

## Providing Sterilisation & Laboratory Services for the World's Most Innovative Healthcare Companies.

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## Dose Mapping - Medistri

### Dose Mapping

Sterilization is a critical process in the healthcare industry which is used to ensure that medical devices and products are free from harmful microorganisms. One of the methods used to achieve this is irradiation, which involves exposing products to ionizing radiation to destroy or inactivate microorganisms. To ensure that the sterilization process is effective, it is important to accurately determine the dose of radiation required.

Dose Mapping is a process used to establish the minimum and maximum areas of imparted dose within a product load, allowing for precise and effective sterilization. Once these areas have been determined, routine dosimeter placement will be limited to the minimum and maximum dose.

Dose Mapping helps to ensure that the sterilization process is effective and safe. By accurately determining the minimum and maximum areas of imparted dose within a product load, Dose Mapping allows for precise control over the sterilization process. This is important because it ensures that the product is exposed to the appropriate amount of radiation, effectively destroying or inactivating harmful microorganisms while avoiding damage to the product itself. In addition, dose mapping helps to ensure that the sterilization process is consistent and repeatable, providing confidence in the safety and effectiveness of medical products.

Dose mapping is performed by determining the most efficient means of placing product in a carrier or tote and placing numerous dosimeters throughout the product load.

 Dosimeters are small devices that measure the amount of radiation absorbed by the product. By placing dosimeters at various locations within the product load, it is possible to establish the minimum and maximum areas of imparted dose.


Once these areas have been determined, routine dosimeter placement will be limited to the minimum and maximum dose areas to ensure that the product is exposed to the appropriate amount of radiation during the sterilization process.

After a Dose Mapping study is completed, the results are typically provided in a report. This report will include information on the minimum and maximum areas of imparted dose within the product load, as well as any other relevant data or observations from the study. The report is usually provided to our customers, and can be used to inform decisions about the sterilization process and ensure that it is effective and safe.

Dose mapping studies in the sterilization industry are typically performed in accordance with the guidelines provided in ISO 11137-3, which is the international standard for the sterilization of healthcare products using radiation.

This standard provides guidance on dosimetric aspects of the development, validation, and routine control of a sterilization process for medical devices. It includes information on the selection and calibration of dosimetry systems, the measurement of dose, and the interpretation of dosimetry results.

Dose Mapping plays a crucial role in ensuring the safety and effectiveness of medical products, making it an important study in the healthcare industry. At Medistri, we have qualified professionals who can prepare a safe and reliable Dose Mapping study according to the guidelines provided in ISO 11137-3.

 To learn more about Medistri's Dose Mapping, visit on our website [here](#) or directly contact our team at [contact@medistri.swiss](mailto:contact@medistri.swiss).

- The Medistri Team

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