Introduction
The COVID-19 pandemic has significantly altered the education environment. Institutions have been tasked with implementing rapid responses that allow for a continuity of education, effective course provision, and ongoing support services for students, all while keeping students, faculty, and staff healthy and safe (WHO, 2020). The constantly changing health environment makes this increasingly difficult, as does a lack of available research on best practices. The goal of this study is to gather information about the planning and preparedness of Schools of Public Health (SPH) in the European Region for reopening campuses after closure due to the COVID-19 pandemic. The research uses an exploratory sequential design with connected integration. Through thematic analysis, questionnaires with open-ended questions as qualitative component will serve to structure the subsequent quantitative element, an internet-based survey with closed-ended questions. The qualitative research in this report was conducted to generate a better understanding of the study context and gain insights into relevant themes to develop an internet-based survey (IBS) within the quantitative component.

This report presents exclusively the initial qualitative part. Combined with the IBS in September, it will provide both a record of the reactions and allow for quantitative and qualitative analysis of the different paths and rationale present amongst the 32 schools included. By prompting dialogue, SPH can better design and enact policies and recommendations relevant to them. Indeed, few national authorities have launched specific guidance for reopening higher education campuses. European SPH could play a critical role in policy and guideline development.
Methods
The review was conducted via email with initial contact made by Robert Otok and follow-up done by the Young Professionals (YPs) during the week of July 22-29. Using purposive sampling and depending on availability, SPH were recruited from the ASPHER network. Of the 59 schools contacted, 32 responded. Data collection was conducted through questionnaires with open-ended questions. Schools were asked about their plans for teaching and exam methods, equipment and infrastructure development, new recruitment and international policies, budget and contingency planning, whether or not they felt safe returning to campus, and if decisions in general were evidence-based. Analysis of the qualitative data was carried out following thematic analysis. The researchers identified codes in the questionnaires to start sorting out data. Then, repeated concepts were sorted into themes. Additionally, a simple statistical analysis was conducted.

Results
Teaching and Exam Methods
Regarding the form of teaching, 65% of schools will rely on hybrid learning via online platforms on which a combination of synchronous as well asynchronous activities will take place in addition to socially distanced face-to-face sessions. Many schools stated some level of uncertainty or flexibility in their plans, with seven schools expressing a complete lack of certainty in their plan by giving answers including “uncertainty still reigns,” “All options are possible. At this point in time it is difficult to tell,” and “currently still no official decision.” Three schools were set in their decision to hold completely online teaching, at least for the fall semester.

Figure 1. Method of delivery

![Method of delivery](image)

Given that the majority of schools will rely on online learning, particular online software such as Moodle and Wiseflow will be used to monitor and assess students during exams for
approximately half the schools. Other schools will avoid classic examination and instead focus on other forms of assessment such as open book exams, written assignments, and presentations.

Figure 2. Exam format

Recruitment and International Policies
Recruitment for many responding SPH was transferred to virtual events and online content. Many maintained their previous acceptance requirements, with COVID-19 modifications such as video-conference interviews and extended application deadlines. Some changed their testing requirements by extending their deadlines for tests, moving tests online, or eliminating them entirely as an application requirement. One school already saw an increase in interest in their MPH programme due to the pandemic.

The SPH are similarly split on changes to their international student policies: approximately 50% have made some adjustments to allow for international students to safely participate in their programme, while others stated uncertainty as to whether there would be any additional international student policies beyond the overall COVID-19 policies.

Equipment and Infrastructure Development
In terms of technological infrastructure, most schools chose to invest in the improvement of their IT departments in an effort to anticipate possible scenarios that might arise from the pandemic. Examples include implementing online communication programs such as Zoom and Microsoft Teams. In addition, these schools often provided online training and guidance to their teachers in order to ensure the best possible quality of learning – while almost all schools also stated that teachers would have an increased workload. Several schools that
had previously offered online courses listed this advantage and reported that they had already practiced and successfully implemented online courses.

Figure 3. Planned provision of additional resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant teacher training</td>
<td>24</td>
<td>77.4%</td>
</tr>
<tr>
<td>Additional software / IT guidance</td>
<td>23</td>
<td>74.2%</td>
</tr>
<tr>
<td>Increase in teachers</td>
<td>-1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Smaller classrooms</td>
<td>-1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Not specified</td>
<td>-2</td>
<td>6.5%</td>
</tr>
<tr>
<td>No additional resources</td>
<td>-2</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

Budget and Contingency Planning

Eighteen schools did not expect budget cuts, while 7 were confident they would have budget cuts. Several schools stated that the popularity of their public health programmes were increasing and they were therefore not experiencing some of the drops in revenue of other departments. The majority of the SPH had contingency plans to varying levels of detail set in place, while three schools had no contingency plan for increased COVID-19 precautions and caseloads.

Figure 4. Announced budget cuts

Safety in Returning to Campus

In order to ensure the safe return of their students and staff this fall, all schools will be taking comprehensive health measures across their campuses. For instance, schools will reduce class size (23 schools), use contact tracing and mobile apps (17 schools), install plexiglass barriers in libraries, offices, and classrooms (10 schools), and make the use of personal protective equipment and social/physical distancing mandatory (10 schools). Many schools
also listed an increase in availability of sanitisers and hygiene products, along with increased cleaning and sanitation of SPH spaces. Mask wearing and routine COVID-19 testing was also included as a potential safeguard for some campuses.

Figure 5. Planned prevention measures

Evidence-based Decision Making

Nineteen respondents stated that yes, they felt as though decisions were evidence-based. Six SPH were unsure, and an additional six said no, decisions were not evidence-based. Similarly, 22 were comfortable returning to campus, 4 were unsure, and 6 did not feel safe returning to their campuses.

Discussion

The results of this rapid review provide an scoping, general idea of what various European SPH have planned for their fall semesters. The survey did not ask for detailed plans nor explanations for the plans, acknowledging that (i) many details are not yet known; (ii) the survey was intended to elicit short, rapid responses; and (iii) the convenience sampling methodology using ASPHER members meant that each respondent could not be held accountable to know, explain, and agree with their schools’ current plan. Additionally, a key requisite currently being expressed is guidance in planning, and simply initiating the dialogue around possible reopening options is the primary goal of the survey. There is no correct or incorrect plan amongst the responses, and it is crucial to consider that the survey did not ask for epidemiological information from each school’s region.

The direct results of the simple statistical analysis of the data found what is listed in the results. A brief thematic review identified few patterns amongst the responses, as the level of detail to associate things such as specificity of plan and severity of epidemiological response were not known. Some interesting associations between responses were found, which especially highlighted the lack of certainty and discrepancies between plans. For example, seven schools were unsure of their teaching methodology for the fall semester. Three schools had no contingency plan, and eight respondents did not feel safe returning to their campuses. However, only one school had all three of these - no method, no contingency plan, and thus a lack of safety. Aside from this, there was only one additional SPH that responded with two of these -- no method and a lack of safety. It appears, then, that SPH
are making variable decisions that are not contingent - and perhaps consistent - with one another. A detailed plan regarding one aspect of reopening does not imply that all other plans for that school are clear, nor that faculty and staff will feel safe on campus. The implications of this lack of pattern in response and lack of certainty pose the question that many educators are also asking -- how will this impact the quality of education?

Uncertainty and constant flux will, undoubtedly, change the quality of the education. In addition to that, the statements from respondents all described increased workloads. This additional time expectation, whether in the form of developing plans both online and in person lessons, or increased email expectations, or in learning new technologies, will likely also affect the comfort, safety, and health of the educators and potentially the quality of education.

Schools that described a distinct advantage were those that already had online programming, as they had either already taught an MPH successfully online or at least knew they had the resources and capabilities to teach online. This highlights the potential for online learning in terms of accessibility, and is a positive example -- it can be done, and executed well. Schools that also described an advantage were those that had a limited teaching component or limited international students, as they were aided by their research-focused, small group layouts.

Interestingly, access to the required technology was not mentioned by the SPH. This has been such a crucial subject for primary and secondary education reopening, and may be a concerning oversight or assumption on the part of schools. Of particular importance is the plans for synchronous versus asynchronous schooling, especially when technology access may be limited to certain times, or shared with family members, making an exclusively synchronous experience very limiting. Details on the format of potential online education were not fully discussed in the survey responses, but will be an important follow-up discussion as schools transition into their teaching semesters. Hybrid and online learning can take many incredibly different forms.

This analysis leaves room for further examination, especially regarding the discrepancies between and feasibility of responses. For example, how is a public health school going to adhere to social distancing without reducing class sizes? Can degrees still be accredited if the method of delivery changes? How contingent are these plans on national COVID-19 levels? And, how different will these plans be for a follow-up in September? European SPH are implementing these changes rapidly as the fall semester approaches. Reviewing these
questions in the follow-up survey will allow an increased pattern identification and a better understanding of the fluctuation of plans and how they respond to the current situation.

**Conclusion**

The goal of this initial survey was to understand and record the varying responses of European Schools of Public Health to the COVID-19 pandemic. With constantly fluctuating epidemiologic data and discussions on best practices, assessing the current plans of each school will help provide better information for all schools to create their own plans, guide national and international policies, and allow for future analysis of how the pandemic was managed by higher education. This initial survey will be followed by a second phase of data collection in September, which will allow for qualitative and quantitative analysis of the changes in schools’ plans in the context of epidemiological changes. The many predicted methods of delivery will be immediately tested, and ASPHER looks forward to further analyzing and collaborating with these SPH to understand and analyse best practices. This survey found that, while the majority of schools are implementing broad changes, the specific details of implementation and provision are not yet known, nor have many of the recommendations been put into practice in higher education scenarios. Certain discrepancies and potential limitations to feasibility will be carefully considered as students return to campuses and various methods of learning.

**References**