsored by commercial organizations (Porter 2004).
Mass media campaigns	Raising public awareness about the survey: the importance in national, community and individual levels.
Home visits	Home visits raise the participation rate if a person is unable (e.g. difficulties in functional capacity) or unwilling to participate otherwise (Heistaro 2008, Lundqvist 2016), or when people prefer or are used to home visits in their health services.
Domestic vs international use of research samples	Participants may be more willing to allow samples to be used for domestic rather than international studies (Tupasela 2009).
Several languages	Using several languages helps in recruiting ethnic minorities (Sproston & Mindell 2004), in addition to the use of own language, ethnic matching of the invitee and the person who made the contact may promote participation (Font 2013)

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Pourquoi et comment ?

Factor	Possible effects on participation rate
Incentives	The use of compensation or small "thank-you gifts" for participation (financial or other) may be considered. Prepaid incentives (paid with the survey itself) raise participation, while postpaid (paid after the survey) usually don't (Porter 2004). Long survey with incentives can make it achieve the same participation rate as a shorter survey without incentives (Groves 1999). The effect of incentives may depend on cultural norms.
Survey environment and background	Economic and social environments may affect by lowering or raising the participation rate; e.g. lower socio-economic groups tend to have lower participation rates (Harald 2007, Porter 2004).
Feedback from focus groups	Discussions in focus groups (small groups with representatives of potential participants) may produce important information for planning leaflets and invitations in a way that they raise interest to participate (Sinicrope 2009, Samanic 2003).
Internet survey vs. paper survey	Participation rate may be even higher in web survey compared to paper survey, but it depends on the population and the design of the web survey (Porter 2004, Link 2005). Typically web surveys can be used as an additional data collection method, since not all invitees have access to the internet (internet coverage varies between countries and population groups within countries). (See also Part A, Chapter 8. of the EHES Manual.)
Length of a questionnaire form	Long questionnaire forms (several pages) may have lower response rates than short forms (1-2 page), but only moderate effect (Porter 2004).
Deadline	Deadlines (giving respondents a deadline) haven't shown important effects on either increasing or decreasing the participation rate (Porter 2004).

Mesure de la pression artérielle... procédures... assurance qualité... outils de formation...

Position of the arm



The measurements should be taken on the right arm whenever possible. If not possible, e.g. the arm has been amputated or has rashes, adhesive dressing, casts, open sores, hematomas, wounds, arteriovenous shunt or any other intravenous access devices, or if axillary lymph nodes have been removed, the left arm should be used. The use of left arm and reason for this should be recorded.

The arm should be resting on the desk so that the antecubital fossa (a triangular cavity of the elbow joint that contains a tendon of the biceps, the medial nerve, and the brachial artery) is at the level of the heart and palm is facing up. To achieve this position, either the chair should be adjusted or the arm on the desk should be raised, e.g. by using a pillow. The participant must always feel relaxed and comfortable.

Selection of the cuff for the participant

The greatest circumference of the upper arm is measured using a non-elastic tape, with the arm relaxed and in the normal blood pressure measurement position. The measurement should be read to the nearest centimeter and recorded. Select the correct cuff size for the arm circumference and record the size of the selected cuff.



Select the correct cuff size for the arm circumference and record the size of the selected cuff.

5.1.1.4.3 Number of measurements

Three measurements should be taken, one minute apart.

5.1.1.4.4 Measurement protocol

Mercury sphygmomanometer or other auscultation based device

1. The participant is asked to sit still for 5 minutes before starting the measurement. At this time the measurement pro-

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cedure should be explained for the participant and emphasized that he/she should not move during and between measurements as that will increase the blood pressure.

2. The participant is asked not to talk during the measurements; it should be explained that talking during or between measurements will increase the blood pressure.

3. The arm circumference is measured and correct cuff size selected.

4. The cuff is placed on the right arm so that its bottom edge is 2-3 cm above the antecubital fossa. The top edge of the cuff should not be restricted by clothing. Make sure that the tubes from the cuff are not under the arm or otherwise tied up.



5. The radial pulse is palpated and the pulse rate is counted for 60 seconds, measured by a stop watch, a digital wrist watch or watch with a second hand.

6. Record 60-second pulse count and whether or not the pulse was regular.

7. Determine the peak inflation level:
 - The mercury column has to be at 0 level.
 - The participant's radial pulse is again palpated.

- The cuff is inflated and the level of the top of the meniscus of the mercury column is noted at the point when the radial pulse disappears. The cuff is immediately deflated by completely opening the valve.

- The peak inflation level is determined by adding 30 mmHg to the pressure where the radial pulse disappeared.

8. The venous blood pool in the forearm is normalized by waiting at least 30 seconds or by raising the arm for 5-6 seconds.



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3 mesures au bras droit à une minute d'intervalle, en position assise, après 5 minutes de repos

Parfois en conflit avec les recommandations pour la pratique clinique (recommandations HAS)

Une enquête européenne avec examen de santé Pourquoi et comment ?

■ Questionnaire...

Appendix 7.1 EHES questionnaire

EHES questionnaire

Participant id:

Health Status Module

Q1. How is your health in general? Is it...

very good
 good
 fair
 bad
 very bad?

Q2. Do you have any longstanding illness or (longstanding) health problem? (Longstanding means illnesses or health problems which have lasted, or are expected to last, for 6 months or more)

Yes
 No

Q3. For at least the past 6 months, to what extent have you been limited because of a health problem in activities people usually do? Would you say you have been ...

severely limited
 limited but not severely or
 not limited at all?

Q4. Do you have or have you ever had any of the following disease or conditions, diagnosed by a medical doctor?

Myocardial infarction Yes No (heart attack)
Coronary heart disease or angina pectoris Yes No
High blood pressure (hypertension) Yes No
Elevated blood cholesterol Yes No
Stroke (cerebral haemorrhage, cerebral thrombosis) Yes No
Diabetes Yes No

Health Care Module

Q5. During the past two weeks, have you used any medicines that were prescribed for you by a doctor (for women, exclude contraceptive pills or other hormones used solely for contraception)?

Yes
 No → Go to Q7

Q6. Were they medicines for ... ?

high blood pressure Yes No
lowering the blood (cholesterol) level Yes No
diabetes Yes No

Q7. When was the last time that your blood pressure was measured by a health professional?

Within the past 12 months
 1-5 years ago
 Not within the past 5 years

Q8. When was the last time that your blood cholesterol was measured (by a health professional)?

Within the past 12 months
 1-5 years ago
 Not within the past 5 years

Q9. When was the last time that your blood sugar (glucose) was measured by a health professional?

Within the past 12 months
 1-5 years ago
 Not within the past 5 years

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Health Determinants

Q10. How tall are you without shoes? (in cm)

cm

Q11. How much do you weigh without clothes and shoes? (in kg)

kg

Q12. Do you smoke?

Yes, daily
 Yes, occasionally
 No or all → Go to Q15

Q13. On average, how many times do you smoke per day (= number of cigarettes, cigars, pipes or tobacco etc.)?

times

Q14. Which of the products do you frequently smoke?

Manufactured cigarettes Yes No
Self-rolled cigarettes Yes No
Pipe Yes No
Cigars Yes No

Q15. Have you ever smoked daily (= almost every day for at least one year)?

Yes
 No

Q16. For how many years have you smoked daily? Count all separate periods of smoking daily. If you don't remember the exact number of years, please give an estimate.

years

Q17. When did you stop smoking daily? (If you have quit smoking several times, give the time when you last stopped smoking daily?)

Within the past week
 1 week - less than 1 month ago
 1 month - less than 1 year ago
 1-5 years ago
 More than 5 years ago

Social Variables

Q18. Sex of respondent

Male
 Female

Q19. What is your date of birth? (dd mm yyyy)

Q20. Are you living with someone as a couple?

Yes
 No

Q21. How many years have you spent at school or in full-time study?

years

Q22. What is the highest level of education or training successfully completed?

early childhood development, pre-primary education
 primary education
 lower secondary education
 upper secondary education
 post-secondary but non-tertiary education
 tertiary education, short-cycle
 tertiary education, bachelor level or equivalent
 tertiary education, master level or equivalent
 tertiary education, doctoral level or equivalent

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Q23. How would you define your current labour status?

Carry out a job or profession, including unpaid work for a family business or holding, including an apprenticeship or paid traineeship, etc.
 Unemployed
 Pupil, student, further training, unpaid work experience
 In retirement or early retirement or has given up business
 Permanently disabled
 In compulsory military or community service
 Fulfilling domestic tasks
 Other inactive person

Q24. How many persons live in the household, including yourself?

persons

Q25. How many of them are aged less than 14 years?

persons

Q26. Which group represents your household's total net monthly income from all the sources (income from work, unemployment benefits, old-age or survivor's benefit, sickness or disability benefits, family/children related allowances, housing allowances, education-related allowance, other regular benefits) after deductions for income tax, national insurance, etc.

Below 1st decile
 Between 1st decile and 2nd decile
 Between 2nd decile and 3rd decile
 Between 3rd decile and 4th decile
 Between 4th decile and 5th decile
 Between 5th decile and 6th decile
 Between 6th decile and 7th decile
 Between 7th decile and 8th decile
 Between 8th decile and 9th decile
 Above 9th decile

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Une enquête européenne avec examen de santé

Pourquoi et comment ?

▪ Et demain ?...

- Articulation avec d'autres projets européens :



- Possibilité d'apparier avec les données de consommations individuelles de soins de l'Assurance maladie :
Utilisation de médicaments, possibilité de mieux décrire les biais de participation
- Possibilité de combiner avec les enquêtes EHIS ?



Merci de votre attention

Rencontres de Santé publique France
4-6 juin 2019 - Paris