



# Reporting Guidelines for Survey Reporting (G-SURE): protocol for guideline development

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**Objectives:** The objective of this study was to develop a reporting guideline for epidemiological survey reports, referred to as "Guidelines for Survey Reporting (G-SURE)."

**Methods:** To develop G-SURE, we adopted a systematic approach, starting with a detailed review of recent survey reports in *Public Health Weekly Report*, *Eurosurveillance*, and *Morbidity and Mortality Weekly Report* and an analysis of current reporting standards. After drafting the guidelines, our team conducted an in-depth internal evaluation to assess their effectiveness and applicability. We then refined the guidelines based on insights from external experts and potential users, particularly those with significant experience in survey reporting. The plan also includes ongoing efforts to widely share the guidelines and update them periodically, incorporating new findings and user feedback.

**Results:** G-SURE will provide a structured framework for reporting outbreak investigations, comprising a detailed checklist and Explanation & Elaboration documents. These will improve the transparency, consistency, and quality of public health documentation.

**Conclusion:** In this protocol article, we introduce G-SURE, a guideline developed to improve epidemiological survey research. G-SURE addresses the critical need for uniform reporting standards in epidemiological surveys, aiming to improve the quality and relevance of research outcomes in this area. This guideline is also designed to be a key resource for peer reviewers and editors, aiding them in efficiently assessing the thoroughness and accuracy of survey reports. By providing consistent reporting criteria, G-SURE seeks to minimize confusion and irregularities, which are often encountered in the process of scientific publication.

## Introduction

*Public Health Weekly Report*, which is published by the Korea Disease Control and Prevention Agency, contains various publication types, including survey/surveillance reports. This type includes the analysis and reporting of epidemiological changes in diseases, pathogens, and health issues based on data from national or international survey/surveillance systems. Survey/surveillance reports should be 2,000 words or less, with no more than three tables and figures

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each. References should be no more than 10. Each report should include an abstract, core summary, introduction, methods, results, discussion (conclusion), acknowledgments, and references [1].

With the exception of surveillance reports, the purpose of the Guidelines for Survey Reporting (G-SURE), the development of which is discussed herein, is to make it easier for researchers at the Korea Disease Control and Prevention Agency to write survey reports and to ensure that they include all the necessary information. Because a survey report can be understood as a survey questionnaire study, this guideline addresses only epidemiological survey reports and clarifies that they are epidemiological studies. Of course, questionnaire surveys can also be included in epidemiological surveys. Importantly, these surveys should be limited to the disease or health condition of interest, not psychological or educational surveys. Survey reports often cover infectious diseases, but can include all areas of health, including chronic diseases, environmental diseases, and external cause diseases.

A survey is commonly used to describe observations made to measure and record something, while surveillance is used to describe the repetition of a standardized survey to detect changes. In this guideline, surveillance reporting refers to the ongoing and regular investigation and reporting of diseases, health conditions, and other epidemiological data in accordance with national legislation or the Centers for Disease Control and Prevention (CDC) practice guidelines. In other words, survey reporting is not a one-time event, but rather an ongoing practice that is often recognized as necessary for public health.

The difference between periodic survey reporting and surveillance reporting is the legal basis, although periodic survey projects can later be categorized as surveillance reports on their legal basis. In contrast, outbreak reports are investigations in situations where there is an urgent need to respond to a sudden outbreak or epidemic of a disease or health condition.

Survey reporting, surveillance reporting, and outbreak reporting all fall into the category of investigative reporting, but they are categorized as being conducted for specific purposes. The recommended reporting guidelines for each of these study designs are based on the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement [2] and are simplified to make them easier for the Korea Centers for Disease Control and Prevention Agency researchers to use.

Epidemiological survey reports play a pivotal role in epidemiological research, serving as a cornerstone for informed public health decisions and policymaking. They provide critical insights into the prevalence, distribution, and determinants of health-related events in specific populations [3]. By systematically gathering and analyzing data on various health conditions, survey reports contribute to our understanding of disease patterns, risk factors, and the effectiveness of health interventions [4]. Their importance is underscored by their ability to guide health professionals and policymakers in designing targeted strategies to improve health outcomes and allocate resources efficiently. In addition, survey reports promote transparency and accountability in public health, ensuring that interventions are evidence-based and tailored to meet the unique needs of different communities.

To the best of our knowledge, however, there is no reporting guideline for survey reports. Reporting guidelines are defined as checklists, flow diagrams, or structured texts that serve as a comprehensive roadmap for authors to report specific types of research [2]. They are crucial tools for various groups, including peer reviewers, authors, and scientific journals. The objective of this study was to develop better reporting guidelines for epidemiological survey studies; thus, the protocol for the G-SURE, which is developed through expert consensus, is described herein.

Unlike existing guidelines such as the STROBE statement [5], which cater to specific research designs (e.g., cohort studies, case-control studies, or observational studies), the aim of G-SURE is to increase the clarity, transparency, and consistency of survey reports. The ultimate goal is to make survey reports more accessible and valuable to the broader public health community, thereby contributing to more efficient use of time and resources in epidemiological research.

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## Methods

This project's methodology is aligned with the Enhancing the Quality and Transparency of Health Research (EQUATOR) Network standards [6]. The methodology incorporates a multidimensional approach, involving a diverse team of experts to develop robust reporting guidelines.

### Formation and role of the research committee

The research committee, a multidisciplinary consortium, plays a pivotal role in shaping the reporting guidelines. It comprises preventive medicine experts who focus on disease prevention strategies, epidemiologists specializing in disease patterns and outbreak dynamics, methodologists responsible for ensuring scientific rigor in research design and data analysis, family medicine practitioners offering insights on practical community health management, public health professionals aligning the guidelines with broader health policies, and journal editors ensuring the guidelines meet standards of clarity and applicability. Their collective expertise, synthesized through workshops and collaborative sessions, has formed the foundation for developing comprehensive, scientifically robust, and practical reporting guidelines.

### Literature review

Our team conducted an in-depth analysis of manuscripts focusing on survey reports, published in the last 3 years in internationally acclaimed journals. We specifically selected *Public Health Weekly Report*, *Morbidity and Mortality Weekly Report*, and *Eurosurveillance*, recognizing their substantial contributions to the domain and their commitment to publishing high-quality survey reports. The chosen manuscripts were meticulously scrutinized to pinpoint distinctive features, research methodologies, and key elements pertinent to survey reporting. Following this comprehensive review, a collaborative meeting with all team members was convened. The purpose of this meeting was to integrate our findings, engage in discussions about the variances and parallels in the reporting styles among the chosen journals, and detect any prevailing gaps in the literature. The insights gained from these deliberations played a crucial role in shaping the new reporting guidelines, ensuring they cater to contemporary needs and propel the standards of survey reporting in health research forward.

### Reviewing existing reporting guidelines

This phase focused on closely examining and classifying existing reporting guidelines, including an in-depth analysis of the STROBE statement. The main aim was to evaluate these guidelines for their appropriateness and effectiveness in survey reporting. This involved assessing each guideline's structure, essential components, and overall approach to epidemiological survey reporting. The evaluation particularly concentrated on how these guidelines handle the specific challenges of survey reports, such as detailing epidemiological methods, presenting research findings, and discussing the implications for public health.

### **Developing new reporting guidelines**

The development of the G-SURE guidelines was a methodical process led by our expert committee. The initial draft was based on insights from a thorough literature review and an analysis of existing reporting guidelines, ensuring that G-SURE aligns with current practices and reflects the latest knowledge in the field. We included Explanation & Elaboration (E&E) documents for each guideline item, providing clear reasons and context, which improves the guidelines' practicality.

The committee played a vital role in this phase, meticulously creating each guideline item. These items are grounded in evidence, drawing from the collective expertise of the committee, reviewed literature, and existing guidelines. This collaborative effort ensured coverage of all important elements of outbreak reporting, with a focus on scientific accuracy and practical application.

We then repeatedly revised the initial draft of the guidelines and the E&E documents. This involved applying them to selected literature to evaluate their effectiveness, and then refining them based on the feedback received. Both internal team members and external experts, including those experienced in outbreak reporting, reviewed the drafts. This review process incorporated a scoring system for a detailed evaluation of each part of the guidelines and the E&E documents.

Finally, we produced the final version of the guidelines and a comprehensive manual. The checklist offers a succinct guide for researchers, while the manual provides in-depth explanations and examples for various outbreak scenarios. This systematic and evidence-based approach ensured that the final guidelines are inclusive, up-to-date, and practical for use.

### **Ongoing updates and revisions**

Acknowledging the ever-changing landscape of public health and epidemiological surveys, we are dedicated to continually updating the G-SURE guidelines. This regular revision is essential to maintain their relevance and effectiveness amidst evolving challenges, scientific progress, and new best practices in the field.

To ensure these updates are timely and effective, the G-SURE guidelines will be under constant review, aligning them with the latest developments in public health and epidemiology. Key to this process will be the collection and integration of feedback from a broad spectrum of users including researchers, public health experts, epidemiologists, and policymakers. Their input will be invaluable in identifying areas for improvement and thereby ensuring that the guidelines remain responsive to user needs.

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## **Results**

As of November 2023, the research team has made advancements in developing comprehensive reporting guidelines for survey reports. Meanwhile, the team has been working on a detailed checklist and E&E documents. These tools will guide authors in clearly and consistently reporting survey reports. The finalized versions of the checklist and E&E documents are expected to be published by December 2024.

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## **Discussion**

The field of epidemiological research is rapidly evolving, underscoring the need for

standardized reporting methods. Epidemiological surveys, which are fundamentally different from surveillance reports, play a critical role in documenting a wide range of health conditions, including infectious, chronic, and environmental diseases. Unlike surveillance reports that require ongoing monitoring under specific health guidelines, epidemiological surveys are typically one-time or periodic investigations tailored to the specific nature and urgency of health issues. These surveys, whether conducted irregularly or on a regular basis, have distinct objectives and thus require unique reporting methodologies. The transition of a regular survey into a surveillance report is often regulated by the legal framework. For example, outbreak reports are specifically designed for immediate responses to sudden disease outbreaks or epidemics.

The introduction of G-SURE, our comprehensive reporting guideline, represents a significant step forward in addressing the complexities of survey reporting. G-SURE aims to improve the clarity, transparency, and consistency of these reports. However, initially navigating the recommended reporting guidelines based on research design can be challenging and may require a thorough examination of numerous papers and hands-on experience in both conducting research and writing papers. Since epidemiological survey reports generally follow a consistent structure, it is beneficial to consider these guidelines from the outset of the research design process, including during data collection and analysis, and ultimately in the writing phase. While G-SURE covers the essential elements of report formatting, it is not exhaustive. Researchers are encouraged to include additional relevant information that may not be explicitly mentioned in the guidelines. Conversely, some sections of G-SURE may be optional, allowing researchers to omit certain elements if they lack pertinent content; alternatively, they may include these sections with a notation of "not applicable" when appropriate.

Despite these advancements, the standardization of reporting for diverse types of surveys remains a complex endeavor. Future updates to G-SURE will tackle these intricacies. Regular revisions, incorporating user feedback and adapting to changes in the public health landscape, are essential to ensure the continued relevance and effectiveness of the guidelines. This adaptive approach is crucial for G-SURE to keep pace with the dynamic nature of public health emergencies and evolving epidemiological challenges.

## Conclusions

In this protocol article, we introduce the G-SURE guidelines, which were developed to improve epidemiological research. G-SURE targets the urgent need for uniform reporting standards in epidemiological surveys, aiming to improve the quality and relevance of research outcomes in this area. This guideline is designed to be a key resource for peer reviewers and editors, aiding them in efficiently assessing the thoroughness and accuracy of survey reports. By providing consistent reporting criteria, G-SURE seeks to minimize confusion and irregularities, which are often encountered in the process of scientific publication.

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### Conflict of interest

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Not applicable.

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### Supplementary materials

Not applicable.

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## References

1. Korea Disease Control and Prevention Agency. Instruction for authors, Public Health Weekly Report (updated April 28th, 2023). Cheongju: Korea Disease Control and Prevention Agency; 2023.
2. Kim SY. Reporting guidelines. *Korean J Fam Med* 2009;30(1):62.  
<https://doi.org/10.4082/kjfm.2009.30.1.62>
3. Williams R, Wright J. Epidemiological issues in health needs assessment. *BMJ* 1998;316(7141):1379-1382.  
<https://doi.org/10.1136/bmj.316.7141.1379>
4. Tulchinsky TH, Varavikova EA. Measuring, monitoring, and evaluating the health of a population. In: Tulchinsky TH, Varavikova EA, editors. *The new public health*. Cambridge: Academic Press; 2014. p.91-147.
5. von Elm E, Altman DG, Egger M, Pocock SJ, Gøtzsche PC, Vandenbroucke JP. Strengthening the reporting of observational studies in epidemiology (STROBE) statement: guidelines for reporting observational studies. *BMJ* 2007;335(7624):806-808.  
<https://doi.org/10.1136/bmj.39335.541782.AD>
6. The EQUATOR Network. How to develop a reporting guideline [Internet]. Oxford (UK): The EQUATOR Network; c2018 [cited 2024 May 24]. Available from: <https://www.equator-network.org/toolkits/developing-a-reporting-guideline/>