Centers for Disease Control and Prevention (CDC)

National Center for Environmental Health (NCEH)

Division of Laboratory Sciences (DLS)

NEWBORN SCREENING AND MOLECULAR BIOLOGY BRANCH (NSMBB)

NEWBORN SCREENING QUALITY ASSURANCE PROGRAM (NSQAP) PORTAL

**QUALITY CONTROL USER GUIDE** 

September 2023

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# **1. Introduction**

The NSMBB Newborn Screening Quality Assurance Program (NSQAP) Portal has been designed to accept participant quality control (QC) data using two options: manual data entry and data upload. Participants are advised to consider their laboratory's internal workflow, processes, and needs, before choosing <u>one</u> of the two options for data submission. Additionally, participants are advised to consider the following before deciding on a data entry option:

- 1. Participants are permitted to only use one data entry option (manual or upload) per event.
- If the upload option is chosen, data must be consolidated into a single template for upload. Participants are required to download the template, enter data from all QC programs into a single template file and save the file before uploading. If multiple uploads are performed, the previous file will be overwritten.
- 3. The review feature enables participants to review and edit manually entered or uploaded data in the Portal directly from the review page.

The following pages describe how to enter data into the NSQAP Portal once a data entry option is chosen.

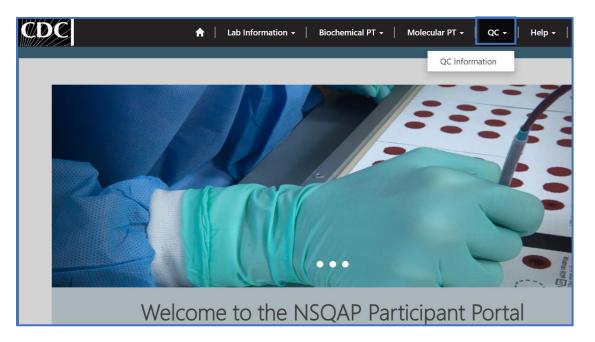
# 2. QC Manual Data Entry

QC Programs data can be manually entered into the NSQAP Portal from the QC Information section of the Portal.

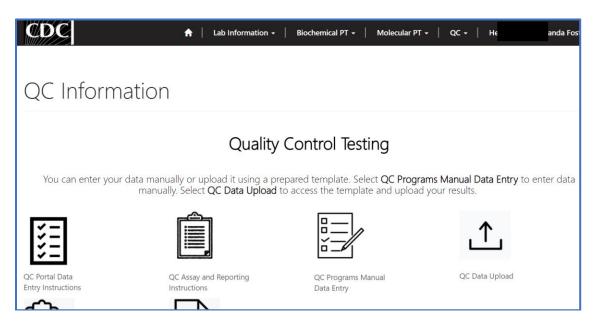
Note: If you choose to manually enter data, you cannot upload data to the Portal.

### 2.1 QC Information Homepage

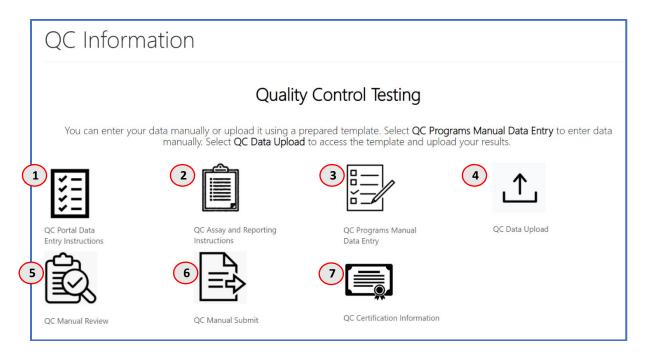
1. Select the 'QC' button at the top of the page on the toolbar and select the 'QC Information' option.



2. This page serves as the homepage and resource for all QC related activities.



3. The QC Information homepage contains several icons that are used to navigate to the various QC sections within the NSQAP Portal.



- 1. **QC Portal Data Entry Instructions** Downloadable Instructions for Completing Manual Data Entry in the NSQAP Portal.
- QC Assay and Reporting Instructions NSQAP QC Assaying and Reporting Instructions for QC Analytes
- QC Programs Manual Data Entry –Page for Manually Entering QC Data into the Portal
- 4. **QC Data Upload** Homepage for Accessing Information for Uploading QC Program Data into the Portal
- 5. **QC Manual Review** Page for Reviewing QC Data Manually Entered into the Portal
- 6. **QC Manual Submit** Page for Submitting QC Data Manually Entered into the Portal
- 7. **QC Certification Information** NSQAP Report Forms and Certification Data Information

# 2.2 Manual Data Entry

1. Select the 'QC Programs Manual Data Entry' icon on the QC Information homepage.



2. Select the QC Program by clicking on the program hyperlink.

QC Programs	
Program Name 🕇	Created On
17 α-Hydroxyprogesterone + Total Galactose (17OHPQC and TGalQC)	3/5/2020 11:05 AM
Galactose-1-phosphate Uridyltransferase (GALTQC)	3/5/2020 11:05 AM
Immunoreactive Trypsinogen (IRTQC)	3/5/2020 11:05 AM
Lysosomal Storage Disorders (LSDQC)	3/5/2020 11:05 AM
Second-tier Congenital Adrenal Hyperplasia by LC-MS/MS (CAHQC)	3/5/2020 11:05 AM
Second-tier Maple Syrup Urine Disease and Phenylketonuria by LC-MS/MS (MSUD-PKUQC)	3/5/2020 11:05 AM
Second-tier Methylmalonic /Propionic Acidemia and Homocystinuria by LC-MS/MS (MMA-HCYQC)	3/5/2020 11:05 AM
Tandem MS 1 (MSMS1QC)	3/5/2020 11:05 AM
Thyroid-Stimulating Hormone (TSHQC)	3/5/2020 11:05 AM
Thyroxine (T4QC)	3/5/2020 11:05 AM

3. Select the Analyte by clicking on the analyte abbreviation hyperlink.

Analyte	s List - (DATA ENTRY)		
Program Name: Tandem MS 1 (M			
Analytes	Name	Submitted By	Submission Date
ALA	Alanine (ALA)	,	
ARG	Arginine (ARG)		<b>~</b>
C0	Free Carnitine (C0)		<b>~</b>
C10	Decanoylcarnitine (C10)		<b>v</b>
C12	Dodecanoylcarnitine (C12)		<b>~</b>
C14	Myristoylcarnitine (C14)		<b>v</b>
C14:1	Tetradecenoylcarnitine (C14:1)		<b>v</b>
C16	Palmitoylcarnitine (C16)		<b>v</b>

4. Select the **'Magnifying Glass'** icon on the 'Method' field.

Home > QC Data Entry	
QC Data Entry	
View Summary	SAVE METHOD
General Analyte Name	
Analyte Name Arginine (ARG)	
Method *	٩

5. A new window will appear listing methods for the analyte. Click on the method, and the row will highlight with a check mark on the left side. Click the **'Select'** button at the bottom of the window to choose the method.

Lookup re	cords		×
		Search	٩
4	Method Name 1		~
	Derivatized - MS/MS ClinSpot® Complete Kit RECIPE		
	Derivatized - MS/MS MassChrom® Chromsystems		
	Derivatized - MS/MS NeoGram PerkinElmer		
4	Derivatized - MS/MS non-kit		
	High-performance liquid chromatography (HPLC) non-kit		- 1
	LC-MS/MS non-kit		
	Non-derivatized - MS/MS MassChrom® Chromsystems		~
	Non derivatized - NACINAL NACO Careening Non (NAC Non)Siemone		Ť
< 1	2 >		
		Select Cancel Remov	ve value

6. Select the **'Save Method'** button to save the method for the analyte.

Home > QC Data Entry	
QC Data Entry	
View Summary	
	SAVE METHOD
General	
Analyte Name	
Arginine (ARG)	
Method *	
Derivatized - MS/MS non-kit	<b>x</b> Q

7. Select the **'OK'** button when prompted "are you sure you want to save the method?".

Submit	×
Are you sure you want to save method?	
	Ok Cancel

8. To add QC data, select the run hyperlink in the 'Runs' summary table.

Runs													
	-			data with ne summa		-	aces, regai	dless	of the val	ues entere		sults enter Download Sum	
RUNS	Analyte	Lot_A	Replicate_1	Replicate_2	Lot_B	Replicate_1	Replicate_2	Lot_C	Replicate_1	Replicate_2	Lot_D	Replicate_1	Replic
1	Arginine (ARG)	A1815			B1815			C1815			D1815		
2	Arginine (ARG)	A1815			B1815			C1815			D1815		
3	Arginine (ARG)	A1815			B1815			C1815			D1815		
4	Arginine (ARG)	A1815			B1815			C1815			D1815		
5	Arginine (ARG)	A1815			B1815			C1815			D1815		
<													>

9. A data entry window will appear. Enter a quantitative value or select the <LOD checkbox for both replicates per lot then select the **'SAVE RUN DATA'** button.

O View details			×
	Analyte: A	arginine (ARG)	^
		1 SAVE RUN DATA	
Data cannot Values	not be saved until	all replicates have been completed	
A1815 Replicate 1A *	□ <lod< td=""><td>Replicate 2A * 🗌 <lod< td=""><td></td></lod<></td></lod<>	Replicate 2A * 🗌 <lod< td=""><td></td></lod<>	
8.7 B1815		8.9	
<b>Replicate 1B *</b> 76.8	□ <lod< td=""><td>Replicate 2B *         <lod< td="">           77</lod<></td><td></td></lod<>	Replicate 2B * <lod< td="">           77</lod<>	

**NOTE:** To save run data, both replicates must have a quantitative value or <LOD selected.

10. Data will appear in the summary table when the run is saved.

RUN	s											۲	Download Sum	nmary
1	NS	Analyte	Lot_A	Replicate_1	Replicate_2	Lot_B	Replicate_1	Replicate_2	Lot_C	Replicate_1	Replicate_2	Lot_D	Replicate_1	Replic
1	N_1	Arginine (ARG)	A1815	8.70	8.90	B1815	76.80	77.00	C1815	150.60	150.80	D1815	224.50	224.70
2	N_2	Arginine (ARG)	A1815	8.60	9.00	B1815	76.70	77.10	C1815	150.50	150.90	D1815	224.40	224.80
}	N_3	Arginine (ARG)	A1815			B1815			C1815			D1815		
1	N_4	Arginine (ARG)	A1815			B1815			C1815			D1815		
5	N_5	Arginine (ARG)	A1815			B1815			C1815			D1815		

11. Analyte specific data can be entered, reviewed, and edited on this page.

**NOTE:** Export results to an Excel spreadsheet by selecting the 'Download Summary' button. (Optional)

	-		ill display d layed in th				s, regardles	ss of t	he values e			ntered as
RUNS	Analyte	Lot_A	Replicate_1A	Replicate_2A	Lot_B	Replicate_1B	Replicate_2B	Lot_C	Replicate_1C	Replicate_2C	Lot_D	Replicate_1
1	Arginine (ARG)	A1815	8.70	8.90	B1815	76.80	77.00	C1815	150.60	150.80	D1815	224.50
2	Arginine (ARG)	A1815	8.60	9.00	B1815	76.70	77.10	C1815	150.50	150.90	D1815	224.40
3	Arginine (ARG)	A1815	8.50	9.10	B1815	76.60	77.20	C1815	150.40	151.00	D1815	224.30
4	Arginine (ARG)	A1815	8.40	9.20	B1815	76.50	77.20	C1815	150.40	151.00	D1815	224.30
5	Arginine (ARG)	A1815	8.30	9.30	B1815	76.40	77.40	C1815	150.20	151.20	D1815	224.10
٠												I

### **2.3 Review Manually Entered Data**

All manually entered QC Programs data can be reviewed by accessing the **'QC Manual Review'** page on the QC Information page.

1. Select the 'QC Manual Review' icon from the QC Information page.



2. On the QC Manual Review page, results can be reviewed and edited.

20	C Re	eview	V									
Filte	er by Pro	gram Nai	me									
□ 1	7 α-Hydrox	yprogester	one + Total Galactose (170	HPQC and TGalC	QC)							
	alactose-1	-phosphate	Uridyltransferase (GALTQC	.)								
	mmunoread	tive Trypsin	ogen (IRTQC)									
	ysosomal S	torage Diso	rders (LSDQC)									
🗆 S	econd-tier	Congenital	Adrenal Hyperplasia by LC	-MS/MS (CAHQC	)							
🗆 S	econd-tier	Maple Syru	p Urine Disease and Pheny	lketonuria by LC-	MS/MS (M	ISUD-PKU	IQC)					
🗆 S	econd-tier	Methylmalo	nic /Propionic Acidemia a	nd Homocystinur	ia by LC-M	IS/MS (MI	MA-HCYQC)					
ΠŢ	andem MS	1 (MSMS1C	2C)									
D T	hyroid-Stim	nulating Ho	rmone (TSHQC)									
ΠT	hyroxine (T	4QC)										
Les	<u>s</u>											
											Ap	ply
											Oow	nload
Run 🕇	Method	Method Code	Analyte	Analyte_code	Abbr	Lot_A	Replicate_1A	Replicate_2A	Lot_B	Replicate_1B	Replicate_2B	Lot
1	FIA- MS/MS		Acid Sphingomyelinase (ASM)	100	ASM	A1808	3.12	3.00	B1808			C18

3. To review QC data, navigate through the results table using the navigation features located on the right side and the bottom of the table.

🗆 s	econd-tier C	ongenital /	rders (LSDQC) Adrenal Hyperplasia by LC-1 o Urine Disease and Phenylk			SUD-PKU	00					
	re 🔻	napie Syrup	onne bisease and menyi	letonuna by Le-i	13/113 (11.	500-1 100	QC)					
											Ap	ply
											O Down	nloa
Run †	Method	Method Code	Analyte	Analyte_code	Abbr	Lot_A	Replicate_1A	Replicate_2A	Lot_B	Replicate_1B	Replicate_2B	10
1	FIA- MS/MS non-kit individual enzyme reaction		Acid Sphingomyelinase (ASM)	100	ASM	A1808	3.12	3.00	B1808			C1
1			Thyroxine (T4)	61	Τ4	A1700	4.60	4.12	B1700	4.20	4.43	C1
1			Immunoreactive Trypsinogen (IRT)	78	IRT	A1809			B1809			C1
1			11-Deoxycortisol (11D2)	203	11D2	A1811	4.60	5.78	B1811	1.65	5.87	C1
1			Total Galactose (TGal)	64	TGal	A1705	5.12	5.78	B1705	4.32	4.43	C1
1			17 α- Hydroxyprogesterone (17OHP)	65	17OHP	A1705	4.60	1.20	B1705	5.80	5.20	C1
1			Thyroid-Stimulating Hormone (TSH)	62	TSH	A1801	3.40	3.20	B1801	3.90	3.40	C1
1			22:0- Lysophosphatidylcholine (C22-LPC)	109	C22- LPC	A1815	3.33	3.56	B1815	5.80	5.23	C1

4. To edit data, select the hyperlinked run number of the row of interest.

											Ap	ply
											O Down	nloa
Run †	Method	Method Code	Analyte	Analyte_code	Abbr	Lot_A	Replicate_1A	Replicate_2A	Lot_B	Replicate_1B	Replicate_2B	Lo
1	FIA- MS/MS non-kit individual enzyme reaction		Acid Sphingomyelinase (ASM)	100	ASM	A1808	3.12	3.00	B1808			C1
1			Thyroxine (T4)	61	T4	A1700	4.60	4.12	B1700	4.20	4.43	С
<u>1</u>			Immunoreactive Trypsinogen (IRT)	78	IRT	A1809			B1809			C
1			17 α- Hydroxyprogesterone (17OHP2)	113	17OHP2	A1811	3.45	3.21	B1811	3.10	3.00	C
1			Alloisoleucine (ALE2)	205	ALE2	A1813	0.34	5.78	B1813	5.80	5.87	C

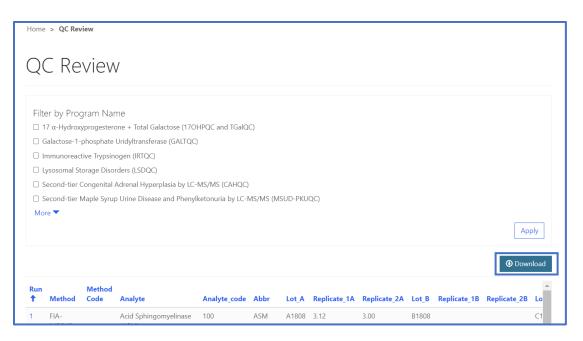
5. The analyte data entry page will appear. The data can be edited and saved.

• View details				×
Analyte	e: Immunorea	active Trypsin	ogen (IRT)	•
		1	SAVE RUN DATA	l
Data cannot	not be saved unti	l all replicates have	been completed	l
Values				l
A1809				
<b>Replicate 1A *</b> 45.83	□ <lod< td=""><td>Replicate 2A *</td><td>□ <lod< td=""><td></td></lod<></td></lod<>	Replicate 2A *	□ <lod< td=""><td></td></lod<>	
B1809 Replicate 1B *	□ <lod< td=""><td>Replicate 2B *</td><td>□ <lod< td=""><td></td></lod<></td></lod<>	Replicate 2B *	□ <lod< td=""><td></td></lod<>	

6. After selecting 'Save Run Data' you will be directed back to the QC Review page to continue reviewing your data.

Run ↑	Method	Method Code	Analyte	Analyte_code	Abbr	Lot_A	Replicate_1A	Replicate_2A	Lot_B	Replicate_1B	Replicate_2B	Lot_
1	FIA- MS/MS non-kit individual enzyme reaction		Acid Sphingomyelinase (ASM)	100	ASM	A1808	3.12	3.00	B1808			C18
1			Thyroxine (T4)	61	T4	A1700	4.60	4.12	B1700	4.20	4.43	C17
1			Immunoreactive Trypsinogen (IRT)	78	IRT	A1809	45.83	48.02	B1809	125.76	128.79	C18
1			17 α- Hydroxyprogesterone (170HP2)	113	170HP2	A1811	3.45	3.21	B1811	3.10	3.00	C18
1			Alloisoleucine (ALE2)	205	ALE2	A1813	0.34	5.78	B1813	5.80	5.87	C18

7. Review QC data offline by selecting 'Download' to generate an Excel spreadsheet of the data entered.



8. QC data can be filtered by program. Check the box(es) next to all relevant program names then select 'Apply'.

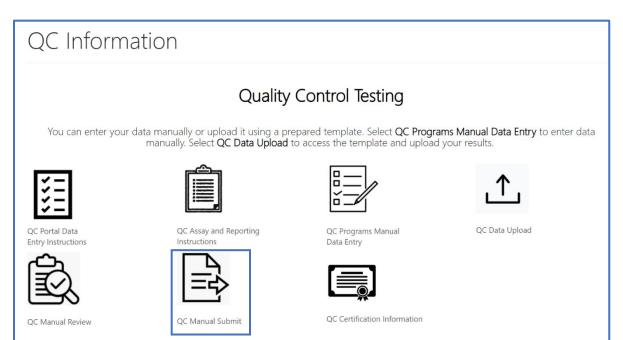
Home > QC Review	
QC Review	
Filter by Program Name	
$\Box$ 17 $\alpha$ -Hydroxyprogesterone + Total Galactose (170HPQC and TGalQC)	
□ Galactose-1-phosphate Uridyltransferase (GALTQC)	
Immunoreactive Trypsinogen (IRTQC)	
vsosomal Storage Disorders (LSDQC)	
Second-tier Congenital Adrenal Hyperplasia by LC-MS/MS (CAHQC)	
□ Second-tier Maple Syrup Urine Disease and Phenylketonuria by LC-MS/MS (MSUD-PKUQC)	
Second-tier Methylmalonic /Propionic Acidemia and Homocystinuria by LC-MS/MS (MMA-HCYQC)	
Tandem MS 1 (MSMS1QC)	
Thyroid-Stimulating Hormone (TSHQC)	
hyroxine (T4QC)	
Less 🗸	
	Apply

9. The data table will then update based on the filters chosen.

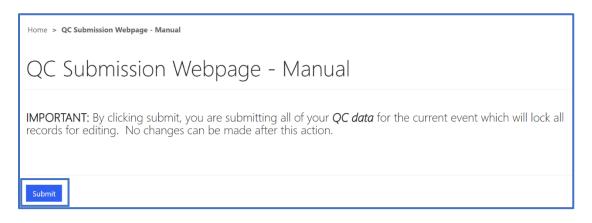
Less	, -											Appl	
Run <b>†</b>	Method	Method Code	Analyte	Analyte_code	Abbr	Lot_A	Replicate_1A	Replicate_2A	Lot_B	Replicate_1B	Replicate_2B	Lot_C	F
1	FIA- MS/MS non-kit individual enzyme reaction		Acid Sphingomyelinase (ASM)	100	ASM	A1808	3.12	3.00	B1808			C1808	5
I			Thyroxine (T4)	61	T4	A1700	4.60	4.12	B1700	4.20	4.43	C1700	2
l			Acid α-Glucosidase (GAA)	39	GAA	A1808			B1808	2.12	2.09	C1808	7
			Galactoceramidase (GALC)	38	GALC	A1808	7.45	7.00	B1808	5.00	5.98	C1808	5
1			α-Galactosidase (GLA)	98	GLA	A1808	2.34	2.45	B1808	2.34	4.45	C1808	3

## 2.4 Submit Manually Entered Data

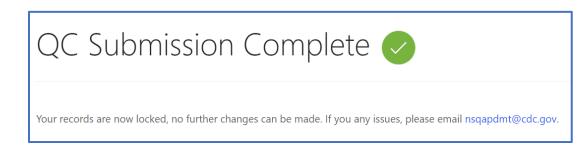
1. After reviewing data, navigate to the 'QC Manual Submit' page on the 'QC Information' page to submit all data at once.



2. Select 'Submit".



3. A confirmation page will appear once the submission is complete.



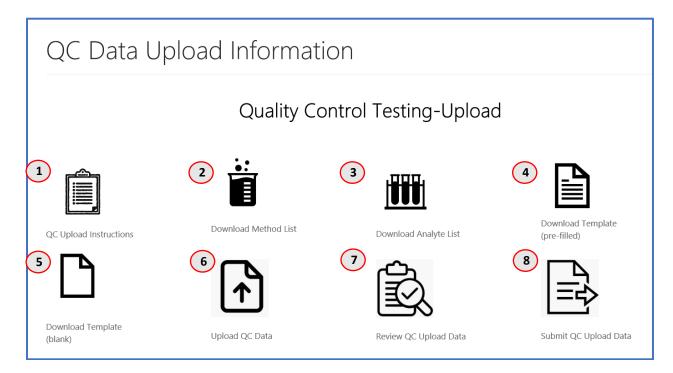
# 3. QC Data Upload

Data for QC Programs can be uploaded to the NSQAP Portal by accessing the 'QC Data Upload' area. **Note:** If you choose to upload data, you cannot manually enter data into the Portal.

1. Select the **'QC Data Upload'** icon on the QC information page.

QC Informa	ation		
	Quality	Control Testing	
You can enter your o	data manually or upload it using a pre manually. Select <b>QC Data Upload</b> t	epared template. Select <b>QC Progr</b> to access the template and upload	<b>ams Manual Data Entry</b> to enter data d your results.
¥ ¥ ¥ ¥	Ê,		⊥
QC Portal Data Entry Instructions	QC Assay and Reporting Instructions	QC Programs Manual Data Entry	QC Data Upload
Ŕ			
QC Manual Review	QC Manual Submit	QC Certification Information	

2. The QC Data Upload Information homepage contains several icons to navigate to the various QC upload sections.



1. **QC Upload Instructions** – Instructions for data upload process.

CDC ↑ Lab Information - Biochemical PT - Molecular PT - QC - Help -
Home > Upload Instructions
Upload Instructions
Steps for Uploading QC Template:
1. Download the Pre-filled template option.
2. Download and <b>READ</b> the QC Upload Instructions.
3. Download the Method List.
4. Enter all QC Programs data into a single consolidated template file. Report exactly 5 runs (10 data points) for each analyte. This is required for the template to be
accepted.
<ul> <li>When using the pre-filled template, provide the following information: method code, other method name (if applicable), and results.</li> <li>5. Do not alter column names, column order, or format of your template file. Any changes to the structure or format of the template will inactivate the template and the</li> </ul>
upload will fail.
6. Leave blank any inapplicable columns or fields. Add <lod for="" necessary.<="" results="" td="" when=""></lod>
7. Upload the completed template for ALL PROGRAMS you are reporting. No partial results will be accepted at this time
8. If you upload more than once, your previous upload will be overwritten.
9. Use the 'Review QC Upload Data' page to review and edit entries after uploading the completed template.
10. If you have trouble uploading your completed template please email NSQAPDMT@cdc.gov for assistance.

2. **Download Method List** – List of methods and their associated codes. (Method codes are needed for data upload.)

# Method List

- DOWNLOAD AND READ INSTRUCTIONS ON HOW TO USE THE QC UPLOAD TEMPLATE.
- Use the method table below as a reference for entering method codes when using the pre-filled and blank QC templates.
- Method codes can be found by navigating through the pages of the table or searching by searching using the search bar.
- Note: Use an asterisk to search method names and codes using partial text (e.g. Enter \*neobase to search for Non-derivatized MS/MS NeoBase<sup>TM</sup> PerkinElmer).

	Search	Q OD	wnload
Method Name 🕇	Method Code		
50hr Reagent Kit Spotcheck® BIOT Astoria-Pacific, ERU (1µmol/dL/90min)	360		
50hr Reagent Kit Spotcheck® G6PD Astoria-Pacific, µmol/L blood	320		
50hr Reagent Kit Spotcheck® GALT Astoria-Pacific, µmol/L blood	240		
50hr Reagent Kit Spotcheck® TGal Astoria-Pacific	200		
Accuwell™ EIA TSH Neo-Genesis	120		
AutoDELFIA® Neonatal 17OHP PerkinElmer	160		
AutoDELFIA® Neonatal hTSH PerkinElmer	121		
AutoDELFIA® Neonatal IRT PerkinElmer	280		

3. **Download Template (pre-filled)** – Downloadable template that is pre-filled with QC Lot Numbers, analytes, and analyte codes.

Dc	wnl	oad QC	Temp	plate -	(Pr	e-fi	lled)					
To obta most re Do not	iin a pre-fill cently uplo change any	e only the program ed template click do aded file will be disp of the column nam bad directions.	wnload (obtain a layed. Data cann	current template for ot be edited or rep	laced af	ter the fil	e is Submitted.					e area
RUN	Method Code	OTHER_METHOD	Analyte_code	Analyte ↓	Abbr	Lot_A	Replicate_1A	Replicate_2A	Lot_B	Replicate_1B	Replicate_2B	Lot_C
1			64	Total Galactose (TGal)	TGal	A0101			A0102			A0103
2			64	Total Galactose (TGal)	TGal	A0101			A0102			A0103
3			64	Total Galactose (TGal)	TGal	A0101			A0102			A0103

4. Upload QC Data – Page where completed templates are uploaded.

teps for Uploading (	E Template:				
	f the template options "Blank"				
	EAD the QC Uploading Proced	e.			
3. Download the I					
	nalyte List if using "Blank" Temp Irams data into a single consoli		actly E-rups (10 data point	s) for each applyte. This is requ	ired for the template to be
accepted.	ranis uata into a single consol	ateu tempiate me. Report ex	actiy 5 runs (10 uata point	s) for each analyte. This is requ	ired for the template to be
	nk template, provide the follow	information: method cod	e, other method name (if a	pplicable), analyte code, run ni	umber (1.2.3.4.5), lot numb
and resul	1	.9	of other method hame (in o		
<ul> <li>For the p</li> </ul>	-filled template, provide the fo	wing information: method	code, other method name	(if applicable), and results.	
6. Do not alter co upload will fail.	mn names, column order, or fo	nat of your template file. An	ny changes to the structure	or format of the template will	inactivate the template and
7. Leave blank any	inapplicable columns or fields.	dd <lod for="" ne<="" results="" td="" when=""><td>ecessary.</td><td></td><td></td></lod>	ecessary.		
	pleted template for ALL QC PR		No partial results will be ac	cepted at this time	
	ore than once, your previous				
	QC Upload Data' page to review				
11. If you have trou	le uploading your completed t	nplate please email NSQAP	DMT@cdc.gov for assistan	ce.	
Attach the Excel	emplate file *				
	•				
Choose File N	file chosen				

#### 5. Review QC Upload Data – Review uploaded data before submission.

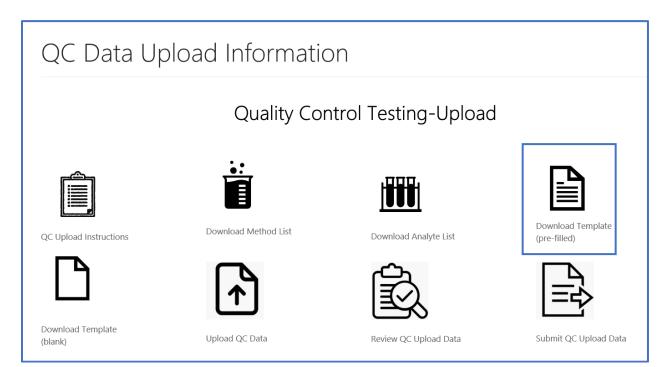
QC	C Revi	ew a	and Edit L	Jpload Dat	а				
o <mark>filte</mark> r	the data by pro	gram, selec	t the check box(es) next to	o the program and click the "A	pply" button in t	he table below.			
Filter	r by Progran	n Name							
0 17	α-Hydroxyprog	gesterone +	Total Galactose (17OHPQ	C and TGalQC)					
Ga	alactose-1-phos	phate Uridy	ltransferase (GALTQC)						
🗆 Im	munoreactive T	rypsinogen	(IRTQC)						
🗆 Lys	sosomal Storage	e Disorders	(LSDQC)						
🗆 Se	cond-tier Cong	enital Adren	al Hyperplasia by LC-MS/	MS (CAHQC)					
🗆 Se	cond-tier Maple	e Syrup Urin	e Disease and Phenylketo	nuria by LC-MS/MS (MSUD-PI	(UQC)				
More	•								
									Apply
									Ownload
RUN		Method	OTHER METHOD	Analyte	Analyte Code	Analyte Abbreviation	Lot_A	Replicate 1A	
↑	Method	Code	=					hepheate_nt	Replicate_2A
<b>↑</b> 1	Method Colormetric BIOT non- kit, qualitative		-	α-L- Iduronidase (IDUA)	88	IDUA	A1808	366.00	<b>Replicate_2A</b> 359.00

#### 6. Submit QC Upload Data – Page to submit uploaded data.

Home > QC Submission Webpage - Upload
QC Submission Webpage - Upload
<b>IMPORTANT:</b> By clicking submit, you are submitting all of your <i>QC data</i> for the current event which will lock all records for editing. No changes can be made after this action.
Submit

# **3.1 Pre-filled Template**

1. Select the **'Download Template (pre-filled)'** icon from the QC Data Upload Information page.



2. Select the 'Download' button from the Pre-filled Template Page.

(TGal)	To obta most re Do not	in a pre-fil cently uplo change an	e only the program led template click do paded file will be disp y of the column nam	wnload (obtain a played. Data cann	current template f not be edited or rep	placed af	ter the fi	e is Submitted.					
RUN         Code         OTHER_METHOD         Analyte_code         Analyte_de         Abbr         Lot_A         Replicate_1A         Replicate_2A         Lot_B         Replicate_1B         Replicate_2B         Lot           1		lew/downi	oau directions.									Dow	vnload
(TGal)           2         64         Total Galactose         TGal         A0102         A0	RUN		OTHER_METHOD	Analyte_code	Analyte 🕂	Abbr	Lot_A	Replicate_1A	Replicate_2A	Lot_B	Replicate_1B	Replicate_2B	Lot_
	1			64		TGal	A0101			A0102			A010
	2			64		TGal	A0101			A0102			A010

3. Select the **'Open'** button on the downloaded Excel file at the bottom of the page.

	1		61	Thyroxine (T4)	T4	A1700			B1700	
	1		113	17 α-Hydroxyprogesterone (17OHP2)	170HP2	A1811			B1811	
-	1	Do you want to open or sav	Save	▼ Cancel	×					

**Note:** The Excel download may look different depending on the browser used. This screenshot is from the Internet Explorer browser.

4. Complete the Excel template with data for submission and save the file.

To complete the Pre-filled template, you will need to include:

- 1. Method Code
- 2. Replicate Values (Insert "<LOD" where necessary)

A	В	С	D	E	F	G	н	L. L.		J	к	L	м	N	0	Р
1 RUN	Method Code	OTHER_METHOLAN		Analyte	Abbr	Lot_A	Replicate_1A	Replicate_2A	Lot_B		Replicate_1B	Replicate_2B	Lot_C	Replicate_1C	Replicate_2C	Lot_D
2 1	403			Tiglylcarnitine (	C5:1	A1815	0.13	0.3	3 B1815		0.45	0.43	C1815	1.35	1.3	2 D1815
3 2	403	10	13	Tiglylcarnitine (	C5:1	A1815	0.12	2 0.12	2 B1815		0.49	0.43	C1815	1.24	1.3	4 D1815
4 3	403	10	13	Tiglylcarnitine (	C5:1	A1815	0.11	0.0	9 B1815		0.45	0.46	C1815	1.33	1.4	3 D1815
5 4	403			Tiglylcarnitine (	C5:1	A1815	0.11	L 0.:	1 B1815		0.42	0.47	C1815	1.39	1.3	2 D1815
6 5	403			Tiglylcarnitine (	C5:1	A1815	0.12	2 0.1:	1 B1815		0.47	0.51	C1815	1.43	1.43	2 D1815
7 1	403	3 10	14	Tetradecenoylo	C14:1	A1815	0.1	0.0	7 B1815		0.49	0.48	C1815	1.45	1.3	8 D1815
8 2	403	3 10	14	Tetradecenoylo	C14:1	A1815	0.06	i 0.0	7 B1815		0.49	0.53	C1815	1.38	1.4	3 D1815
9 3	403	3 10	14	Tetradecenoylo	C14:1	A1815	0.08	0.0	8 B1815		0.51	0.51	C1815	1.45	1.4	7 D1815
10 4	403			Tetradecenoylo	C14:1	A1815	0.09	0.0	7 B1815		0.51	0.56	C1815	1.53	1.4	2 D1815
11 5	403			Tetradecenoylo	C14:1	A1815	0.09	0.0	B B1815		0.45	0.49	C1815	1.49	1.3	5 D1815
12 1	403	3 10	15	Creatine (CRE)	CRE	A1815	185.57	/ 137.5:	1 B1815		275.83	272.05	C1815	469.75	462.3	3 D1815
13 2	403	10	15	Creatine (CRE)	CRE	A1815	204.8	3 208.0	6 B1815		330.9	301.5	C1815	479.5	487.	9 D1815
14 3	403	10	15	Creatine (CRE)	CRE	A1815	186.05	i 190.1	5 B1815		290.68	301.17	C1815	473.97	467.7	5 D1815
15 4	403			Creatine (CRE)	CRE	A1815	200.76	5 188.69	9 B1815		299.16	297.61	C1815	473.3	483.0	2 D1815
16 5	403			Creatine (CRE)	CRE	A1815	222.14	208.44	4 B1815		296.15	322.09	C1815	505.45	474.5	5 D1815
17 1	403			Guanidinoaceti	GUAC	A1815	1.34	2.64	4 B1815		5.87	5.97	C1815	11.3	10.9	3 D1815
18 2	403			Guanidinoaceti	GUAC	A1815	1.62	2 1.5	8 B1815		7.21	6.61	C1815	11.87	11.9	5 D1815
19 3	403	3 10	16	Guanidinoaceti	GUAC	A1815	1.19	1.3	2 B1815		6.16	6.3	C1815	10.91	. 11.13	3 D1815
20 4	403			Guanidinoaceti	GUAC	A1815	1.31	1.2	8 B1815		6.13	6.45	C1815	11.7	12.0	1 D1815
21 5	403			Guanidinoaceti	GUAC	A1815	1.58	1.49	9 B1815		6.45	6.66	C1815	12.18	11.3	8 D1815
22 1	403			Creatinine (CRM	CRN	A1815	43.06	5 40.14	4 B1815		74.92	74.5	C1815	124.48	120.1	3 D1815
23 2	403	10	17	Creatinine (CRM	CRN	A1815	39.75	i 41.19	9 B1815		81.65	71.52	C1815	116.7	121.9	3 D1815
24 3	403			Creatinine (CRM	CRN	A1815	39.61	40.2	8 B1815		77.74	82.25	C1815	122.72	124.2	7 D1815
25 4	403			Creatinine (CRM	CRN	A1815	42.21	40.7	6 B1815		81.65	83.44	C1815	127.02	127.0	5 D1815
26 5	403			Creatinine (CRM	CRN	A1815	43.54	40.34	4 B1815		71.83	79.7	C1815	128.78	126.3	9 D1815
27 1	408			20:0-Lysophosp	C20-LPC	A1815	0.38	0.3	5 B1815		0.59	0.55	C1815	0.94	0.9	9 D1815
28 2	408			20:0-Lysophosp	C20-LPC	A1815	0.34	0.3	5 B1815		0.54	0.53	C1815	0.94	0.9	5 D1815
29 3	408	3 10	18	20:0-Lysophosp	C20-LPC	A1815	0.34	0.3	1 B1815		0.56	0.55	C1815	1.07	1.0	5 D1815

Column name	Description	Values	Example Data
RUN	Shows the run number	Whole number (INTEGER) from 1-5	1
Method Code	Code for the method used	See Method list webpage	360
OTHER_METHOD	Name of method not in list	Type name of method	MYNewMethod
Analyte_code	Code for the analyte	See Analyte list webpage	203
Lot_A	Lot number for Lot A	Name of lot provided for each event	A1811
Replicate_1A	Result for replicate 1 of Lot A	Decimal numbers with periods or <lod< th=""><th>1.12</th></lod<>	1.12
Replicate_2A	Result for replicate 2 of Lot A	Decimal numbers with periods or <lod< th=""><th>1.12</th></lod<>	1.12
Lot_B	Lot number for Lot B	Name of lot provided each event	B1811
Replicate_1B	Result for replicate 1 of Lot B	Decimal numbers with periods or <pre></pre>	1.12
Replicate_2B	Result for replicate 2 of Lot B	Decimal numbers with periods or <lod< th=""><th>1.12</th></lod<>	1.12
Lot_C	Lot number for Lot C	Name of lot provided each event	C1811
Replicate_1C	Result for replicate 1 of Lot C	Decimal numbers with periods or <lod< th=""><th>1.12</th></lod<>	1.12
Replicate_2C	Replicate 2 of Lot C	Decimal numbers with periods or <lod< th=""><th>1.12</th></lod<>	1.12
Lot_D	Lot number for Lot D	Name of lot provided each event	D1811
Replicate_1D	Result for replicate 1 of Lot D	Decimal numbers with periods or <pre></pre>	1.12
Replicate_2D	Result for replicate 2 of Lot D	Decimal numbers with periods or <lod< th=""><th>1.12</th></lod<>	1.12
Lot_E	Lot number for Lot E	Name of lot provided each event	E1811
Replicate_1E	Result for replicate 1 of Lot E	Decimal numbers with periods or <lod< th=""><th>1.12</th></lod<>	1.12
Replicate_2E	Result for replicate 2 of Lot E	Decimal numbers with periods or <lod< th=""><th>1.12</th></lod<>	1.12

The table below explains each of the columns in the template.

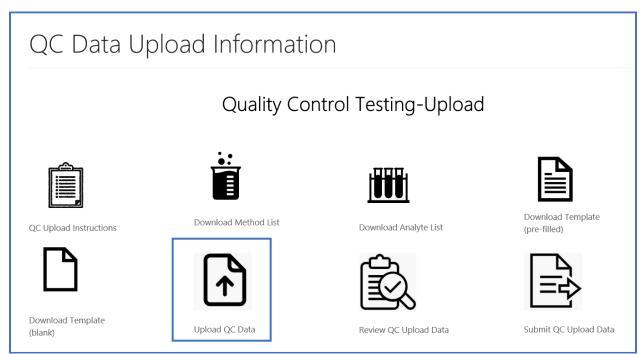
**Note:** If you choose to complete the Pre-filled Template, you cannot complete the Blank Template and submit it.

**Note:** Method Codes and Analyte Codes are found on the 'Download Method List' and the 'Download Analyte List' pages, respectively.

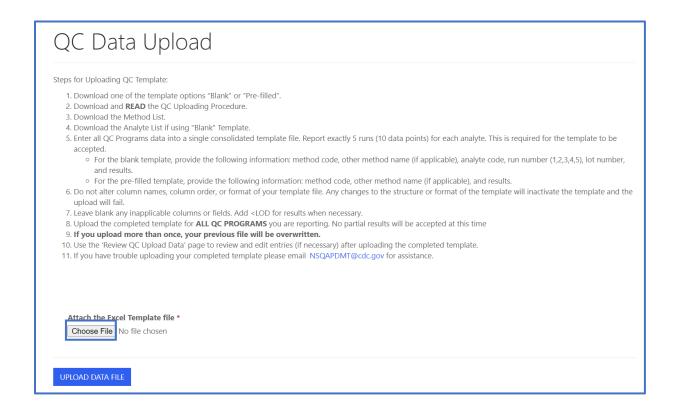
**Note:** Do not change any of the column headers. Headers must be exact for information to be uploaded properly.

### **3.2 Upload Data**

1. Navigate back to the 'QC Data Upload Information Page' and select the 'Upload QC Data' icon.



2. Select the **'Choose File'** button on the 'QC Data Upload' page and select the completed template for upload.



#### 3. Select the 'Upload Data File' to upload the document.

<ul> <li>For the blank template, provide the following information: method code, other method name (if applicable), analyte code, run number (1,2,3,4,5), lot number, and results.</li> <li>For the pre-filled template, provide the following information: method code, other method name (if applicable), and results.</li> <li>For the pre-filled template, provide the following information: method code, other method name (if applicable), and results.</li> <li>Do not alter column names, column order, or format of your template file. Any changes to the structure or format of the template will inactivate the template and the upload will fail.</li> <li>Leave blank any inapplicable columns or fields. Add <lod for="" li="" necessary.<="" results="" when=""> </lod></li></ul>
8. Upload the completed template for <b>ALL QC PROGRAMS</b> you are reporting. No partial results will be accepted at this time
9. If you upload more than once, your previous file will be overwritten.
10. Use the 'Review QC Upload Data' page to review and edit entries (if necessary) after uploading the completed template.
11. If you have trouble uploading your completed template please email NSQAPDMT@cdc.gov for assistance.
Attach the Excel Template file *
Choose File No file chosen
UPLOAD DATA FILE

- 4. After the file has been uploaded two notification emails will be sent:
  - a. Notification the QC file was uploaded.

Your QC File		
NBS Admin To This message was sent with Low importance.	← Reply	الله Re
LAB-9000_20200724T0748072 Tabs.xlsx ~ 10 KB		
Here is a copy of the file you submitted.		

b. Notification data is ready for review in the Portal.

QC File Upload-LAB-9000		
NBS Admin To This message was sent with Low importance.	← Reply	<u>س</u> ا
Your QC upload data is now ready to be reviewed. Go to the upload revi	ew all page.	

**Note: It may take several minutes for this email to be sent.** If your lab doesn't receive an email notifying the data is ready for review, an error with the upload may have occurred. Review Section 3.6 Troubleshooting and FAQs for more information.

## 3.3 Review Uploaded Data

1. Navigate back to the 'QC Data Upload Information' page and select the **'Review QC Upload Data'** icon.



- 2. Review/edit the data that has been uploaded from the 'QC Review Upload Data' page.
  - a. Filter the data by program by selecting the check box next to the program(s) and selecting the **'Apply**' button.

QC Review upload Data	
Filter by Program Name	
$\Box$ 17 $\alpha$ -Hydroxyprogesterone + Total Galactose (170HPQC and TGalQC)	
Galactose-1-phosphate Uridyltransferase (GALTQC)	
Immunoreactive Trypsinogen (IRTQC)	
Lysosomal Storage Disorders (LSDQC)	
Second-tier Congenital Adrenal Hyperplasia by LC-MS/MS (CAHQC)	
Second-tier Maple Syrup Urine Disease and Phenylketonuria by LC-MS/MS (MSUD-PKUQC)	
Second-tier Methylmalonic /Propionic Acidemia and Homocystinuria by LC-MS/MS (MMA-HCYQC)	
Tandem MS 1 (MSMS1QC)	
Thyroid-Stimulating Hormone (TSHQC)	
Thyroxine (T4QC)	
Less	Apply

#### b. To sort data, click on the column header.

	cond tior Ma	nlo Svrup Hei	ne Disease and Phenylketonu	ria by LC MS/MS/MS						
		pie syrup on	ne Disease and Phenyiketonu	IIId Dy LC-IVIS/IVIS (IVISC	JD-PROQC)					
More	e 🔻									
									Ap	oply
									• Dow	nload
RUN	Method	Method Code	OTHER_METHOD	Analyte 🕇	Analyte_Code	Analyte Abbreviation	Lot_A	Replicate_1A	Replicate_2A	Lot_
1	LC-MS/MS non-kit	164		11- Deoxycortisol (11D2)	203	11D2	A1811	1.00	2.00	B181
2	Other	999	DEMO	11- Deoxycortisol (11D2)	203	11D2	A1811		3.00	B181
3	LC-MS/MS	164		11-	203	11D2	A1811			B181

**Note:** The screenshot is sorted in ascending order by Analyte. The indicator is the arrow next to the header name.

c. To edit a record, select the number hyperlink in the 'Run' column.

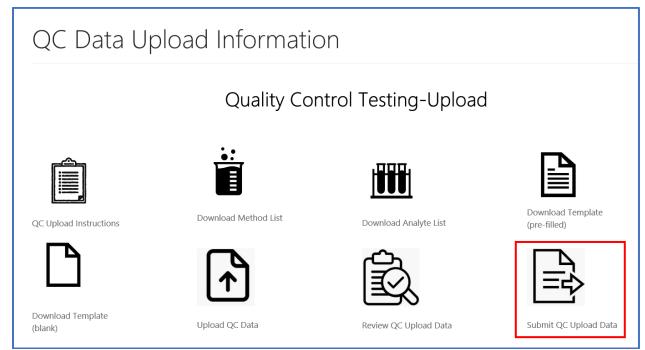
🗆 Se	econd-tier Cor	ngenital Adre	nal Hyperplasia by LC-MS/MS	S (CAHQC)						
🗆 Se	econd-tier Ma	ple Syrup Uri	ne Disease and Phenylketonu	ria by LC-MS/MS (MSL	JD-PKUQC)					
More	e 🔻									
									A	oply
									• Dow	nloac
		Method				Analyte				
RUN	Method	Code	OTHER_METHOD	Analyte 🕇	Analyte_Code	Abbreviation	Lot_A	Replicate_1A	Replicate_2A	Lot
1	LC-MS/MS	164		11-	203	11D2	A1811	1.00	2.00	B18
	non-kit			Deoxycortisol						
				(11D2)						
	Other	000	DEMO	11-	203	1100	A1811		3.00	
2	Other	999	DEMO	Deoxycortisol (11D2)	203	11D2	A1811		3.00	B18
3	LC-MS/MS	164		11-	203	11D2	A1811			B18
	non-kit			Deoxycortisol						

d. Edit the information on the pop-up screen for the run and select the **'Save Run Data'** button.

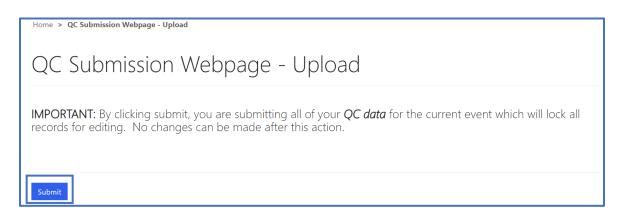
Ar	Analyte: 11-Deoxycortisol (11D2)										
	F	RUN 2	SAVE RUN DATA								
Data cannot n Values	ot be saved unt	il all replicates have b	been completed								
A1811											
Replicate 1A	✓ <lod< p=""></lod<>	<b>Replicate 2A *</b> 3.00	<pre>LOD</pre>								
B1811											
Replicate 1B *	<lod< td=""><td>Replicate 2B *</td><td><lod< td=""></lod<></td></lod<>	Replicate 2B *	<lod< td=""></lod<>								

### 3.4 Submit Uploaded Data

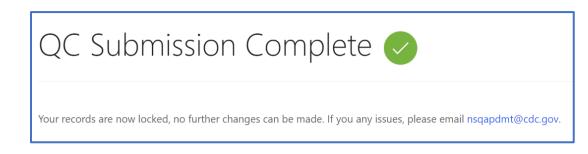
1. After data has been reviewed, navigate back to the 'QC Data Upload Information' page and select the **'Submit QC Data Upload'** icon.



2. Select the 'Submit' button to submit the uploaded data.



3. The submission confirmation message will appear upon successful upload.



## 3.6 Troubleshooting and FAQs

#### If your uploaded data does not appear in the Portal after uploading

- 1. Confirm that you clicked the 'Review QC Upload Data' icon rather than the 'QC Manual Review' icon.
- 2. Confirm that you received a confirmation email stating that your data is ready. Note that it may take several minutes for this email to be sent.
- 3. If you received an email confirmation, refresh the web page.
- 4. If you clicked the 'Review QC Upload Data' icon, received an email confirmation, and refreshed the webpage and still do not see your data, confirm there are no issues with the file you uploaded. The following are common issues with the uploaded file:
  - a. The file should be in .xlsx or .xls format.
  - b. The data should appear on sheet 1 of the file.
  - c. Remove any table names in the spreadsheet. Table names are not encouraged unless you name the table 'Data'.
  - d. Check your headings. Make sure the headings are spelled correctly.
  - e. Check the values that have been entered for your data.
- 5. Confirm that your data was not already submitted.

#### If your method code does not appear

- 1. Confirm that the code exists in the method list that is provided on the Portal.
- 2. Check to see if any spaces or other characters are present before or after code. Remove as necessary.