

December 3, 2009

TO: SOII-Adobe Team

FROM: Kathy Downey  
Office of Survey Methods Research

RE: OSMR Review of the Revised SOII Adobe Form

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Three other members of OSMR and I reviewed the SOII Adobe Fillable Form version dated **11-25-09**. (The Adobe form was revised on 12-3-09.)

Overall, OSMR is very pleased that SOII is offering the Adobe fillable form to respondents. One important issue for the future is whether the Adobe form captures any metadata. In other words, is there an audit trail when a respondent had to correct the form or had keystroke errors? This is highly useful in determining which design elements may not be working and causing data quality or data entry issues. For example, by wiping the decimals during data entry (and not on submission), does this lead to increased corrections that have to be made by respondents?

Another issue is using the wording “significantly more than 15 cases” in the email and throughout the instructions. First, this wording is vague and confusing. We should be clear whether this means 16, 17, or 18 cases. Also, one reviewer suggested that the wording might raise a red flag that the establishment is in trouble. We could add “for assistance on completing this form” before “please contact...”

Additionally, one person tried to complete the form just using the tab key to move between fields. She noticed that the *Tab* key worked differently in different sections.

Our recommendations are detailed on the following pages.

## Email to receive form

Respond   Actions   Junk E-mail   Options   Find

From: SOII@idcf.bls.gov  
To: Downey, Kathy - BLS  
Cc:  
Subject: Re: request adobe  
Attachments: SOII\_2009.pdf (522 KB)

Sent: Fri 11/27/2009 3:18 PM

Thank you for contacting the Survey of Occupational Injuries and Illnesses to request an electronic survey form. A PDF form is attached to this e-mail.

**PLEASE NOTE:** We have designed this survey to ensure that you do not have to report more than approximately 15 cases with days away from work. If you have significantly more than 15 cases, please call us at 334-242-3462 for assistance.

1. **Save the attached form to your computer and open it using Adobe Reader (version 8 or higher). If you do not have Adobe Reader, you can download it for free from:**  
<http://get.adobe.com/reader/>

**Note:** Please make sure the form opens up in Adobe Reader and not in Preview.

2. Enter your establishment's identifying information (establishment ID, address, and contact information), and then enter your establishment's injury and illness data.
  - You may use the TAB key or the mouse to navigate through the fields on the form.
  - You do not need to complete the survey in one sitting.
  - You can save the form and come back later to complete entering your information.
3. When all of your data is entered, please save the form on your computer and print a copy for your records in case we need to contact you.
4. When you have completed the survey, send the form to the Bureau of Labor Statistics at [oshhelpdesk@bls.gov](mailto:oshhelpdesk@bls.gov).

[If you have any questions, you can contact us at oshhelpdesk@bls.gov.](mailto:oshhelpdesk@bls.gov)

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U.S. Bureau of Labor Statistics Statement to Respondent on the Use of Electronic Data Transmission

As a participant in a U.S. Bureau of Labor Statistics (BLS) statistical survey, you should be aware that use of electronic transmittal methods in reporting data involves certain inherent risks to the confidentiality of those data. Further, you should be aware that responsible electronic transmittal practices employed by the BLS cannot completely eliminate those risks.

The BLS is committed to the responsible treatment of the data you report and will take appropriate steps within their ability to protect the confidentiality of those data.

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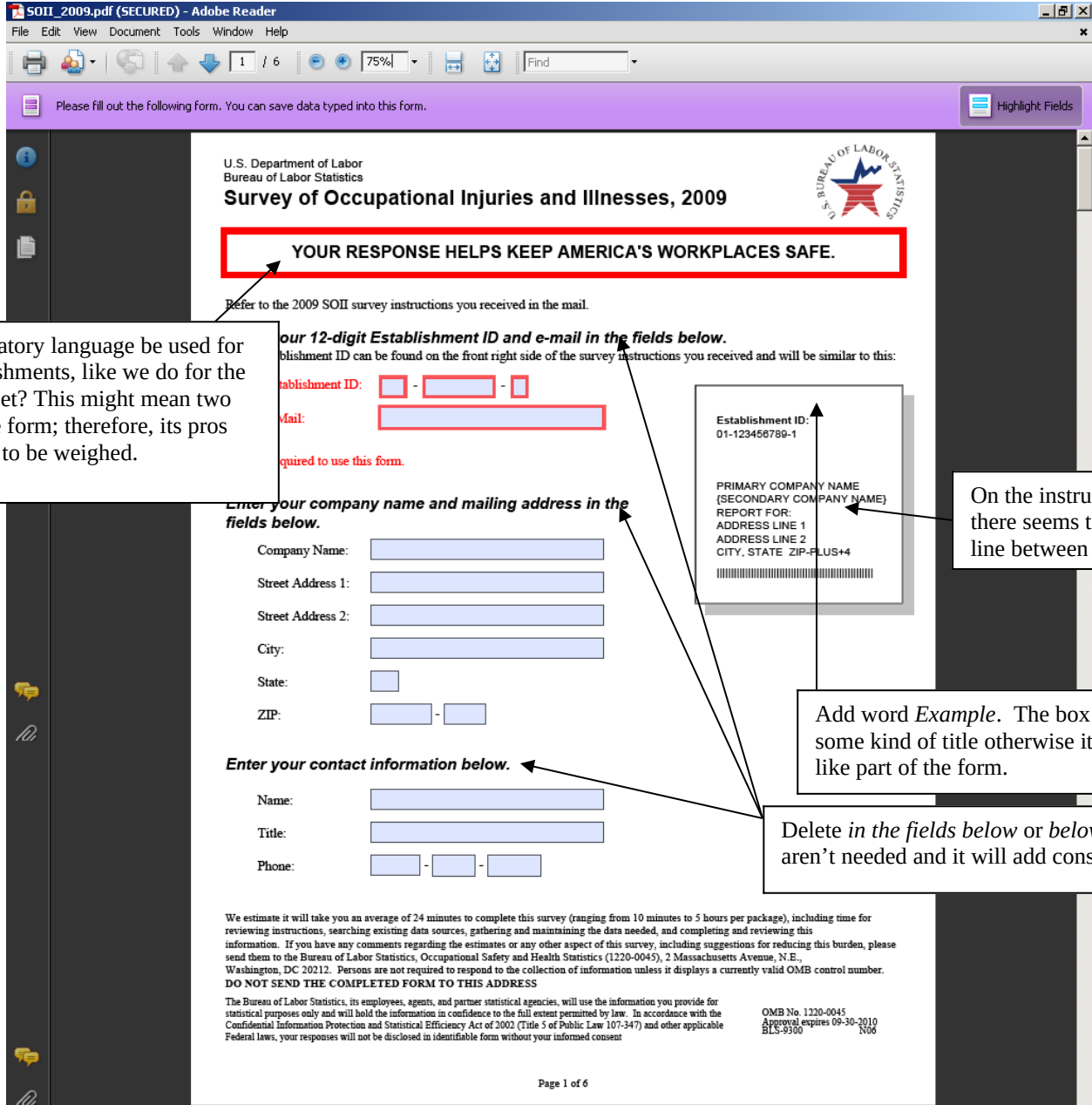
Please do not reply to this message as it is from an automated mailbox. Any replies to this e-mail will not be responded to or forwarded. This service is used for outgoing e-mails only and cannot respond to inquiries.

What does "significantly" mean? It's a little vague and confusing. Is it 16, 17, 18?

What does "not in Preview" mean?

Do we know how this will appear when it's not HTML? Will the bullets become asterisks or lose the formatting?

# First page



Will the mandatory language be used for certain establishments, like we do for the instruction sheet? This might mean two versions of the form; therefore, its pros and cons need to be weighed.

On the instruction sheet, there seems to be an extra line between these rows.

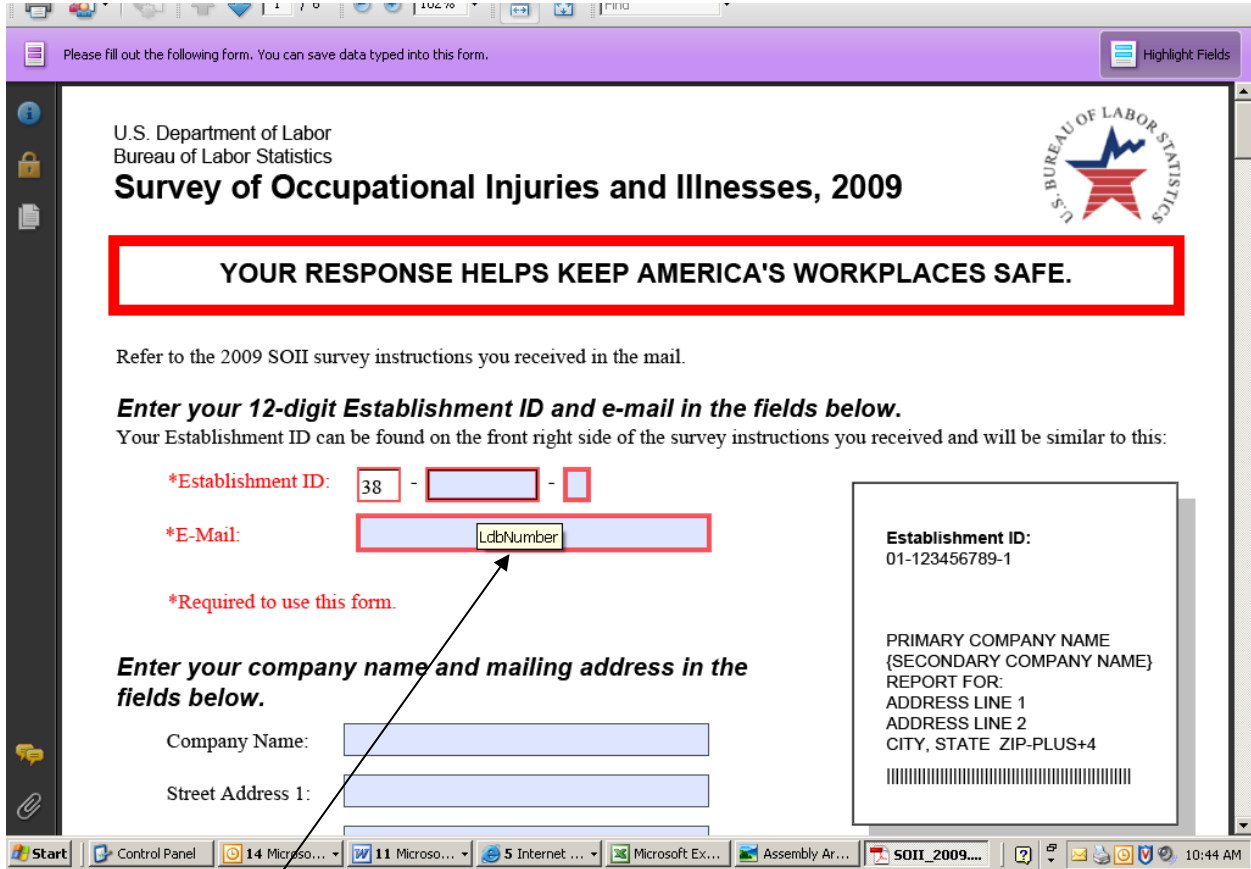
Add word *Example*. The box needs some kind of title otherwise it looks like part of the form.

Delete *in the fields below* or *below*. They aren't needed and it will add consistency.

- Establishment ID. Since the LDB number is long, we purposely entered an error to see what would happen. An error isn't reported until *Submit* is clicked, which isn't ideal.
- Yellow highlights for errors. Right now, there is yellow highlighting when there is an error to the following fields: *Establishment ID*, *E-mail*, *Zip*, and *Phone*. There are two suggestions:
  - There should be consistency when the highlights pop. The whole row should highlight like it does for *E-mail*.

- o There could be more warning than just a color change. We could put “!error” or “Check this” next to the field.

**First page continued**



- Word callouts. Will respondents know what *LdbNumber* is? Also, the word callout over state is *StateFipsCode*. Again, will respondents know what this means?

## Second page

SOIT\_2009.pdf (SECURED) - Adobe Reader

File Edit View Document Tools Window Help

2 / 6 75% Find

Please fill out the following form. You can save data typed into this form.

### Section 1: Establishment Information

Instructions: Using your completed Calendar Year 2009 *Summary of Work-Related Injuries and Illnesses* (OSHA Form 300A), copy the establishment information into the boxes. If these numbers are not available on your OSHA Form 300A, or if your establishment does not keep records needed to answer (1) and (2) below, provide estimates by following the instructions on the next page.

- Enter the annual average number of employees for 2009 (numbers only).
- Enter the total hours worked by all employees for 2009 (numbers only).
- Check any conditions that might have affected your answers to questions 1 and 2 above during 2009.
  - Strike or lockout
  - Shutdown or layoff
  - Seasonal work
  - Natural disaster or adverse weather conditions
  - Shorter work schedules or fewer pay periods than usual
  - Longer work schedules or more pay periods than usual
  - Other reason:
  - Nothing unusual happened to affect our employment or hours figures
- Did you have ANY work-related injuries or illnesses during 2009?
  - Yes. Go to Section 2: Summary of Work-Related Injuries and Illnesses, 2009, directly below.
  - No. Go to Section 4: Submit Your Data to the Bureau of Labor Statistics (BLS).

### Section 2: Summary of Work-Related Injuries and Illnesses, 2009

Instructions:

- Refer to the OSHA Forms for Recording Work-Related Injuries and Illnesses for the location referenced on the survey instruction sheet under "Report for."
- If more than one establishment is noted on the survey instruction sheet you received in the mail, please provide information for all of the establishments specified.
- If any total is zero on your OSHA Form 300A, enter "0" in that total's space below.
- The total Number of Cases recorded in G + H + I + J must equal the total Injury and Illness Types recorded in M (1 + 2 + 3 + 4 + 5 + 6).

Number of Cases			
Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
(G)	(H)	(I)	(J)

Number of Days	
Total number of days away from work	Total number of days of job transfer or restriction
<input type="text"/>	<input type="text"/>
(K)	(L)

Injury and Illness Types			
Total number of ... (M)			
(1) Injuries	<input type="text"/>	(4) Poisonings	<input type="text"/>
(2) Skin disorders	<input type="text"/>	(5) Hearing loss	<input type="text"/>
(3) Respiratory conditions	<input type="text"/>	(6) All other illnesses	<input type="text"/>

If you had any work-related deaths in 2009, please tell us in the Comments in Section 4 of this survey where you assigned/classified each death within the list of items (M1) through (M6) provided under Injury/Illness Types above (e.g., "fatal case was due to injury resulting from fall" or "death resulted from respiratory conditions")

Page 2 of 6

What is the purpose of these black, horizontal bars?

These boxes should be aligned and the same size. If the black lines are deleted, then they can be aligned next to the question. The entries can be right justified.

- Inability to enter decimals. The decimals are wiped out during entry. However, this means that as someone enters "1,000.00" it registers as "100,000" incorrectly. Therefore, the respondent just entered 100 times what he or she meant. Hopefully, respondents check this and it isn't submitted erroneously.
- Callouts. Nice job on the callouts on this page.

- Skip on # 4. In the future, it would be great if a *No* on item 4 would then take the person to the last page. (We don't know if this may be a programming issue with Adobe.)
- Totals for M1 to M6. It would also be great if in the future, that there is a validity check that value for *H* matches the totals for *M1* to *M6*.
- Metadata. As stated earlier, it would be great to capture metadata (e.g., an audit trail). This would be highly useful in determining which design elements are not working and may lead to data quality or data entry issues.
- Tab key entry.
  - In Section 1, Q3, the tab key moves from option to option (Left to right, then to the next row), and the space bar either selects or deselects the option. That's how we expect check boxes to work.
  - In Section 1, Q4, the tab key takes you to the first option and you use the space bar to make a selection. You then use the arrow keys to change the selection. This is fine for radio buttons.

## Second page continued

SOII\_2009.pdf (SECURED) - Adobe Reader

Please fill out the following form. You can save data typed into this form.

1. Refer to the OSHA Forms for Recording Work-Related Injuries and Illnesses for the location referenced on the survey instruction sheet under "Report for."
2. If more than one establishment is noted on the survey instruction sheet you received in the mail, please provide information for all of the establishments specified.
3. If any total is zero on your OSHA Form 300A, enter "0" in that total's space below.
4. The **total** Number of Cases recorded in G + H + I + J must equal the **total** Injury and Illness Types recorded in M (1 + 2 + 3 + 4 + 5 + 6).

Number of Cases			
Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0 (G)	3 (H)	1 (I)	1 (J)

Number of Days	
Total number of days away from work	Total number of days of job transfer or restriction
15 (K)	2 (L)

Injury and Illness Types			
Total number of ... (M)			
(1) Injuries	3	(4) Poisonings	
(2) Skin disorders	1	(5) Hearing loss	
(3) Respiratory conditions	2	(6) All other illnesses	

If you had any work-related deaths in 2009, please tell us in the Comments in Section 4 of this survey where you assigned/

- **Note entries.** This was done purposely to see if there was an edit. One did appear after *Submit* was clicked.

## Third page – average number of employees

SOIT\_2009.pdf (SECURED) - Adobe Reader

Please fill out the following form. You can save data typed into this form.

### Steps to estimate annual average number of employees for 2009:

**Step 1:**  
To calculate the annual average number of employees your establishment paid during 2009, you must calculate the total number of employees your establishment paid for all periods. Add the number of employees your establishment paid in every pay period during calendar year 2009. Count all employees that you paid at any time during the year and include full-time, part-time, temporary, seasonal, salaried, and hourly workers. Note that pay periods could be monthly, weekly, bi-weekly, etc.

**Example:**  
Acme Construction paid its employees in 12 pay periods during 2009:

Pay Period	Number of Employees Paid Per Pay Period
1	30
2	0
3	35
4	37
5	37
6	40
7	43
8	42
9	37
10	35
11	30
12	±26
	392 (total number of employees paid over all pay periods)

**Step 2:**  
Divide the total number of employees (from step 1) by the number of pay periods your establishment had in 2009. Be sure to count any pay periods when you had no (zero) employees.

**Example:**  
Acme Construction had 12 pay periods and paid a total of 392 employees during these pay periods.  
392 divided by 12 = 32.67

**Step 3:**  
Round the answer you computed in step 2 to the next highest whole number. Write that number in the box for Section 1, question 2 on the previous page.

**Example:**  
Acme would round 32.67 to 33.

Annotations:

- Break up paragraphs into smaller chunks.
- Move the rounding instruction to here to save space.
- Align 'all' under 'total'

- Number of Steps. It doesn't seem that three steps are required. Space on the page could be saved by reducing the number of steps, and moving parts of the example. For example:

### Example

392 divided by 12 = 32.67    Round up to 33.

- Rewrite of Step 1 Paragraph. Instructions should not be buried in paragraphs. To ensure that they're read or seen, break them out as shown below.

#### Step 1 (see example for monthly pay periods on right)

- Determine the number of paid employees per pay period.
- Count full-time, part-time, temporary, seasonal, salaried, and hourly workers.
- Sum the number of employees for all pay periods.

#### Step 2

- Divide the total number of employees from Step 1 by the number of pay periods.
- Round the result to the highest number.

## Third page – total hours worked

SOII\_2009.pdf (SECURED) - Adobe Reader

File Edit View Document Tools Window Help

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Please fill out the following form. You can save data typed into this form.

### Steps to estimate total hours worked by all employees for 2009:

**Step 1:**  
Determine the number of full-time employees at your establishment.

**Example:**  
Of Acme's 33 employees in 2009, 28 were full-time.

**Step 2:**  
Determine the number of hours generally worked by a full-time employee for a year. Multiply the number of full-time employees you calculated in step 1 by this number. This total number of full-time hours worked should exclude vacation, sick leave, holidays, and any other non-work time.

**Example:**  
Each of Acme's 28 full-time employees worked 2,000 hours per year after excluding non-work time. This works out to 56,000 hours for all full-time employees.

**Step 3:**  
Determine the number of regular hours worked by your non-full-time employees. (Non-full-time employees include part-time, seasonal, and temporary employees.)

**Example:**  
Acme's 5 part-time employees worked a total of 2,715 hours during 2009.

Add these numbers to the number you calculated in step 2 above. This is the estimated number of hours worked by all of your employees - full-time and non-full-time - during 2009. Write this number in Section 1, question 3 on the previous page.

**Calculation:**

28 full-time employees	X 2,000 hours per year	56,000 total full-time hours
5 part-time employees	X 543 hours per year	2,715 total part-time hours
		61,515 total hours worked

Annotations:

- "This implies only full-time employees are of interest" points to Step 1.
- "Mention the complete breakdown: 28 full-time, 5 part-time" points to the Example for Step 1.

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- Overly detailed instructions. The instructions seem too fragmented, which could lead to their being ignored. The examples can help convey the instructions. See suggested changes below.

### Step 1

- Estimate the hours worked by:
  - Full-time employees
  - Other employees (part-time, seasonal, temporary)
- Include:
  - Overtime
- Exclude:
  - Vacation
  - Sick leave
  - Holidays and any non-work time
- Tying the worksheet to the previous page. If this page was an actual worksheet as opposed to instructions, the data entry fields for this page could then be used to populate items 1 and 2 on previous page.





## Fourth page

SOII\_2009.pdf (SECURED) - Adobe Reader

File Edit View Document Tools Window Help

4 / 6 75% Find

Please fill out the following form. You can save data typed into this form. Highlight Fields

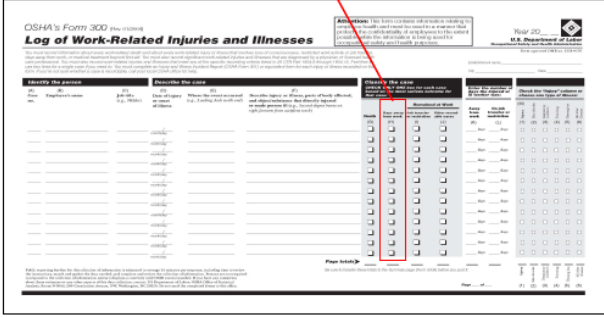
### Section 3: Reporting Cases with Days Away from Work

**Instructions:**

Please refer to your records of days away from work cases to complete this section. If you maintain these records on the OSHA Form 300, *Log of Work-Related Injuries and Illnesses*, these cases will be indicated by checks in Column H (see sample below).

If you had cases with days away from work in Column H, please complete Section 3 (starting on the next page). You should only report cases with days away from work.

If you had **NO** cases with days away from work in Column H, you are finished with the survey. Proceed to Section 4 to submit your data to BLS.



We have designed this survey so that you should not have to report more than approximately 15 cases. If you have significantly more than 15 cases, please contact the state agency at the phone number listed on the front of the survey instructions you received in the mail.

**Step 1:** Fill out one "Case with Days Away from Work" form for each work-related injury or illness days away from work. The requested information can be found on documents such as:

- The *Injury and Illness Incident Report* (OSHA Form 301);
- A workers' compensation report;
- An accident report; or
- An insurance form.

**Step 2:** If more than one establishment is noted on the survey instructions under "Report For," be sure to look at all your OSHA Form 300's to find which cases to report.

**Step 3:** If you had an injury or illness that resulted in death, please include a comment in the comment box.

**Step 4:** When you are finished, proceed to Section 4 to submit your data to BLS.

Page 4 of 6

This instruction could use a header (see suggestion below)

Note typo: Should be worker's

What does "significantly more than 15 cases" mean? Would you report 16, 17, 18?

Also, the wording might raise a red flag that the establishment is in trouble. We could add "for assistance on completing this form" before "please contact..."

- Ambiguous instructions. Be clear about the maximum upper limit of cases that are to be reported.
- Instruction for Column H needs a header. Since respondents may skim headings, a critical instruction is buried under the heading *Instructions*, so it could be missed, despite the red box. See suggested change below.

### What if you have "no cases away from work?" (Column H is blank)

If you had no cases with days away from work, you are done. Please go to Section 4 and submit your data to BLS.

## Fifth page

SOII\_2009.pdf (SECURED) - Adobe Reader

File Edit View Document Tools Window Help

5 / 6 75% Find

Please fill out the following form. You can save data typed into this form. Highlight Fields

### Case with Days Away from Work

Tell us about a 2009 work-related injury or illness **only** if it resulted in days away from work. To find out which case(s) you should report, read the instructions at the beginning of *Section 3: Reporting Cases with Days Away from Work*.

**Tell us about the Case**

Go to your completed OSHA Form 300. Copy the case information from that form into the spaces below.

Employee's name (column B)	Job title (column C)	Date of injury or onset of illness (column D)	Number of days away from work (column K)	Number of days of job transfer or restriction (column L)
		MM DD 2009		

**Tell us about the Employee**

1. Check the category which *best* describes the employee's regular type of job or work: (optional)

<input type="checkbox"/> Office, professional, business or management staff	<input type="checkbox"/> Healthcare
<input type="checkbox"/> Sales	<input type="checkbox"/> Delivery or driving
<input type="checkbox"/> Product assembly, product manufacture	<input type="checkbox"/> Food service
<input type="checkbox"/> Repair, installation or service of machines, equipment	<input type="checkbox"/> Cleaning, maintenance of building, grounds
<input type="checkbox"/> Construction	<input type="checkbox"/> Material handling (e.g. stocking, loading/unloading, moving etc.)
<input type="checkbox"/> Other	<input type="checkbox"/> Farming

2. Employee's race or ethnic background: (optional-check one or more)

<input type="checkbox"/> American Indian or Alaska Native	<input type="checkbox"/> Native Hawaiian or Other Pacific Islander
<input type="checkbox"/> Asian	<input type="checkbox"/> White
<input type="checkbox"/> Black or African American	<input type="checkbox"/> Not available
<input type="checkbox"/> Hispanic or Latino	

3. Employee's age:

OR date of birth: MM DD YYYY

4. Employee's date hired: MM DD YYYY

OR check length of service at establishment when incident occurred:

<input type="checkbox"/> Less than 3 months
<input type="checkbox"/> From 3 to 11 months
<input type="checkbox"/> From 1 to 5 years
<input type="checkbox"/> More than 5 years

5. Employee's gender:  Male  Female

**Tell us about the Incident**

6. Time employee began work: hh : 00  AM  PM

7. Time of event: hh : 00  AM  PM Check if time cannot be determined

Event occurred:  before  during  after work shift

8. What was the employee doing just before the incident occurred? Describe the activity as well as the tools, equipment, or material the employee was using. Be specific. Examples: "climbing a ladder while carrying roofing materials"; "spraying chlorine from hand sprayer"; "daily computer key-entry."

9. What happened? Tell us how the injury or illness occurred. Examples: "When ladder slipped on wet floor, worker fell 20 feet"; "Worker was sprayed with chlorine when gasket broke during replacement"; "Worker developed soreness in wrist over time."

10. What was the injury or illness? Tell us the part of the body that was affected and how it was affected; be more specific than "hurt," "pain," or "sore." Examples: "strained back"; "chemical burn, hand"; "carpal tunnel syndrome."

11. What object or substance directly harmed the employee? Examples: "concrete floor"; "chlorine"; "radial arm saw." If this question does not apply to the incident, leave it blank.

Add New Case Remove Case

Page 5 of 6

Having "XX-Month" show (when the drop-down is used) seems strange for a MM format.

When you click *Add New Case* there is no confirmation. I kept clicking until I noticed the total number of pages was incrementing.

- Unconventional display of date. The format calls for MM, but that is not what is displayed. For example, it displays "05-May" for May. An alternative would be to use numbers with no zeros. That way, respondents can use the digit to enter the month. Right now, entering "1" could give you one of three months (10, 11, 12). Obviously, this isn't a show stopper, but it could confuse someone.
- Lack of confirmation. When *Add New Case* was clicked, nothing seemed to happen. The only way to tell was to finally notice the total number of pages incrementing. Can the "page 5 of 6" be highlighted some way when it changes?

- Radio buttons versus checkboxes. For items that are “check all that apply,” checkboxes should be used. For items that are “check one,” radio buttons (such as Q4 and Q5) should be used.
- Tab key entry.
  - It tabs across the top of the page, through the employee name, title, etc. That's what we expect. Then, you move to Q1, option 1. You can make a selection by pressing the space bar, as with the previous check boxes. However, when you hit the tab key again, you go to the field for "other." Once you make a selection in this question, you can't clear out all the options. To move between the options, you have to use the arrow keys. This question functions like the radio buttons in Q4 above. It should probably use radio buttons anyway.
  - For Q2, the *tab* button moves the cursor down the first column, then down the second. In Section 1, Q3, the cursor moved across the row, then to the next row. We prefer the method in Section 1.
  - When you tab to a date field (month or day), you can press the arrow keys to move through the options. However, to start, you have to hit the down arrow twice to get to 01. The first time, nothing seems to happen. We're not sure why you need to hit it twice.

## Last page

SOIT\_2009.pdf (SECURED) - Adobe Reader

Please fill out the following form. You can save data typed into this form.

### Section 4: Submit Your Data to BLS

- 1. Comment**  
Provide any additional information you have on the data you are submitting in the space provided. If you had an injury or illness that resulted in death, please tell us what injury/illness type you classified it as in Section 2.
- 2. Save**  
Save a copy of this form for your records.
- 3. Print**  
Print a copy of this form for your records.
- 4. Submit**  
Click the Submit button to send your data to BLS.  
You will receive a confirmation via e-mail within 24 hours of your data being received. If you have JavaScript enabled in your browser, you may also receive a confirmation message within the next 5 minutes when we receive your data.
- 5. Keep the confirmation**  
Keep a copy of the confirmation for your records.  
If you do not receive an e-mail confirmation, contact your State at the phone number listed on the front of your survey instructions for assistance in submitting your data.

Thank you for your response and for helping to keep America's workplaces

Confirmation from whom? It should say who is sending the confirmation email.

Page 6 of 6

- Confirmation email. We didn't see the text of the confirmation email after submitting the data.

## Example of error message for Establishment ID

The screenshot shows the Adobe Reader interface with a PDF document titled "SOII\_2009.pdf (SECURED)". The document content includes a form with a purple header bar that says "Please fill out the following form. You can save data typed into this form." Below the header, there is a large light blue rectangular area. The form has four main sections:

- 2. Save**  
Save a copy of this form  
[Save button]
- 3. Print**  
Print a copy of this form  
[Print button]
- 4. Submit**  
Click the Submit button to send your data to BLS.  
You will receive a confirmation via e-mail within 24 hours of your data being received. If you do not see a confirmation message in your browser, you may also receive a confirmation message within the next 5 minutes when you check your e-mail.  
[Submit button]

An error message dialog box is displayed over the form, titled "Warning: JavaScript Window - BLS SOII 2009". The dialog contains the following text:

Errors were found that prevented your form from being submitted. Please correct the errors listed below and then try submitting your form again.

Error 1 (pg 1): A valid 12 digit establishment ID is required to use this form. An example of a valid ID is: 99-123456789-0.

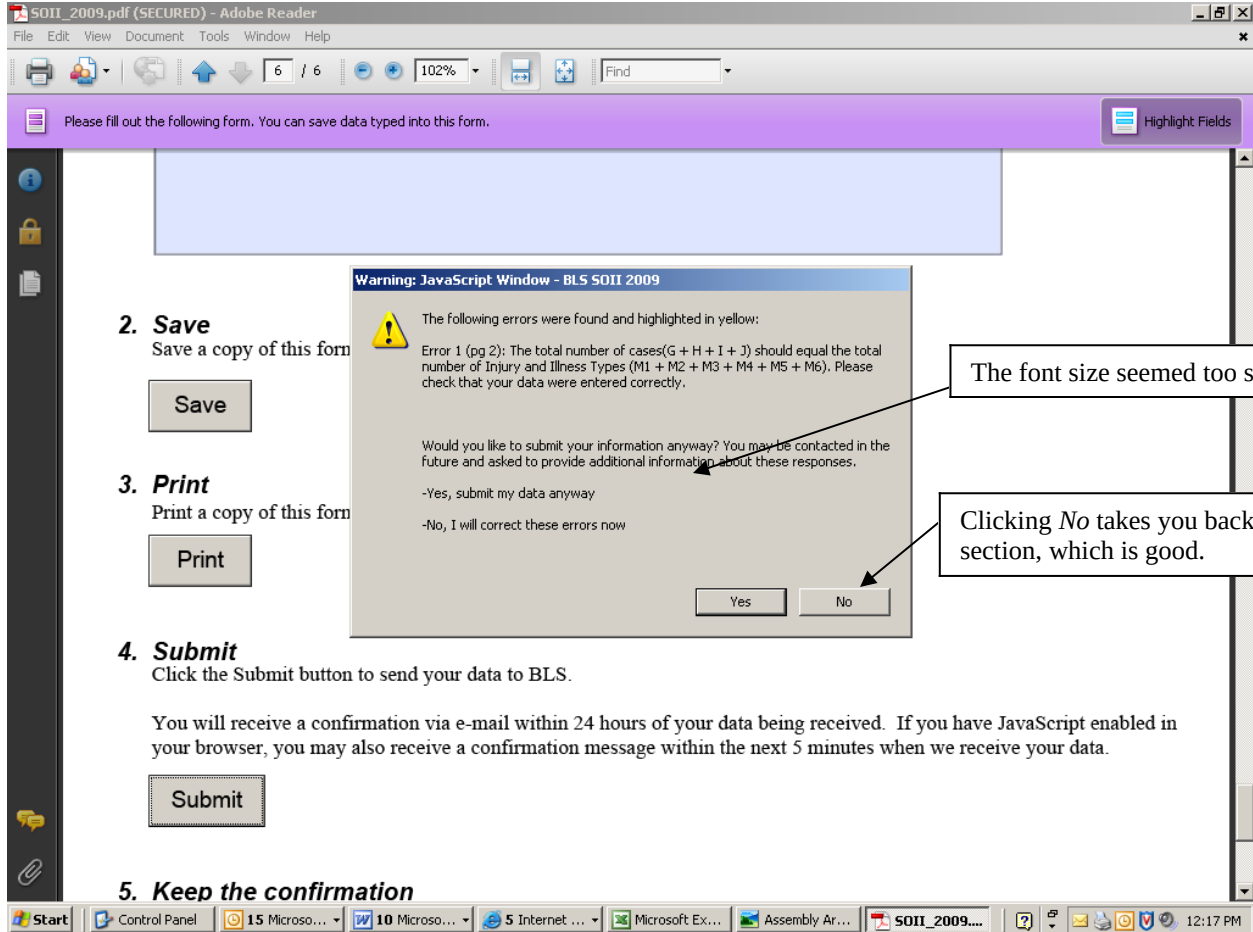
[OK button]

An arrow points from a text box on the right to the error message dialog box.

Example of error message. The form takes you back to the ID, which is good.

The Windows taskbar at the bottom shows the Start button, Control Panel, and several open applications including Microsoft Office Word (15 and 10 instances), Internet Explorer (5 instances), Microsoft Excel, Assembly Ar..., and SOII\_2009... The system clock shows 12:16 PM.

## Example of other error messages (after Establishment ID error)



- Change the wording of the error message. We should encourage them to fix errors. The default for this is Yes, both grammatically and in the highlighting of the button, which is to submit the data anyway. The wording should be something like:

“Would you like to correct your information now? If errors remain, you may be contacted in the future to provide additional information.”

- Size of font in error message. It’s not easy to read.

## Confirmation Page

