



HALT SOFTWARE

2016

User Guide for LTCFs





Abbreviations

- LTCF: Long-Term Care Facility
- PPS: Point Prevalence Survey
- ATC: The Anatomical Therapeutic Chemical (ATC) Classification System

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1. Introduction

This application is designed for long-term care facilities (LTCF) to collect data for the HALT point prevalence survey. Each LTCF enters the local HALT data from completed questionnaires into the application. The application can generate a summary report and afterwards each LTCF will export the finalised data and e-mail a copy of the final file to the HALT team at HPSC halt@hpsc.ie

This user guide will provide details on how to download the software from the HPSC website, install the software on your computer and input data from your completed questionnaires. Details are also provided on how to generate an automatic summary report and how to export the data and e-mail it to the HPSC.

- **If you participated in HALT previously** and are still using the same computer, installation of the new HALT 2016 software should be straightforward as your computer hopefully still has the necessary pre-requisites to run the HALT software. You should be able to skip section 2.1 and go straight to section 2.2.
- **If you are participating in HALT for the first time** or using a different computer for data entry than previous HALT surveys, you will need to read all of Section 2.
- **If you are a HALT coordinator for more than one LTCF** please refer to Section 2.2.2 page 5.

IT IS STRONGLY ADVISED THAT YOU PROCEED TO DOWNLOAD YOUR HALT SOFTWARE AS SOON AS POSSIBLE AFTER YOUR HALT TRAINING DATE

With the information provided below, it should be possible for each LTCF's local HALT coordinator to install the HALT software on your computer. However, if you have on-site IT service, you can ask them to install this software for you, following the step-by-step protocol.

HSE ICT Services are aware of the HALT 2016 project and have been asked to respond promptly to LTCFs that report difficulty installing software. Please contact your regional ICT service as soon as possible if you are experiencing technical problems to allow time for the issue to be addressed in time for HALT.

If you have no IT services available to you and have problems installing the software, please contact halt@hpsc.ie at the HPSC.

2. Installing the HALT Software

2.1. Prerequisites for installing the software on your computer

In order to run the application, you must have a computer with the following requirements:

- Operating System: Microsoft Windows 98 or later
- Software: Microsoft .NET framework 2.0 or above and a ZIP file extractor

The .NET framework is distributed by Microsoft and is free of charge. If you have Windows XP Service Pack 3, Windows Vista or Windows 7, it is already installed on your computer. In any other case, you have to check whether the framework is already installed on your computer.

2.1.1. How to check whether the .NET framework is installed

Windows XP:

1. Go to start (lower left corner)
2. Open the Control Panel
3. Open "Add or Remove Programs"
4. In the list, look for something like "Microsoft .NET Framework X.X ..."
5. If X.X is 2.0 or more, it means the framework is already installed

In all other cases you will have to install the framework

Windows 7:

1. Go to start (lower left corner)
2. Open the Control Panel
3. Open "Programs" and click on "Programs and Features"
4. In the list, look for something like "Microsoft .NET Framework X.X ..."
5. If X.X is 2.0 or more, it means the framework is already installed

In all other cases you will have to install the framework

Windows 8(.1) and 10 users by default have a .NET framework higher than 2.0.

2.1.2. How to install the .NET framework on your computer

A newer version of the .NET framework can be found and downloaded from:
www.microsoft.com/net

2.2. How to download the HALT software to your Desktop

- The HALT software can be downloaded from the HPSC website at the address below:
<http://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/Surveillance/HCAIinlongtermcarefacilities/DocumentationandsoftwareforundertakingHALT/>

To download the software, click on the file called 'HALT 2016 Software [Zip file]' at the end of the page and select to save the file on your Desktop. The downloaded file will be called 'HALT-3 2016 Software'.

- Please save this file onto your Desktop or local C: drive. **Do not save the file on the network.**
- **If you have permission problems moving and copying files on your computer, please contact your IT services as soon as possible, as there could be a delay in accessing IT support.**
- Please save the file in a folder of your choice (e.g. Open your Desktop and create a new folder called 'HALT'. To do this, go to your Desktop, right click your mouse and select 'New' and then 'Folder'. A new folder will appear on your Desktop. Rename the folder to 'HALT 2016'. Move your new file into this folder.
- If you participated in HALT previously, move your HALT 2010/2011/2013 software folders into this 'HALT' folder. This is not essential but just to allow you to keep all of your HALT files in the same location on the computer.
- Now open your 'HALT' folder. Within this folder you should now have a file called 'HALT-3 2016 Software'. You now have to unzip or extract the file. The application will not work without unzipping or extracting the file.

2.2.1. How to unzip your file with the ZIP file extractor

The HALT software is distributed as a ZIP archive. In order to use it, you first need to extract it. You will need a program that is able to unzip ZIP archives. Windows XP and above include such software by default.

If you have software on your computer to unzip files, double click on the 'HALT-3 2016 Software' file and a window should appear listing the name of the file you want to unzip. Click once on the file you want to unzip and search for the function 'Extract here' or 'Extract files ...'.

If you click “Extract here”, the unzipped documents will be placed in the same folder as the original .zip file (This is recommended). If you click “Extract files...”, you can choose a different folder in which you can save your documents.

Once you extracted your files, you should now have a folder called ‘HALT-3 2016 Software’ which contains all the files as listed below.

Name	Type
HALT.dll	Application extension
HALT	Microsoft Access Database
HALT.ReportingTool.dll	Application extension
HALT_LTCF	Application
HALT_NC_TraductionModule.dll	Application extension
Ionic.Zip.dll	Application extension
ReportTemplate	HTML Document

If your computer does not have a ZIP program, you can download one from the internet:

<http://sourceforge.net/projects/sevenzzip/> > click on download and follow the instructions.

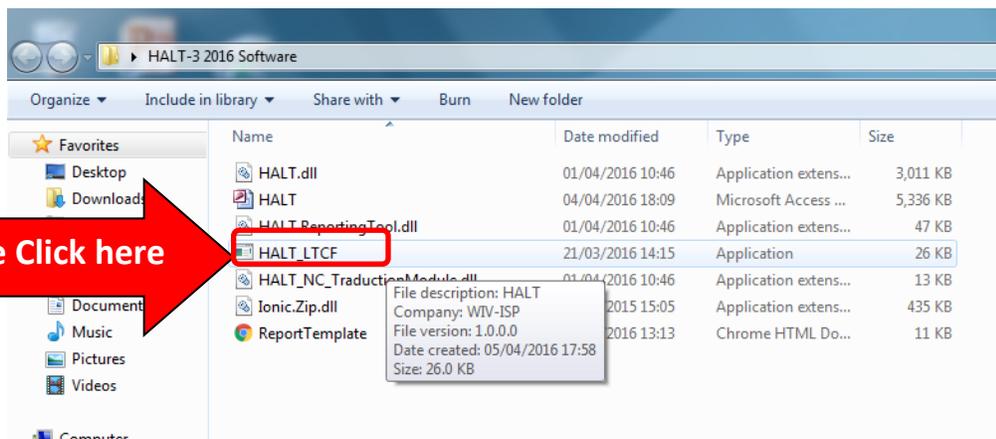
2.2.2. What if you are entering data for multiple LTCFs?

Important: The software can only be used for one LTCF, i.e. only for one study number. In case you are responsible for the data entry of several facilities, you should:

- 1) Create a new folder on your computer for each LTCF you want to enter data for (make sure to name the folders appropriately so you can distinguish them)
- 2) Copy the original .zip file to this folder
- 3) Extract the .zip file
- 4) Open the application and enter data for a new LTCF

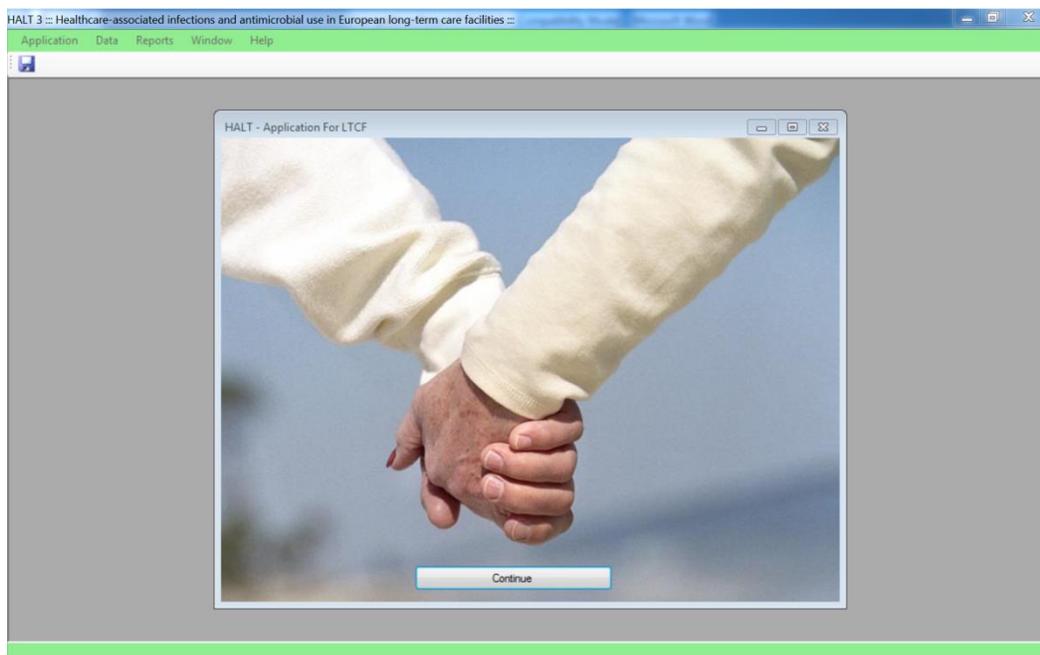
2.3. How to open the application to ensure that it is working

To open the application, go into the HALT-3 2016 Software folder, and simply double-click on the **HALT_LTCF.exe** or **HALT_LTCF** file (depending on your computer’s configuration you will or will not see the .exe extension at the end of the file name) – see example below. **Opening the file may take a couple of seconds!**



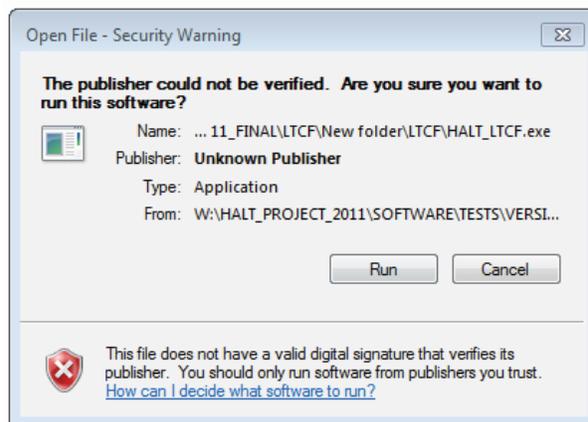
Important: The application will not work if you did not unzip and extract the file first and just double-clicked on the file to see the content (see 2.2.1). An error report will appear. **Extracting the zip file first is therefore absolutely necessary.** Do not delete files from the folder that is created, otherwise the software will not work properly.

Once you have double clicked this icon, the following image will appear.



Click on the “Continue” button. You will see a login window appear.

Note: Depending on the computer you use and its security settings, a security warning may pop up (see figure across). Click “Run” to proceed.



2.4. How to Login



Enter your login code in the Login field and your password in the Password field. Please note that both login and password are case sensitive.

Login details are provided below:

Login Details:

The same details are used for both the Login and the Password.

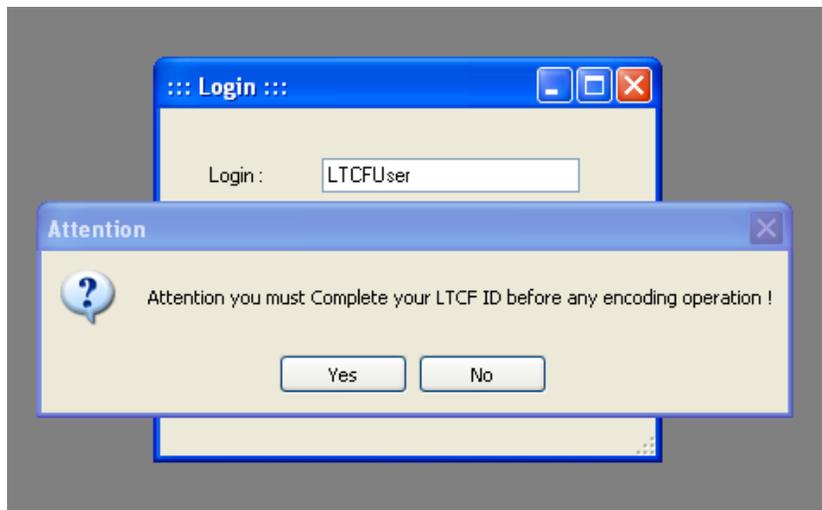
Login = LTCFUser

Password = LTCFUser

Once you have entered the login and password, click on the button “Enter”. You are now able to use the HALT application.

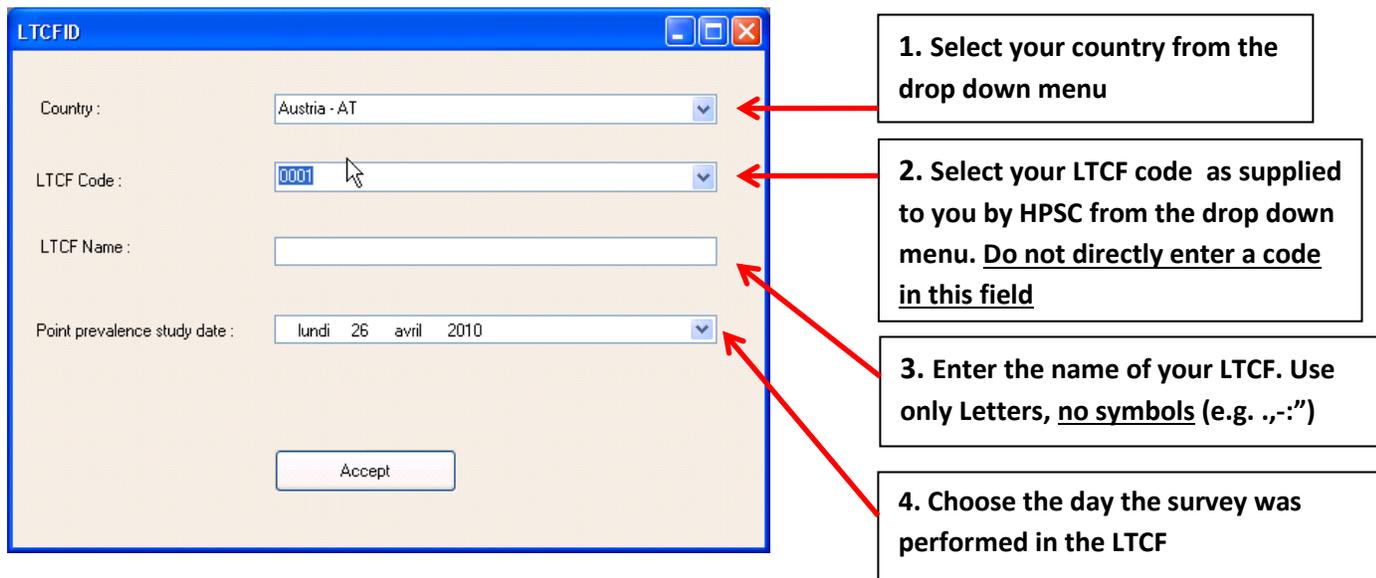
You will see a dialog box appear, with the following message:

“Attention you must complete your LTCF ID before any encoding operation”.



Click on the “Yes” button.

The login window will then disappear and a new window opens:



1. Select your country from the drop down menu

2. Select your LTCF code as supplied to you by HPSC from the drop down menu. Do not directly enter a code in this field

3. Enter the name of your LTCF. Use only Letters, no symbols (e.g. ., - :’)

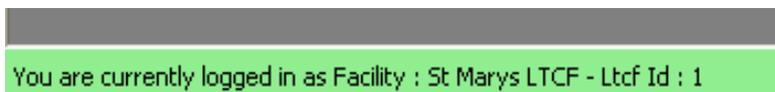
4. Choose the day the survey was performed in the LTCF

This window appears because the application needs to know for which LTCF you want to enter data for. This must be completed only **once**.



1. In the “Country” field, select your country from the drop down menu: **Ireland-IE**
2. In the “LTCF code” field, choose **your** study number which was provided to you by e-mail from the HPSC. For example, your LTCF study number is 67, select 0067 from the drop down menu. **Ensure that you select this study number from the drop down menu.** Directly entering a study number in this field is not possible and will result in an error message.
3. In the “LTCF Name” field, enter the name of your LTCF. **Do not use a full-stop or apostrophe** in the name of your LTCF as this causes problems with the software package. If your facility name is **St. Mary’s LTCF** – then please name your facility: **St Marys LTCF** without the full stop or apostrophe. Do not use any symbols in the LTCF Name field (i.e. /!^”.,# etc)
4. In the “Point prevalence study date” field, please pick the day the survey was carried out in your LTCF or the date that the survey started for larger LTCF where data collection took more than one day
5. Click on the “Accept” button

The name and ID of your LTCF will now appear at the bottom of the application window:

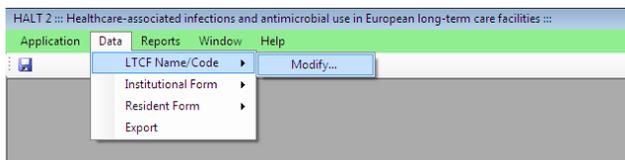


You are now ready to use the HALT application.

3. How to Use the HALT Software

3.1. Changing the LTCF identification data

In the case you made an error when identifying your LTCF OR if you wanted to change the date of your survey, you have the possibility to make corrections. Click on the “Data” menu and select “LTCF Name/Code > Modify...”

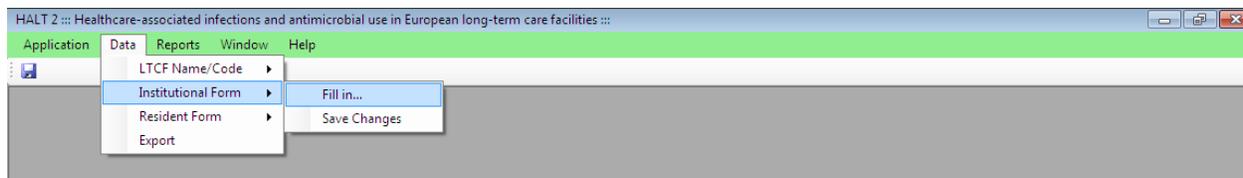


Important: Changing the LTCF ID does not erase data already entered and saved, nor does it allow data entry for a new LTCF. The application can only be used for data entry for one LTCF (i.e. only for one unique study number). In the case where the local coordinator is responsible for the data entry of several LTCFs, (s)he can:

1. Create a new folder on the computer with the name of the second facility
2. Copy the original “**HALT 2016 LTCF Software**” zip file to this folder
3. Extract the zip file
4. Open the HALT software and enter data for a new LTCF

3.2. Entering data in the Institutional Questionnaire

In order to access the institutional form, click in the menu on “Data” and select “Institutional Form > Fill in...”



The institutional form will appear. The different sections of the institutional questionnaire have been split up in several screens, accessible through tabs. For example, if you want to display the questions on Denominator Data, simply click on the tab with name “B – Denominator Data”, etc.

There are several types of fields in which you can enter data. See table below. For example, radio buttons (round buttons) only need one answer, whereas tick boxes can have multiple answers.

Button type	Example	Description
Radio buttons	<p>Is this/are these person(s):</p> <p><input type="radio"/> Working in the facility (internal)</p> <p><input type="radio"/> Not working in the facility (external)</p> <p><input type="radio"/> There is both an internal and an external person</p>	Click on the radio button next to the appropriate answer. Buttons are mutually exclusive, i.e. only one button can be ticked
Tick boxes	<p>1. Who collected the HALT-3 data</p> <p><input type="checkbox"/> A physician</p> <p><input type="checkbox"/> A nurse</p> <p><input type="checkbox"/> Another person</p>	To select an answer, click on the tick box next to the appropriate answer. Tick boxes are independently of each other, i.e. you can select several answers
Number field with arrows	<p><i>Total number of meetings last year ?</i></p> <p><input type="text"/> <input type="button" value="▲"/> <input type="button" value="▼"/> <i>meetings previous year</i></p>	These fields accept numbers. You can enter a number directly or use the arrows to increase (top arrow) or decrease (bottom arrow) a number
Text field	<p>Infection code</p> <p>Other infection ▼</p> <p>If 'other' infection, please specify</p> <p><input type="text"/></p>	These fields accept any text string

For example:

3.3. Warning messages

Checks were included in the institutional form to prevent surveyors from forgetting to complete certain parts (tabs) of the form.

When switching between part A, B and C of the form, a warning message will appear when important questions in the different sub tabs were not answered. The concerning question(s) are highlighted in purple.

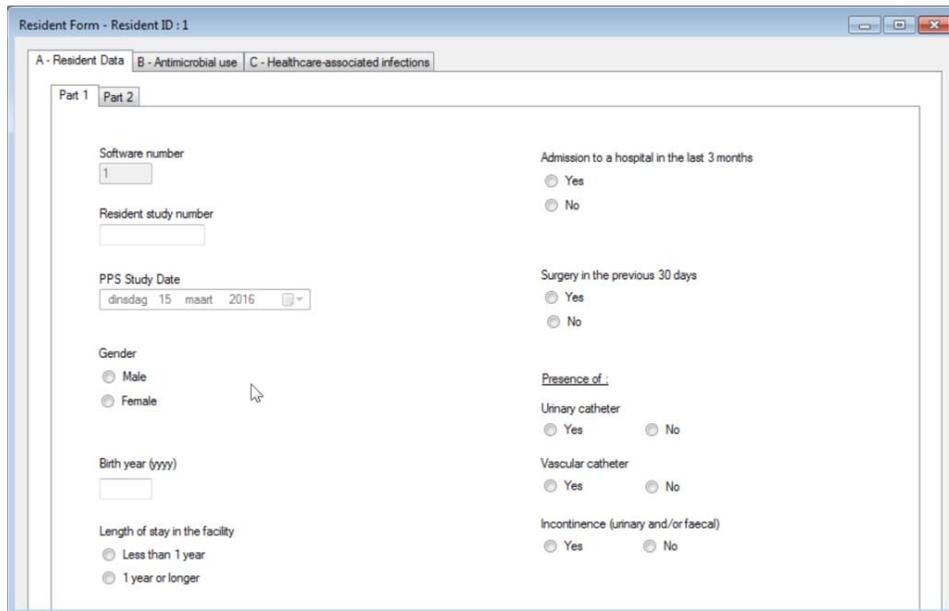
Please fill in these answers if you can however, an answer to these questions is not needed to save the data.

3.4. Entering Data in the Resident Questionnaire

3.4.1. Adding a resident

From the menu select “Data > Resident Form > Add new ...”

A window appears. You can start encoding data for the resident.



A resident study number should have been allotted by you to each resident during the PPS. This is made up of two parts: The locally-assigned letter code for the ward/unit and the consecutive number of the resident on the ward list (e.g. A05 – ‘A’ refers to the ward and ‘05’ refers to the 5th person who was surveyed on that ward). (Please see the HALT protocol under section 1.3 for more information on assigning resident study numbers). This number should appear on the resident questionnaire (paper form) and entered into software.

In addition, a **software number** is automatically assigned to each resident form. It is incremental, i.e. the first resident form receives number 1, the second receives number 2 and so on.

When switching from different parts of the form, a warning message will appear when no answer was given to the following questions: gender, surgery in the previous 30 days, urinary catheter, vascular catheter, incontinence, pressure sore, other wounds, disorientation or mobility. The variables will be highlighted in purple. An answer to these questions is not needed to save the resident form.

Important: Sections B (Antimicrobial Use) and C (Healthcare-associated Infections) are greyed out by default which means no data can be entered. To activate these sections, you must answer the question relative to the status of the resident, located in the tab named “Part 2” of section A (Resident Data). See figure below:

On the day of the survey, the resident :

Receives antimicrobial agent(s)
 Yes

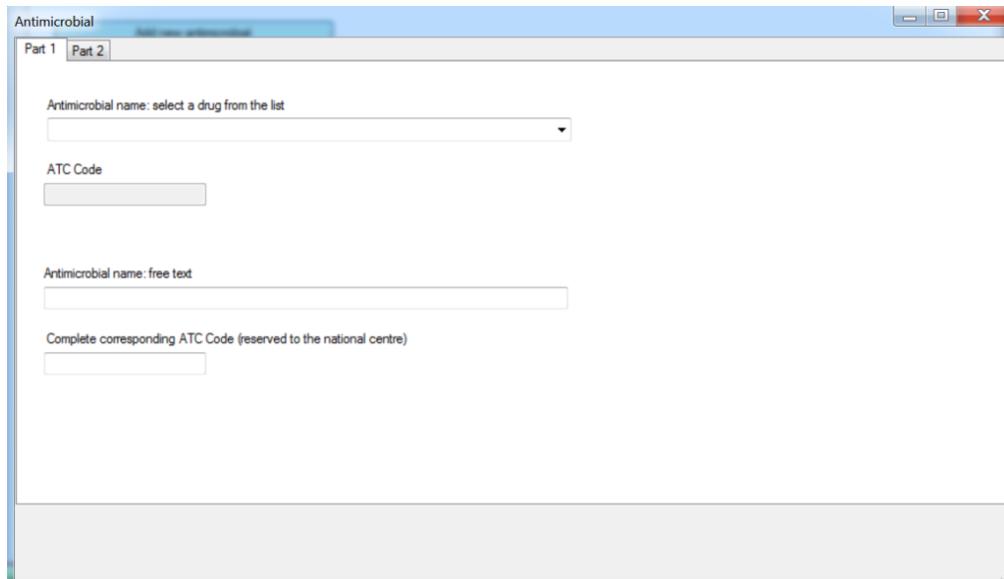
Presents infection(s)
 Yes

Has both: antimicrobial use and infection(s)
 Yes

When selecting the first answer (i.e. receives antimicrobial agents), section B gets activated. Clicking on the second answer (i.e. presents infection), activates section C, and selecting the third answer (i.e. Both: antimicrobial use and infection) opens both section B and C. The resident form cannot be saved if no answer was given to this key question. An error message will pop up.

3.4.2. Antimicrobial use data

Click on the button “Add New Antimicrobial” to enter data for a (new) antimicrobial. A window will appear:



A predefined list of all antimicrobials available in your country has been integrated in the form. Please note that this list may be incomplete (drugs recently removed from or added to the market). You can select an antimicrobial for this list.

To make the search for the antimicrobial name go faster, click on the arrow point down and enter the

first letter(s) of the antimicrobial. **Do not type in the entire antimicrobial name!** Please select it from the drop down menu.

After selecting an antimicrobial from the list, its corresponding ATC code is automatically displayed in the field below.

If the antimicrobial cannot be found in the list, you can enter its name in the free text field labelled “Antimicrobial name: free text”. **Note:** Antimicrobials manually entered in the free text box are not included in the automatic summary report. You should only use free text as a last resort. It would be incredibly rare for an antimicrobial not to be in the dropdown list

The antimicrobial treatment data cannot be saved if following occurs:

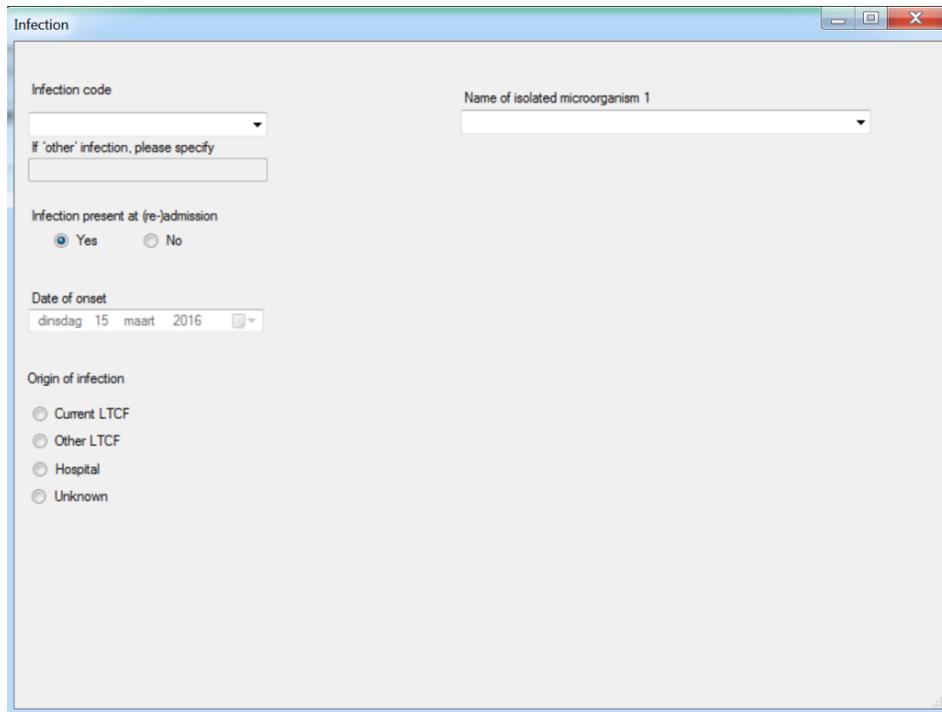
- 1) No antimicrobial was chosen from the drop list or no antimicrobial name was inputted.
- 2) No answer to the questions “type of treatment”, “antimicrobial given for”

After saving the antimicrobial use data the name of the antimicrobial will be displayed in part B – Antimicrobial use of the resident form. To add a new antimicrobial click again on ‘Add new antimicrobial’. Up to four antimicrobials can be entered.

3.4.3. Healthcare-associated infections

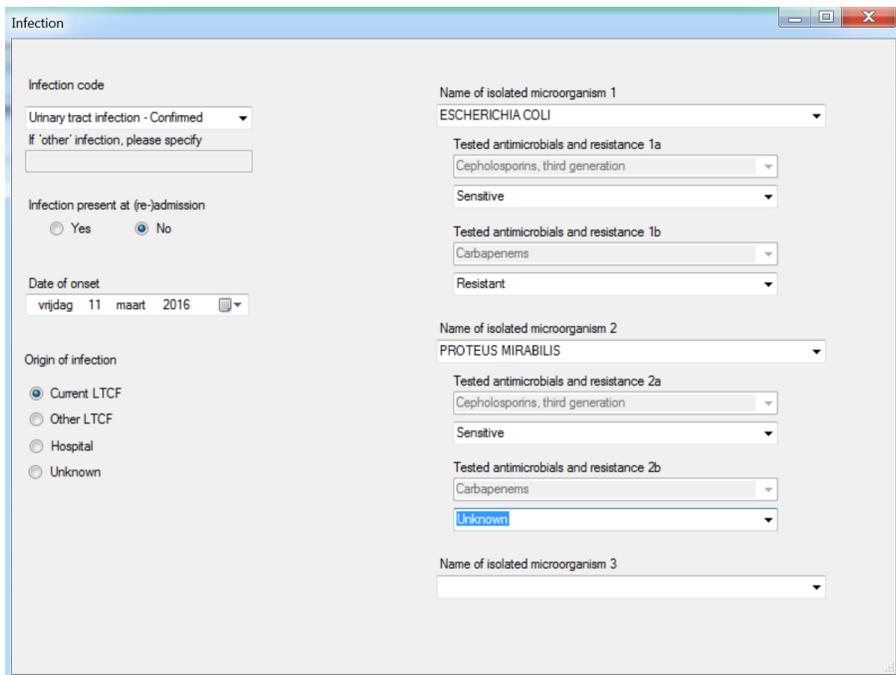
Click on the button “Add new infection” to enter data for an infection. A window will appear

Take extra care to make sure you select the correct infection code, as you recorded it on your resident questionnaire paper form. Infection Imported is only ever used for a resident who returns to your facility on antimicrobial treatment for a HCAI that started in the hospital/other facility and you don’t have access to any symptoms or signs data.



Select the appropriate infection from the predefined list of infections displayed below ‘Infection code’. For each infection data on the isolated microorganism(s) and antimicrobial resistance should be entered. Specify up to three isolated microorganisms. If no microbiological result is available on the day of the PPS, one of the following options should be selected:

EXAMINATION NOT DONE	No diagnostic sample taken, no microbiological examination done.
RESULTS NOT AVAILABLE	The results of the microbiological examination are not (yet) available or cannot be found.
MICROORGANISM NOT IDENTIFIED	Evidence exists that a microbiological examination has been done, but the microorganism cannot be correctly classified.
STERILE EXAMINATION	A microbiological examination has been done, but the result was negative.



Important:

The infection data cannot be saved if the following occurs:

1. No infection was chosen from the list;
2. No answer to the “Name of isolated microorganism 1”. Remember, even if there is no report yet, you still have to enter that in this section

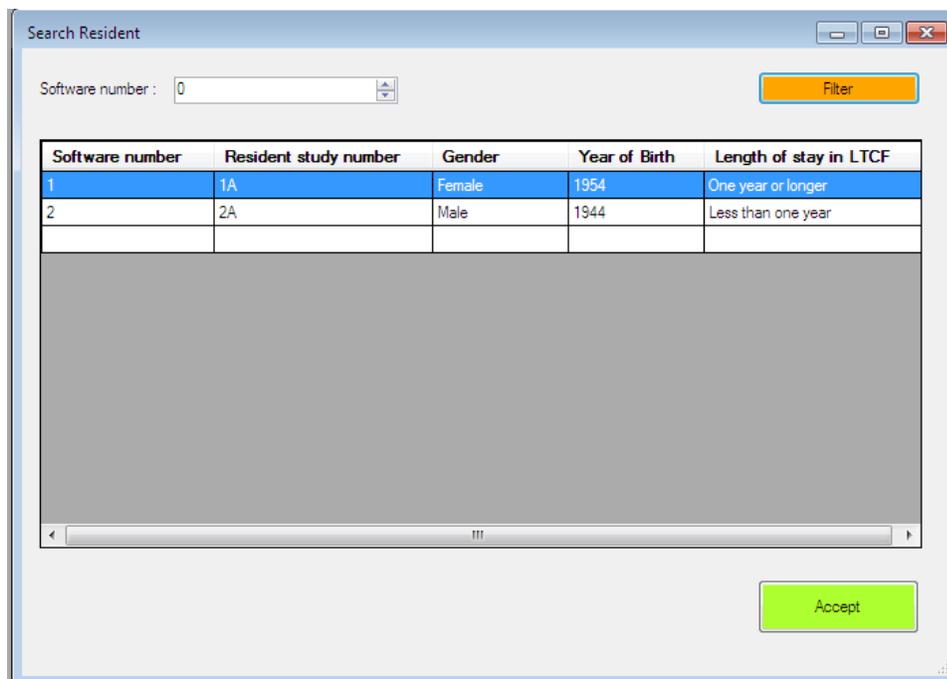
After saving the infection data the type of infection will be displayed in part C – Healthcare-associated infections of the resident form. To add a new infection click again on ‘Add new infection’. Up to four infections can be entered. To change the infection data click on the infection. To delete an infection and its details, please click on ‘Delete’.

3.4.4. Searching and modifying resident data

To modify resident data, select from the menu “Data > Resident Form > Search / Modify ...”

A window appears, displaying a list of all the residents encoded in the application.

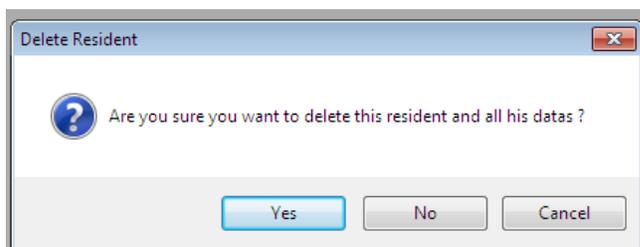
You can select a resident by clicking on its ID number and then on the “Accept” button. If the list is too long, you can filter by entering the software number in the field labelled “Software number” on top of the window and clicking on the button “Filter”. The resident form containing the already entered data is displayed. You can continue encoding data or make corrections.



3.4.5. Deleting a resident form

If you want to delete a resident form, select from the menu “Data > Resident Form > Delete ...”.

The same window as above (searching a resident) appears, allowing you to select the resident. When your choice is made, click on the button “Accept”. A dialog box appears, prompting you to confirm the deletion



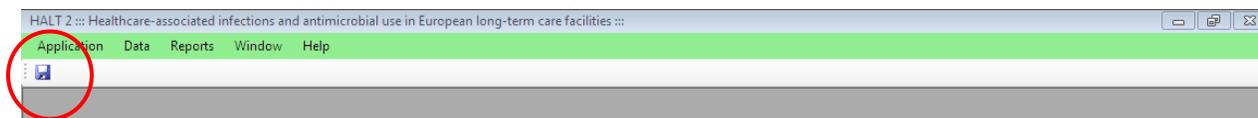
Click “Yes” to delete and “No” or “Cancel” to cancel the operation.

3.5. How to save data

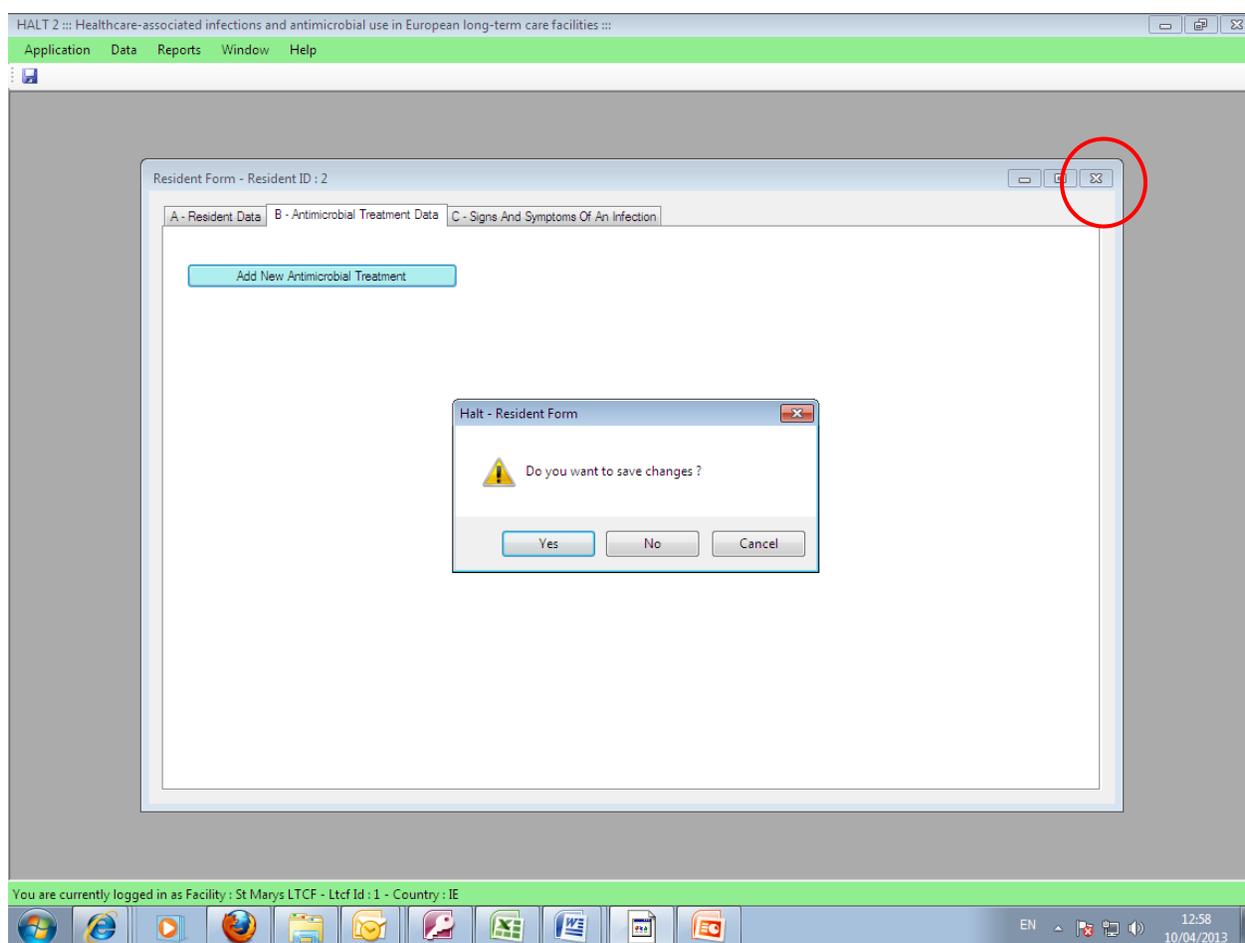
Pay attention to the fact that the data you enter into the application are not automatically saved. You must explicitly save them.

Two possibilities are offered:

1. **Click on the floppy disk icon on the top left of the screen to save the data.**

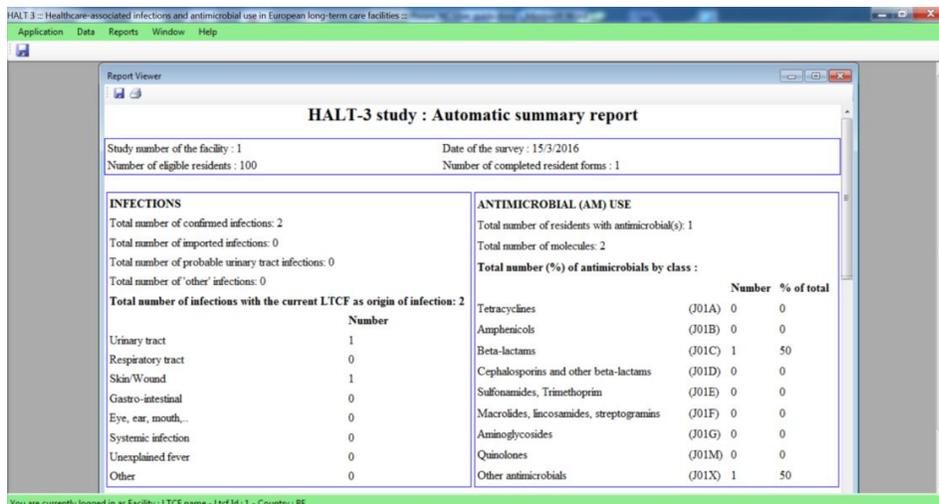


2. **Click on the red X button to close a window and a dialog box will appear asking you if you want to save the changes.** Click “Yes” to save the data or “No” to close the window or application without saving. “Cancel” will prevent the window from closing.



3.6. Viewing the survey summary report

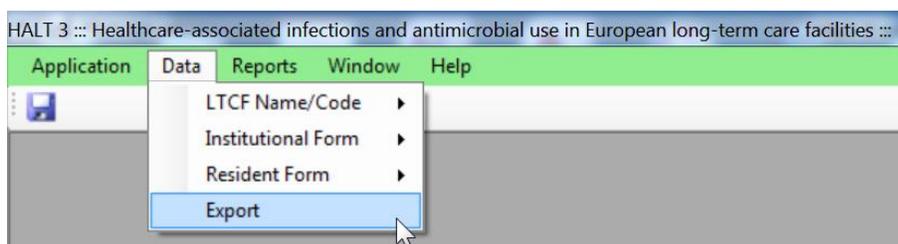
A report summarizing data of the LTCF and its residents can be displayed throughout the application. From the menu select “Reports > View Report”



You can save the summary report on your computer by clicking on the floppy disk icon in the left upper corner of the window (report viewer). The report is stored as a simple HTML file that can be viewed with any browser (Firefox, Internet Explorer...). There is also a printer icon that allows you to print the report. This is a very basic but immediate report on your HALT 2016 survey that you can share locally directly after HALT. Your local HALT report will have more data and will compare the 2016 results with previous HALT surveys if your LTCF has done HALT before.

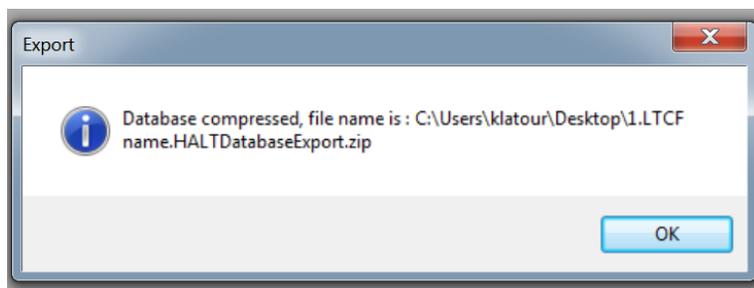
3.7. Exporting the data to the HPSC

Once data has been entered, the database must be sent to HPSC by e-mail. Click in the menu on "Data > Export".



Select a place (folder) where you want to save the file containing the data. Click OK to validate your choice. A dialog box appears, confirming that the file was saved.

REMEMBER, YOU HAVE TO PHYSICALLY E-MAIL THE COMPLETED FILE TO HPSC, CLICKING EXPORT WILL NOT SEND THE FILE FOR YOU



The name of the file is automatically generated with the format:
[ID of your facility].[Name of your facility].HALTDatabaseExport.zip

For example:

1.St Marys LTCF.HALTDatabaseExport.zip

Important: Do not rename the created .zip file. **Do not double click as it will not open.**

Attach the file to an email and send to HALT@hpsc.ie

The file may be quite large (~4MB) therefore if you are sending data from more than one facility, please send these attachments in separate emails, one attachment per email.

Please keep all paper questionnaires and computer files safely stored until the HALT National Report has been published by HPSC

4. Contact Details

If you have further questions do not hesitate to contact the following coordinators:

For any queries relating to HALT, please e-mail questions to:
halt@hpsc.ie

Let us know in the e-mail subject heading what your query relates to, so we can direct it to the most appropriate person to deal with your query

- HALT software IT issues – Sarah Hennessy
- Interpretation of microbiology results – Dr Karen Burns/Helen Murphy
- Interpretation of HCAI case definitions or deciding whether a surgical site infection or *Clostridium difficile* infection was acquired in the hospital or in the LTCF - Dr Karen Burns/Helen Murphy