WORKSHEET 3.10

# Sampling Across Shifts, Seasons, Departments and Contractors

*Subchapter 3.10 · case in the book: Maastricht*

**GUIDING QUESTION**

Your last audit examined a number of records and a number of people. Of the people, how many were on your payroll, and what proportion of those who work in your building on an ordinary day is that?

This worksheet turns the tools of the subchapter into a form you can fill in. The texts come from the book; the empty columns are for your own property. Adapt it before use: an unadapted checklist is exactly what the book warns against.

## Practical application: what to do in your property

| Step (from the book) | Done? | What we found / owner |
|---|---|---|
| Write the population and the list before selecting. The gap between them is visible in advance and costs nothing to see. | | |
| Stratify by the four dimensions that vary in a hotel: hour, season, department, employer. | | |
| Count the people in the building by employer, and the people the audit spoke to by employer. Compare the two proportions. | | |
| Ask for the records held elsewhere (contractor permits, provider inspections, agency training) and put the request in the contract if asking does not work. | | |
| Confine the conclusion to what was sampled, and name what was not reached. | | |
| Compare this audit's frame with last year's. Drift is invisible within one cycle and obvious across two. | | |
| Keep the weighting inside a cycle, not across it. Everything still has to be reached eventually. | | |

These steps are the book's method, not requirements of ISO 45001. Evidence can take whatever form suits the property; a separate document is needed only where an applicable requirement, or the property's own system, makes it necessary.

## Verification Pact: what is believed, tested against the standard

| What is commonly believed | What actually holds | Our position |
|---|---|---|
| «We sample ten per cent, which is defensible.» | Ten per cent of what. The percentage describes the sample; the frame decides whether the sample means anything. | |
| «A representative sample is the professional standard.» | A sample spread in proportion to numbers suits the purpose of describing a population fairly. A safety audit is looking for where harm can occur, and harm is not evenly distributed, so it represents every stratum but weights effort toward exposure, and says so. | |
| «Sampling the records samples the work.» | It samples the work that generates records. The hours and the populations that generate none are outside the frame, not under-represented within it. | |

| What is commonly believed | What actually holds | Our position |
|---|---|---|
| «Contractors are audited by their own employers.» | They are within the property's hazard identification and therefore within its audit population. Their employer's audit is not the property's. | |
| «The sample size determines the strength of the conclusion.» | The frame determines what the conclusion is about. A large sample of the wrong population is a confident statement about nothing. | |
| «A weighted sample is biased and therefore improper.» | It is uneven by design and proper, provided the weighting is declared and the conclusion is confined to what was examined. | |

## Common mistakes: a self-check

| Mistake (from the book) | Present here? | Action / owner |
|---|---|---|
| Defending the sample and never examining the frame. Ten per cent of an incomplete list is ten per cent of an incomplete list. | | |
| Applying a uniform percentage across a property. It asserts that the parts are equal, which the programme clause already denies. | | |
| Sampling records and believing you have sampled work. The work that generates no local record is outside the frame. | | |
| Excluding contractors because their employer audits them. They are inside the property's hazard identification and therefore inside its population. | | |
| Concluding generally from a weighted sample. Weighting is honest only when the conclusion is confined. | | |
| Weighting across cycles instead of within one. Everything still has to be reached; the weighting decides how often. | | |

## Operative synthesis

- An audit is a claim about a whole made from a part, and the part is almost always chosen from a list rather than from the population. In a hotel the two are never the same: the payroll is not the workforce, the filed permits are not the permits issued, and the training matrix covers the people the property employs and nobody else. The sample can be impeccable and the claim still be about something other than the property.
- **Safety populations are also not made of records.** They are made of hours, seasons, departments and employers, and only some of those leave documents. Sampling the documents therefore samples the projection of the property onto the part of it that generates paper on site, and the rest is not under-sampled but absent from the frame.
- Proportional sampling is the wrong default, and the clause that requires the programme to take the importance of processes into consideration is already a stratification instruction. Effort is allocated by exposure rather than by size, which means a contracted crew of six may be examined more closely than a permanent team of thirty. The price of that weighting is that the conclusion has to be confined to what was reached, which is a shorter and more defensible sentence than the one most reports end with.
- **None of which was concealed from her, and none of which any external auditor had ever asked about.** The question that produces all of it is one line long (what population does this audit describe, and what list was it drawn from) and in three years nobody, inside the property or outside it, had put it.

- Forty-seven people interviewed over four audits, forty-six of them on the payroll, in a building where a third of the people working on an ordinary day are employed by somebody else. No night permits, no build periods, one of two intakes. Three years of clean ten per cent sampling of a list that covered a little under two thirds of the population.
- And when the sample finally reaches the third of the population that works in the building without appearing on the payroll, the auditor discovers that they are examining work the property does not control, performed by people it did not select, under an arrangement between two employers that nobody has written down.

## Action plan for our property

| Action | Owner | Due | How we will know it worked |
|---|---|---|---|
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Source: Francesco Dore, The Helm and the Lens, Volume 3b «The Lens», subchapter 3.10. Edizioni Effedore, 2026. Clause references are paraphrased; this sheet does not reproduce the text of ISO 45001. It is not legal advice: health and safety law is that of the place where the property operates.