

How to engage with your workforce

'In order to find acceptance for the implementation of sensors, all individuals affected by the sensors or their data need to be involved in the decisions on the purpose and application of sensors. Possible negative side effects need to be discussed and addressed.' (Le Feber et al, 2021¹)

Once you decided to deploy low-cost sensors in the workplace, effectively engaging with the workforce is a crucial step for success. Workers play a pivotal role in the deployment and proper use of these devices, as they are the primary users and can help inform results being seen and practical considerations. Ideally, a situation is created in which employer and workforce are motivated to collaborate to improve the working conditions.

Establishing clear communication, fostering collaboration, and addressing any concerns or misconceptions about low-cost sensor use can improve acceptance, compliance, and overall data quality. In some cases, there may be reluctance among the workforce to wear low-cost sensors, due to distrust or inconvenience. In other cases, workers may feel more valued, protected and that their health and well-being is being considered a priority through awareness of the use of real-time technologies.

This checklist highlights some key points to consider when engaging with the workforce regarding the use of low-cost sensors, ensuring that workers feel informed, involved, and supported throughout the process.

Engagement areas for consideration when deploying low-cost sensors:

1. Why are low-cost sensors being deployed?

- Purpose/objective of low-cost sensor use.
- Advantages of low-cost sensors compared to alternative conventional methods.
- Benefits for all involved.
- What low-cost sensors will be measuring.
- How the data gathered by low-cost sensors will be used (only for intended worker & company response).
- What information will be communicated to whom and for which purpose?

2. Data security

- Who has access to the data gathered by low-cost sensors?
- Where is the data to be stored?
- What security/protection measures are in place to keep the data safe and secure?
- How long will the data be stored?

¹ Le Feber, M., Jadoenathmisier, T., Goede, H., Kuijpers, E., & Pronk, A. (2021). *Ethics and privacy considerations before deploying sensor technologies for exposure assessment in the workplace: Results of a structured discussion amongst Dutch stakeholders*. *Annals of Work Exposures and Health*, 65(1), 3–15.

See our [“Data Management” guidance sheet](#) for further considerations.

3. Be clear on voluntariness of participation from workers.

- If using low-cost area sensors in the vicinity where people work, it is sufficient to just inform workers.
- If you are using low-cost body-worn, personal, sensors attached to the individual:
 - Consider and discuss with the workforce the targeted group of workers for monitoring and the number of individuals within this group to wear low-cost sensors.
 - Invite workers to participate and make sure that participation is voluntary.

4. Encourage questions and reflections and take time to respond to these fully.

- Inform all workers involved (e.g. those wearing low-cost sensors or working in the areas monitored, associated management, auxiliary staff), where possible within a group session. In addition, consider scheduling open-door drop-in sessions at varying dates and times.
- Make relevant company representatives accessible to respond to workers questions; you may have to share contact details of those representatives (e.g. email, contact number and/or office location).
- Develop a simple contact form (e.g. MS Forms) or open a post box in a common area to enable workers to post questions/comments anonymously without fear or detriment. Share responses to questions in a central location accessible and visible to all (e.g. in the canteen, intranet).
- Circulate Frequently Asked Questions (FAQ) with responses.

5. Offer proactive assurances for any anticipated concerns.

Some examples include:

- Workers may be concerned that they may be publicly criticized based on insights from low-cost sensors.
- Workers may be concerned that the data gathered by low-cost sensors may be used against them during appraisal or relative to promotion/progression within the company.
- Employer may fear that workers may manipulate the low-cost sensors (e.g. keeping them near sources) with intent to stop work or receive financial recompense.

6. Provide assistance and training for proper use of low-cost sensors.

- Ensure workers understand how low-cost sensors work and the importance of undertaking their work as they would normally (i.e. not interfering with the low-cost sensors - particularly important for those using body-worn sensors). If they have any issues or concerns (e.g. its beeping or its switched off), then they should inform the relevant point of contact.
- Provide insight into how to check battery/power of low-cost sensors if needed and how to charge/replace these if needed.
- Provide insight into how to check connectivity of low-cost sensors amongst those needed.

7. Consider multiple forms and channels of communication.

To ensure access, preferences and repeated provision of the same clear messaging. This may include, for example:

- A company-wide briefing meeting (virtually or in person) that could be recorded for circulation and access later.
- Posters/infographics/leaflets containing key information.
- A dedicated page on the company intranet with signposting to departments/individuals who can be contacted with any questions.
- Confirmation of when and how insights from data are being used and informing action/decision making.

Ensure responsibility for action/decision making is clearly communicated within the business against each of the seven areas for consideration outlined above. Resulting decisions and actions should be captured and cascaded through subsequent communications.

Ideally a communication and engagement plan should be drawn up to ensure regular communications during the lifecycle of using the low-cost sensors. This will include prior to, at the time of, and following the launch of low-cost sensors, along with periodic updates sharing insights from the data and how this is informing action and decision making ('closing the feedback loop').